
1,10-ジブロムデカンのラットを用いる 28 日間反復経口投与毒性試験及び
14 日間回復試験

最 終 報 告 書

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株式会社日本バイオリサーチセンター
羽島研究所

1. 目次

表紙.....	1
1. 目次	2
2. 試験責任者陳述書.....	10
3. 最終報告書作成者署名.....	11
4. 試験概要	12
5. 試験従事者及び業務分担.....	15
6. 要約	16
7. 緒言	18
8. 方法	18
8.1. 被験物質及び媒体.....	18
8.2. 投与検体及び濃度測定	18
8.3. 試験動物及び飼育条件	19
8.3.1. 動物種及び系統.....	19
8.3.2. 検疫及び馴化, 群分け並びに個体識別	19
8.3.3. 環境条件及び飼育管理	19
8.3.4. 飼料及び飲料水.....	20
8.4. 投与経路, 投与方法, 群構成, 投与量及び投与期間.....	20
8.4.1. 投与経路及び投与方法	20
8.4.2. 群構成及び投与量	21
8.4.3. 投与期間.....	21
8.5. 觀察及び検査項目.....	22
8.5.1. 一般状態.....	22
8.5.2. 体重.....	22
8.5.3. 摂餌量.....	22
8.5.4. 摂水量.....	22
8.5.5. FOB	22
8.5.6. 感覚反応	22
8.5.7. 握力	22
8.5.8. 自発運動量.....	23
8.5.9. 尿検査.....	23
8.5.10. 血液学検査.....	23
8.5.11. 血液生化学検査.....	24
8.5.12. 剖検及び器官重量	24
8.5.13. 病理組織学検査.....	24
8.6. 統計学的方法.....	25
9. 試験結果	26

9.1.	一般状態	26
9.1.1.	雄	26
9.1.2.	雌	26
9.2.	体重	26
9.2.1.	雄	26
9.2.2.	雌	26
9.3.	摂餌量	26
9.3.1.	雄	26
9.3.2.	雌	26
9.4.	摂水量	27
9.4.1.	雄	27
9.4.2.	雌	27
9.5.	FOB	27
9.5.1.	雄	27
9.5.2.	雌	27
9.6.	感覚反応	27
9.6.1.	雄	27
9.6.2.	雌	27
9.7.	握力	27
9.7.1.	雄	27
9.7.2.	雌	27
9.8.	自発運動量	27
9.8.1.	雄	27
9.8.2.	雌	28
9.9.	尿検査	28
9.9.1.	投与期間終了時雄	28
9.9.2.	投与期間終了時雌	28
9.9.3.	回復期間終了時雄	28
9.9.4.	回復期間終了時雌	28
9.10.	血液学検査	28
9.10.1.	投与期間終了時雄	28
9.10.2.	投与期間終了時雌	28
9.10.3.	回復期間終了時雄	29
9.10.4.	回復期間終了時雌	29
9.11.	血液生化学検査	29
9.11.1.	投与期間終了時雄	29
9.11.2.	投与期間終了時雌	29
9.11.3.	回復期間終了時雄	29

9.11.4. 回復期間終了時雌	29
9.12. 剖検所見	30
9.12.1. 投与期間終了時雄	30
9.12.2. 投与期間終了時雌	30
9.12.3. 回復期間終了時雄	30
9.12.4. 回復期間終了時雌	30
9.13. 器官重量	30
9.13.1. 投与期間終了時雄	30
9.13.2. 投与期間終了時雌	30
9.13.3. 回復期間終了時雄	30
9.13.4. 回復期間終了時雌	30
9.14. 病理組織学所見	31
9.14.1. 投与期間終了時雄	31
9.14.2. 投与期間終了時雌	31
9.14.3. 回復期間終了時雄	32
9.14.4. 回復期間終了時雌	32
10. 考察	33
11. 文献	35

Tables

Table 1. General signs in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	36
Table 2. General signs in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	39
Table 3. Body weights of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	42
Table 4. Body weights of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	43
Table 5. Food consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	44
Table 6. Food consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	45
Table 7. Water consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	46
Table 8. Water consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	47
Table 9. FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	48
Table 10. FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	54

Table 11.	Sensory response of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	60
Table 12.	Sensory response of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	61
Table 13.	Grip strength of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	62
Table 14.	Grip strength of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	63
Table 15.	Spontaneous motor activity of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	64
Table 16.	Spontaneous motor activity of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	65
Table 17.	Urinary findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	66
Table 18.	Urinary findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	68
Table 19.	Urinary findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	70
Table 20.	Urinary findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	72
Table 21.	Hematological findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	74
Table 22.	Hematological findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	75
Table 23.	Hematological findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	76
Table 24.	Hematological findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	77
Table 25.	Blood chemical findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	78
Table 26.	Blood chemical findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	79
Table 27.	Blood chemical findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	80
Table 28.	Blood chemical findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	81
Table 29.	Necropsy findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	82

Table 30.	Necropsy findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	83
Table 31.	Necropsy findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	84
Table 32.	Necropsy findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	85
Table 33.	Organ weights of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	86
Table 34.	Organ weights of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	87
Table 35.	Organ weights of male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	88
Table 36.	Organ weights of female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	89
Table 37.	Histopathological findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	90
Table 38.	Histopathological findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	92
Table 39.	Histopathological findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	94
Table 40.	Histopathological findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	95

Figs

Fig. 1.	Chemical structure of 1,10-dibromodecane	96
Fig. 2.	Body weights of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	97
Fig. 3.	Body weights of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	98
Fig. 4.	Food consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	99
Fig. 5.	Food consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	100
Fig. 6.	Water consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	101
Fig. 7.	Water consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane	102

Appendices

Appendices 1-1 - 1-4.	Individual general signs in male rats	103
Appendices 2-1 - 2-4.	Individual general signs in female rats	114
Appendices 3-1 - 3-4.	Individual body weights (g) of male rats	125
Appendices 4-1 - 4-4.	Individual body weights (g) of female rats	129
Appendices 5-1 - 5-4.	Individual food consumption (g/day) in male rats	133
Appendices 6-1 - 6-4.	Individual food consumption (g/day) in female rats	137
Appendices 7-1 - 7-4.	Individual water consumption (g/day) in male rats	141
Appendices 8-1 - 8-4.	Individual water consumption (g/day) in female rats	145
Appendices 9-1 - 9-4.	Individual FOB of male rats	149
Appendices 10-1 - 10-4.	Individual FOB of female rats	193
Appendices 11-1 - 11-4.	Individual sensory response of male rats on termination of administration period	237
Appendices 12-1 - 12-4.	Individual sensory response of female rats on termination of administration period	241
Appendices 13-1 - 13-4.	Individual grip strength (g) of male rats on termination of administration period	245
Appendices 14-1 - 14-4.	Individual grip strength (g) of female rats on termination of administration period	249
Appendices 15-1 - 15-4.	Individual spontaneous motor activity of male rats on termination of administration period	253
Appendices 16-1 - 16-4.	Individual spontaneous motor activity of female rats on termination of administration period.....	257
Appendices 17-1 - 17-4.	Individual urinary findings in male rats on termination of administration period	261
Appendices 18-1 - 18-4.	Individual urinary findings in female rats on termination of administration period	265
Appendices 19-1 - 19-3.	Individual urinary findings in male rats on termination of recovery period	269
Appendices 20-1 - 20-3.	Individual urinary findings in female rats on termination of recovery period	272
Appendices 21-1 - 21-4.	Individual hematological findings in male rats on termination of administration period	275
Appendices 22-1 - 22-4.	Individual hematological findings in female rats on termination of administration period	283
Appendices 23-1 - 23-3.	Individual hematological findings in male rats on termination of recovery period	291

Appendices 24-1 - 24-3.	Individual hematological findings in female rats on termination of recovery period	297
Appendices 25-1 - 25-4.	Individual blood chemical findings in male rats on termination of administration period	303
Appendices 26-1 - 26-4.	Individual blood chemical findings in female rats on termination of administration period	315
Appendices 27-1 - 27-3.	Individual blood chemical findings in male rats on termination of recovery period	327
Appendices 28-1 - 28-3.	Individual blood chemical findings in female rats on termination of recovery period	336
Appendices 29-1 - 29-4.	Individual necropsy findings in male rats on termination of administration period	345
Appendices 30-1 - 30-4.	Individual necropsy findings in female rats on termination of administration period	349
Appendices 31-1 - 31-3.	Individual necropsy findings in male rats on termination of recovery period	353
Appendices 32-1 - 32-3.	Individual necropsy findings in female rats on termination of recovery period	356
Appendices 33-1 - 33-4.	Individual organ weights of male rats on termination of administration period	359
Appendices 34-1 - 34-4.	Individual organ weights of female rats on termination of administration period	367
Appendices 35-1 - 35-3.	Individual organ weights of male rats on termination of recovery period	375
Appendices 36-1 - 36-3.	Individual organ weights of female rats on termination of recovery period	381
Appendices 37-1 - 37-4.	Individual histopathological findings in male rats on termination of administration period	387
Appendices 38-1 - 38-4.	Individual histopathological findings in female rats on termination of administration period	391
Appendices 39-1 - 39-3.	Individual histopathological findings in male rats on termination of recovery period	395
Appendices 40-1 - 40-3.	Individual histopathological findings in female rats on termination of recovery period	398

Attachments

Attachment 1.	Stability of 1,10-dibromodecane in test preparations (Study No. 095027).....	401
Attachment 2.	Concentrations of 1,10-dibromodecane in dosing preparations at the start of administration in male rats	402
Attachment 3.	Concentrations of 1,10-dibromodecane in dosing preparations at the end of administration in female rats	403
Attachments 4-1 - 4-3.	General signs in male rats during quarantine and acclimatization	404
Attachments 5-1 - 5-3.	General signs in female rats during quarantine and acclimatization	410
Attachments 6-1 - 6-3.	Body weights (g) of male rats during quarantine and acclimatization	416
Attachments 7-1 - 7-3.	Body weights (g) of female rats during quarantine and acclimatization	419
Attachment 8.	Background data [Hematological findings, Crl:CD (SD) female rats, 10 weeks]	422
Attachment 9.	Background data [Blood chemical findings, Crl:CD (SD) male rats, 10 weeks]	423
Attachment 10.	Background data [Blood chemical findings, Crl:CD (SD) female rats, 10 weeks]	424

2. 試験責任者陳述書

試験番号 : 502327

表　題：1,10-ジブロムデカンのラットを用いる 28 日間反復経口投与毒性試験及び 14 日間回復試験

本試験は、新規化学物質等に係る試験を実施する試験施設に関する基準について(平成 15 年 11 月 21 日、薬食発第 1121003 号、平成 15・11・17 製局第 3 号、環保企発第 031121004 号、平成 20 年 7 月 4 日最終改正) 及び OECD PRINCIPLES OF GOOD LABORATORY PRACTICE (OECD 化学物質の安全性試験の実施に関する基準、1997 年 11 月 26 日) に従って実施したものである。

2011 年 9 月 13 日

株式会社日本バイオリサーチセンター 羽島研究所

試験責任者

3. 最終報告書作成者署名

試験番号：502327

表　題：1,10-ジブロムデカンのラットを用いる28日間反復経口投与毒性試験及び14日間回復
試験

2011年9月13日

株式会社日本バイオリサーチセンター 羽島研究所

試験責任者_____

4. 試験概要

試験番号 : 502327

表題 : 1,10-ジブロムデカンのラットを用いる 28 日間反復経口投与毒性試験及び 14 日間回復試験

試験委託者 : 厚生労働省 医薬食品局審査管理課 化学物質安全対策室
〒100-8916 東京都千代田区霞が関一丁目 2 番 2 号

試験施設 : 株式会社日本バイオリサーチセンター 羽島研究所
〒501-6251 岐阜県羽島市福寿町間島六丁目 104 番地

試験場所 (血清中塩素濃度測定場所) :

株式会社日本バイオリサーチセンター 修善寺分室
〒410-2402 静岡県伊豆市大野 1868-23

試験目的 : 1,10-ジブロムデカンが継続的に人に摂取された場合の健康への影響を推定するためには、1,10-ジブロムデカンを雌雄ラットに 28 日間反復経口投与し、さらに一部の動物には 14 日間の回復期間を設けた反復投与による毒性学的影響を検討した。

準拠したガイドライン :

新規化学物質等に係る試験の方法について (平成 15 年 11 月 21 日、薬食発第 1121002 号、平成 15・11・13 製局第 2 号、環保企発第 031121002 号、平成 18 年 11 月 20 日最終改正) 及び OECD Guideline for Testing of Chemicals for Repeated Dose 28-day Oral Toxicity Study in Rodents (407)

遵守した GLP :

新規化学物質等に係る試験を実施する試験施設に関する基準について (平成 15 年 11 月 21 日、薬食発第 1121003 号、平成 15・11・17 製局第 3 号、環保企発第 031121004 号、平成 20 年 7 月 4 日最終改正) 及び OECD PRINCIPLES OF GOOD LABORATORY PRACTICE (OECD 化学物質の安全性試験の実施に関する基準、1997 年 11 月 26 日)

遵守した動物の福祉に関する法令など：

法律第 105 号 (昭和 48 年 10 月 1 日, 平成 11 年 12 月 22 日一部改正, 平成 17 年 6 月 22 日一部改正)「動物の愛護及び管理に関する法律」, 環境省告示第 88 号 (平成 18 年 4 月 28 日)「実験動物の飼養及び保管並びに苦痛の軽減に関する基準」, 厚生労働省通知 科発第 0601005 号 (平成 18 年 6 月 1 日)「厚生労働省の所管する実施機関における動物実験等の実施に関する基本指針について」及び株式会社日本バイオリサーチセンター 羽島研究所「動物実験倫理委員会規則」
本試験は、試験施設の動物実験倫理委員会で審査され、試験施設の運営管理者により承認されたものである。

試験開始日：2008 年 10 月 28 日

試験終了日：2011 年 9 月 13 日

試験実施日：

動物入手日	2008 年 10 月 29 日
雄の群分け日	2008 年 11 月 10 日
実験開始日 (雄の投与開始日)	2008 年 11 月 11 日
雌の群分け日	2008 年 11 月 12 日
雌の投与開始日	2008 年 11 月 13 日
雄の投与期間終了日	2008 年 12 月 8 日
雄投与期間終了時の剖検日	2008 年 12 月 9 日
雌の投与期間終了日	2008 年 12 月 10 日
雌投与期間終了時の剖検日	2008 年 12 月 11 日
雄回復期間終了時の剖検日	2008 年 12 月 23 日
雌回復期間終了時の剖検日	2008 年 12 月 25 日
実験終了日 (病理組織所見最終化日)	2009 年 2 月 16 日

資料、標本及び保管すべき被験物質の保管場所：

資料 (試験計画書の原本及びその変更書の原本, 生データ, 最終報告書の原本), 標本及び保管すべき被験物質は試験施設の資料保存施設に最終報告書提出後 10 年間保管する。その後の処置は、試験委託者と協議の上、決定する。

SOP 及び試験計画書に従わなかったこと :

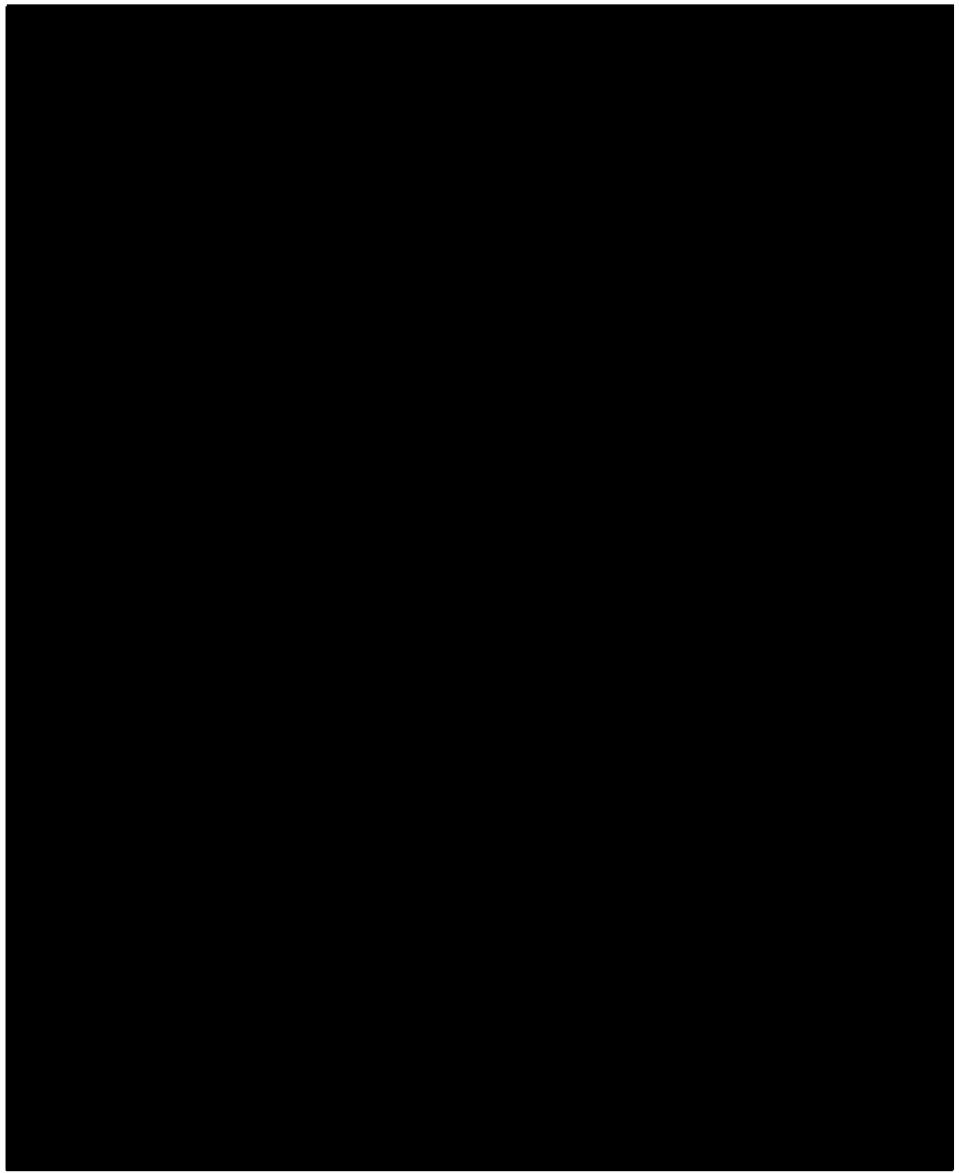
動物飼育室 (E 棟 5 号室) の湿度の逸脱が、2008 年 11 月 28 日に認められた。湿度許容範囲の下限 40%が最低湿度 39.2% (逸脱時間 6 分) となった。逸脱の範囲が僅かで、時間も短いことから試験成績に及ぼす影響はないと判断した。
その他に SOP 又は試験計画書に従わなかったことはなかった。

予見することができなかつた試験の信頼性に影響を及ぼす疑いのある事態 :

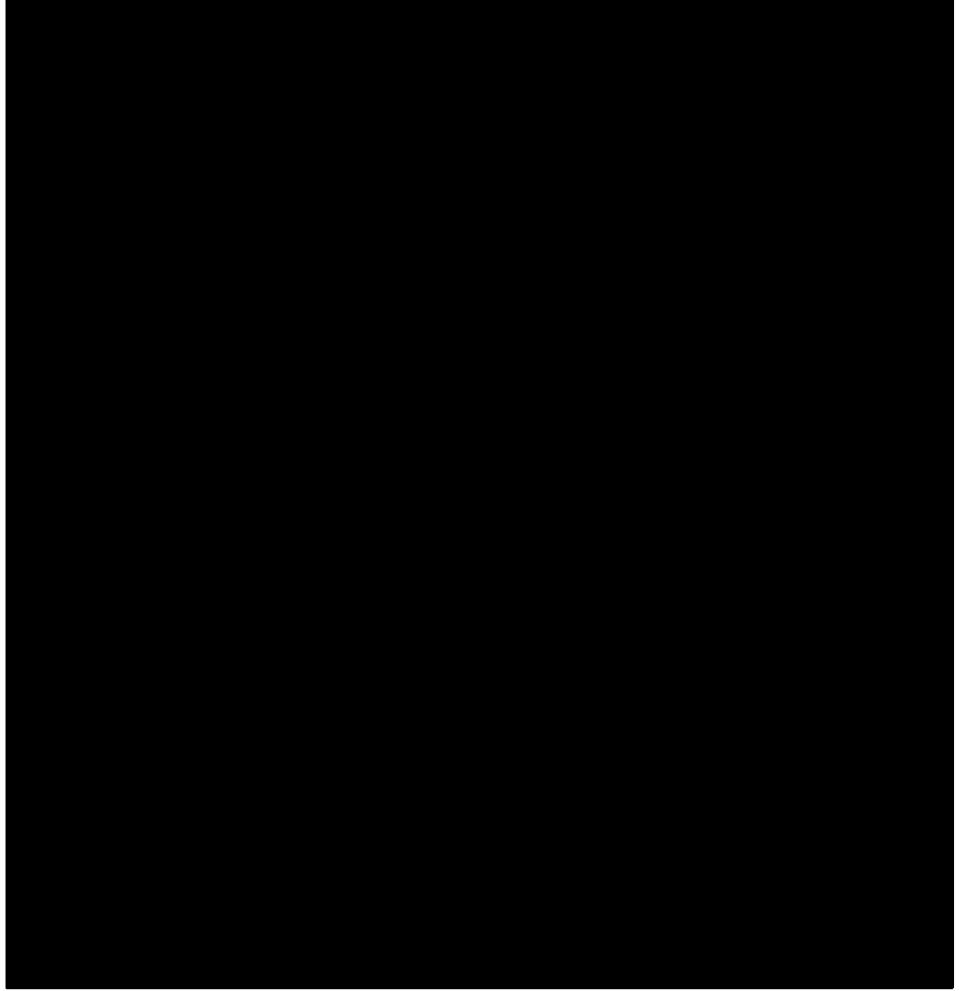
当試験の実施期間中に予見することができなかつた試験の信頼性に影響を及ぼす疑いのある事態は認められなかつた。

5. 試験従事者及び業務分担

試験責任者:



試験従事者:



6. 要約

1,10-ジブロムデカンが継続的に人に摂取された場合の健康への影響を推定するために、1,10-ジブロムデカンを雌雄ラットに28日間反復経口投与し、さらに一部の動物には14日間の回復期間を設けた反復投与による毒性学的影響を検討した。投与量は、200 mg/kg を高用量とし、以下、40 及び 8 mg/kg を設定した。媒体にはトウモロコシ油を用い、対照群には被験物質投与群と同容量のトウモロコシ油を投与した。各群の使用動物数は対照群及び 40 及び 200 mg/kg 群を雌雄各12例とし、各群ともそのうち半数を回復群とした。8 mg/kg 群は雌雄各 6 例とした。

1) 一般状態及び死亡状況

死亡例は、雌雄とも認められなかった。一般状態では、雌雄とも 200 mg/kg 群で投与後に一過性の流涎がみられたが毒性症状とはみなさなかった。

2) 体重、摂餌量及び摂水量

体重及び摂餌量では、雌雄のいずれの投与群とも投与に起因する変化は認められなかった。

摂水量では、雄の 200 mg/kg 群で投与 9, 12 及び 23 日に、雌の 200 mg/kg 群で投与 5 日及び 40 mg/kg 群で投与 2 日に高値がみられた。回復期間中には、雌雄とも投与に起因する変化は認められなかった。

3) 行動機能 (FOB), 感覚反応、握力及び自発運動量

行動機能 (FOB), 感覚反応、握力及び自発運動量では、雌雄のいずれの投与群とも投与に起因する変化はみられなかった。

4) 尿検査、血液学検査及び血液生化学検査

尿検査及び血液学検査では、投与期間終了時及び回復期間終了時に雌雄のいずれの投与群とも投与に起因する変化は認められなかった。

血液生化学検査において、投与期間終了時に雄の 200 及び 40 mg/kg 群で尿素窒素の高値、雌雄の 200 mg/kg 群で Cl の高値がみられた。回復期間終了時には、雌雄とも投与に起因する変化は認められなかった。

5) 剖検所見及び器官重量

剖検において、投与期間終了時に雄の 200 及び 40 mg/kg 群で肝臓の褪色、200 mg/kg 群で腺胃粘膜の潰瘍がみられた。回復期間終了時には、雌雄とも投与に起因する変化は認められなかった。

器官重量において、投与期間終了時に雄の 200 及び 40 mg/kg 群で肝臓の相対重量の高値がみられた。雌では 200 mg/kg 群で肝臓及び腎臓の絶対重量及び相対重量の高値がみられた。回復期間終了時には、雌雄とも投与に起因する変化は認められなかった。

6) 病理組織学検査

投与期間終了時には、雄では肝臓に門脈周囲性の肝細胞腫大及び脾臓にチモーゲン顆粒の減少が 200, 40 及び 8 mg/kg 群、肝臓に微小肉芽腫が 200 及び 40 mg/kg 群でみられた。また、剖検所見で腺胃粘膜の潰瘍が認められた 200 mg/kg 群の 1 例に、腺胃粘膜の糜爛がみられた。雌では肝臓に門脈周囲性の肝細胞腫大及び脾臓にチモーゲン顆粒の減少が 200, 40 及び 8 mg/kg 群でみられた。

回復期間終了時には、雄では肝臓に門脈周囲性の肝細胞腫大が 200 及び 40 mg/kg 群でみられた。雌では肝臓に門脈周囲性の肝細胞腫大が 200 mg/kg でみられた。

以上のように、1,10-ジブロムデカンの無影響量は、雌雄とも 8 mg/kg 投与により肝臓に門脈周囲性の肝細胞腫大及び脾臓にチモーゲン顆粒の減少が認められたことから、8 mg/kg/day 未満と考えられる。

7. 緒言

1,10-ジブロムデカンが継続的に人に摂取された場合の健康への影響を推定するために、新規化物質等に係る試験の方法について（平成 15 年 11 月 21 日、薬食発第 1121002 号、平成 15・11・13 製局第 2 号、環保企発第 031121002 号、平成 18 年 11 月 20 日最終改正）及び OECD Guideline for Testing of Chemicals for Repeated Dose 28-day Oral Toxicity Study in Rodents (407) に基づいて 1,10-ジブロムデカンを雌雄ラットに 28 日間反復経口投与し、さらに一部の動物には 14 日間の回復期間を設けた反復投与による毒性学的影響を検討した。

8. 方法

8.1. 被験物質及び媒体

被験物質 1,10-ジブロムデカン（英語名称: 1,10-dibromodecane, CAS No. 4101-68-2, Fig. 1）は、化学式: Br(CH₂)₁₀Br, 分子量: 300.07, 物性・性状: 固体, 凝固点: 26.1°Cである¹⁾. 当試験には、東京化成工業株式会社から入手したものを用いた [製造元: 東京化成工業株式会社(東京都), Lot No. VQHMG, 純度 (GC): 98.8%, 入手量: 1000 g]. 入手後は、被験物質保管室の保管庫に冷蔵・遮光・密閉の条件下で保管した。被験物質を保管した保管庫（冷蔵庫: BMS-500F3, 日本フリーザー株式会社）の温度 [設定温度: 4°C (許容範囲: 2.0~8.0°C; 実測値: 2.1~6.4°C)] に問題はなかった。

投与期間終了後、試験施設で保管する被験物質 (1.0000 g) を除いた残余被験物質は製造元に返却した。

試験の投与期間終了後に実施した試験施設で保管した被験物質 (Lot No. VQHMG) の品質試験成績から、使用期間中の安定性が確認された。

媒体には、トウモロコシ油（以下、Corn oil, Lot No.: V8F7016, 使用期限: 2013 年 5 月 29 日又は 2013 年 7 月 14 日, 製造元: ナカライトスク株式会社, 保管条件: 室温, 保管場所: 被験物質保管室の保管庫）を用いた。Corn oil を保管した被験物質保管室の保管庫の温度 [設定温度: 23°C (許容範囲: 18.0~28.0°C; 実測値: 21.5~24.3°C)] 及び湿度 [設定湿度: 55% (許容範囲: 40.0~70.0%; 実測値: 47.2~59.8%)] に問題はなかった。

8.2. 投与検体及び濃度測定

1,10-ジブロムデカンは、使用前にウォーターバス（ペアスター: PS-100, 東京理化器械株式会社）を用いて約 30°C で加温、融解した。各濃度ごとに必要量（純度による補正は実施しなかつた）を秤取（電子天秤: AT250 又は PM2500, メトラー・トレド株式会社）後、Corn oil で 40, 8 及び 1.6 mg/mL 濃度となるように溶解し、調製した。

調製検体の安定性については、1, 20 及び 200 mg/mL の濃度で調製後、冷蔵（設定温度 4°C, 冷蔵庫: BMS-500F3, 日本フリーザー株式会社）・遮光 8 日間とその後、室温（設定温度: 23°C）・遮光で 6 時間まで問題がないことが確認されている²⁾（Attachment 1）。従って、各投与検体は、ディスポーザブルポリプロピレン製容器に 1 日分ごとに小分け後、冷蔵（冷蔵庫: BMS-500F3, 日本フ

リーザー株式会社)・遮光の条件下で保管し、調製後 7 日以内に使用した。各投与検体を保管した冷蔵庫の温度 [設定温度: 4°C (許容範囲: 2.0 ~ 8.0°C; 実測値: 4.0 ~ 5.8°C)] に問題はなかった。各投与検体は、冷蔵庫から持ち出し後 4 時間 50 分以内に使用した。

雄投与開始日 (投与 1 日) 及び雌投与終了日に使用した各投与検体中の被験物質濃度をガスクロマトグラフ (GC-2010, 株式会社島津製作所) で測定した。その結果、被験物質濃度は表示濃度の 93.7 ~ 104.4% であり、規定値 ($100 \pm 10\%$) の範囲内であった (Attachments 2 及び 3)。

8.3. 試験動物及び飼育条件

8.3.1. 動物種及び系統

試験には、毒性試験に一般的に用いられている動物種で、その系統維持が明らかである Crl:CD (SD) 雌雄ラット (SPF) を用いた。動物は、2008 年 10 月 29 日に日本チャールス・リバー株式会社 日野飼育センターから 4 週齢で雌雄各 52 匹を入手した。入手後 1 日の体重範囲は、雄が 88 ~ 106 g、雌が 78 ~ 95 g であった。

8.3.2. 検疫及び馴化、群分け並びに個体識別

入手した動物には、検疫期間 (2008 年 10 月 29 日 ~ 11 月 3 日) と馴化期間 (雄: 2008 年 11 月 4 日 ~ 2008 年 11 月 10 日、雌: 2008 年 11 月 4 日 ~ 2008 年 11 月 12 日) を設け、この間に一般状態の観察を 1 日 1 回、体重測定 (電子天秤: PB3002-S/FACT 又は PB3002、メトラー・トレド株式会社) を雄は 3 回と雌は 4 回、行動機能 (FOB) 観察を 1 回行った。検疫・馴化期間中の一般状態及び体重推移に異常が認められなかった動物を群分けした (Attachments 4-1 ~ 4-3, 5-1 ~ 5-3, 6-1 ~ 6-3 及び 7-1 ~ 7-3)。

投与開始前日に、コンピュータを用いて体重を層別に分けた後に無作為抽出法により各群の平均体重及び分散がほぼ等しくなるように群分けした。但し、個々の動物の体重が平均値の $\pm 20\%$ 以内にあるものを選んで群分けした。群分け日の体重範囲は、雄が 183 ~ 223 g、雌が 147 ~ 197 g であった。群分け残余雄のうち、検疫・馴化動物番号の若い順に 2 匹を雌の回復期間終了日に実施した微生物モニタリング検査用動物とした。微生物モニタリング検査において、感染を示唆するような異常はみられなかった。群分け残余雄のうち微生物モニタリング検査に用いなかった雄及び群分け残余雌は、群分け日にジエチルエーテルによる麻酔下で腹大動脈から放血して安楽死させた。

動物の個体識別は、動物入手日に黒色油性インクを用いて尾へ検疫・馴化動物番号 (下 3 桁) を記入して行った。

動物の検疫・馴化期間中の各ケージには試験番号、入手年月日及び検疫・馴化動物番号を記入したラベルを、群分け後の各ケージには試験番号、投与量、検疫・馴化動物番号及び動物番号を記入し、群ごとに色分けしたラベルをそれぞれ取り付けた。なお、FOB 観察は Blind で検査するため、検疫・馴化期間中のラベルを取り付けた。

8.3.3. 環境条件及び飼育管理

動物は、設定温度: 23°C (許容範囲: 20.0 ~ 26.0°C; 実測値: 21.8 ~ 24.6°C)、設定湿度: 55% (許容範

囲: 40.0~70.0%; 実測値: 39.2~60.1%, 2008年11月28日に最低湿度39.2%の逸脱), 明暗各12時間(照明: 午前6時~午後6時), 換気回数12回/時(中性能フィルターを通した新鮮空気)に維持された動物飼育室(E棟5号室)で飼育した。

動物は、検疫・馴化期間中はステンレス製懸垂式ケージ(W: 240×D: 380×H: 200 mm)を用いて1ケージ当たり2匹の雌雄別群飼育とし、群分け後はステンレス製懸垂式ケージを用いて個別飼育した。ステンレス製懸垂式ケージ及び給餌器の交換は2週間に1回以上行い、給水瓶及びステンレス製懸垂式ケージの受皿の交換は1週間に2回以上行った。動物飼育室の清掃(床の掃除)及び0.02%次亜塩素酸ナトリウム水溶液での床のモップ拭きによる消毒は毎日1回実施した。

8.3.4. 飼料及び飲料水

飼料は製造後5箇月以内の固型飼料(CRF-1, オリエンタル酵母工業株式会社)を自由に摂取させた。但し、剖検前日には午後4時頃から給水・絶食させた。使用した飼料と同一ロットの分析結果は、Eurofins Scientific Analytics及びオリエンタル酵母工業株式会社で実施したもの入手した。飼料の分析結果は、当試験施設で設定した基準値の範囲内であった。

飲料水は水道水を自由に摂取させた。飲料水の水質検査結果は、株式会社環境公告センターで約6箇月ごとに実施したもの入手した。飲料水の分析結果は、当試験施設で設定した基準値の範囲内であった。

8.4. 投与経路、投与方法、群構成、投与量及び投与期間

8.4.1. 投与経路及び投与方法

1,10-ジブロムデカンは、継続して経口的に人に摂取される可能性が考えられるため、投与経路として経口を選択した。

投与は、ディスポーザブルラット用金属製経口胃ゾンデ(有限会社フチガミ器械)を取り付けたディスポーザブルポリプロピレン製注射筒(テルモ株式会社)を用いて強制的に行った。

投与液量は、投与日に最も近い測定日の体重を基準とし、5 mL/kgで算出した。

投与時刻は午前8時31分~11時51分までの間で、投与回数は1日1回とした。

投与開始日の週齢は雌雄とも6週齢であり、体重範囲は雄が197~223 g、雌が156~186 gであった。

8.4.2. 群構成及び投与量

群構成は、以下に示したように被験物質投与群として3群を設定し、その他に対照群を設けた。各群の動物数は、対照群、40及び200 mg/kg群を雌雄各12例、8 mg/kg群を雌雄各6例とした。

群	投与量 (mg/kg/day)	濃度 (mg/mL)	ラベル の色	動物数(動物番号)	
				雄	雌
1群 対照 (Corn oil)	0	0	白色	6 ¹⁾ +6 ²⁾ (M01101～M01112)	6 ¹⁾ +6 ²⁾ (F01151～F01162)
2群 1,10-ジブロム デカン	8	1.6	茶色	6 ¹⁾ (M02201～M02206)	6 ¹⁾ (F02251～F02256)
3群 1,10-ジブロム デカン	40	8	青色	6 ¹⁾ +6 ²⁾ (M03301～M03312)	6 ¹⁾ +6 ²⁾ (F03351～F03362)
4群 1,10-ジブロム デカン	200	40	紫色	6 ¹⁾ +6 ²⁾ (M04401～M04412)	6 ¹⁾ +6 ²⁾ (F04451～F04462)

¹⁾投与期間終了時に剖検

²⁾回復期間終了時に剖検

1,10-ジブロムデカンの投与量は、当試験の予備試験³⁾（投与段階: 0, 10, 50, 200 及び 1000 mg/kg、使用動物数: 各群雌雄各 5 例）の結果から決定した。すなわち、予備試験において 1000 mg/kg 群の雌で死亡例が 1 例認められた。雄では瀕死及び死亡例はいずれの群にも認められなかった。一般状態において、腹部膨満が 1000 mg/kg 群の雄でみられた。好中球比率の有意な高値が 1000 mg/kg 群の雌、単球比率の有意な高値が 1000 mg/kg 群の雌雄でみられた。ALT の有意な高値が 1000 mg/kg 群の雄、γ-GTP、総蛋白、アルブミン及び A/G 比の有意な高値が 1000 mg/kg 群の雌、総ビリルビンの有意な高値が 1000 mg/kg 群の雌雄でみられた。肝臓の大型化が 1000 mg/kg 群の雌雄、肝臓の褪色が 200 及び 50 mg/kg 群の雌雄と 1000 mg/kg 群の雄でみられた。唾液腺の絶対重量の有意な低値が 1000 mg/kg 群の雄、相対重量の有意な低値が 1000 及び 200 mg/kg 群の雄、肝臓の絶対重量の有意な高値が 1000 及び 200 mg/kg 群の雌雄、肝臓の相対重量の有意な高値が 1000 及び 200 mg/kg 群の雌雄と 50 mg/kg 群の雄、腎臓の絶対重量の有意な高値が 1000 mg/kg 群の雌、腎臓の相対重量の有意な高値が 1000 mg/kg 群の雌雄でみられた。そこで、当本試験では、200 mg/kg を高用量とし、以下公比 5 で 40 及び 8 mg/kg の 3 投与群を設定した。

対照として媒体 (Corn oil) のみを被験物質投与群と同容量投与する群を設けた。

8.4.3. 投与期間

投与期間は、新規化学物質等に係る試験の方法について（平成 15 年 11 月 21 日、薬食発第 1121002 号、平成 15・11・13 製局第 2 号、環保企発第 031121002 号、平成 18 年 11 月 20 日最終改正）及び OECD Guideline for Testing of Chemicals for Repeated Dose 28-day Oral Toxicity Study in Rodents (407) に従って、雌雄とも 28 日間とした。28 日間の投与後に、対照群、40 及び 200 mg/kg 群の雌雄各半数の動物について 14 日間の回復期間を設けた。

投与開始日を投与 1 日と規定し、最終投与の翌日を回復 1 日とした。

8.5. 観察及び検査項目

8.5.1. 一般状態

死亡の有無の確認及び一般状態の観察は、投与期間中に投与前及び投与後の1日2回、回復期間中に毎日1回及び剖検日に1回行った。

8.5.2. 体重

体重は、1週間に2回測定した [測定日: 投与1, 4, 8, 11, 15, 18, 22, 25, 28日及び29日(回復1日), 回復4, 8, 11, 14及び15日(電子天秤: PB3002, PG2002-S又はPB3002-S/FACT, メトラー・トレド株式会社)]。

8.5.3. 摂餌量

摂餌量は、1週間に2回1日量を測定した [残量測定日: 投与2, 5, 9, 12, 16, 19, 23及び26日, 回復2, 5, 9及び12日(電子天秤: PB3002, PG2002-S又はPB3002-S/FACT, メトラー・トレド株式会社)]. 摂餌量のTables, Figs及びAppendicesの表示は残量の測定日とした。

8.5.4. 摂水量

摂水量は、1週間に2回1日量を測定した [残量測定日: 投与2, 5, 9, 12, 16, 19, 23及び26日, 回復2, 5, 9及び12日(電子天秤: PB3002, PG2002-S又はPB3002-S/FACT, メトラー・トレド株式会社)]. 摂水量のTables, Figs及びAppendicesの表示は残量の測定日とした。

8.5.5. FOB

全例について投与開始前(雄は投与開始4日前、雌は投与開始3日前)、投与期間終了時剖検例について投与7, 14, 21及び27日に下記の1)~3)の項目を観察した。観察時刻は、投与後1時間とした。なお、観察者はほぼ固定し、Blindで実施した。

- 1) 姿勢、眼瞼閉鎖状態、かみつき行動及び痙攣はケージ内で観察した。
- 2) ケージからの出し易さ、扱い易さ、筋の緊張、毛の状態、流涙、流涎及び呼吸は手を持って観察した。
- 3) 立ち上がり回数及び毛づくろい回数はオープンフィールド内で2分間観察した。また、同時に歩行状態、眼瞼閉鎖状態、覚醒度、行動異常及び正向反射をオープンフィールド内で観察した。

8.5.6. 感覚反応

投与期間終了時剖検例について、投与27日のFOB観察後に瞳孔反射、接近反射、触覚反射、聴覚反射及び痛覚反射を作業台の上で検査した。

8.5.7. 握力

投与期間終了時剖検例について、投与27日の感覚反応検査終了後にAnimal Grip Strength System

(San Diego Instruments Inc.) を用いて、前肢及び後肢の握力を 5 回測定し、最高値と最低値を除いた中央の 3 測定値の平均値を採用した。

8.5.8. 自発運動量

投与期間終了時剖検例について、投与 26 日に Activity Monitor (MED Associates Inc.) を使用し、歩行量及び立ち上がり回数について投与後 1 時間から 2 時間まで 10 分間隔で測定した。

8.5.9. 尿検査

投与期間終了前 (投与 23 日) の投与検体投与前に投与期間終了時の剖検用動物、回復期間終了前 (回復 9 日) に回復期間終了時の剖検用動物について、採尿ケージを用いて絶食・給水下で新鮮尿を採取した。その後、引き続いて給餌・給水下で 24 時間尿を採取した。採取した尿について、以下の検査を実施した。検査後の尿は廃棄した。

新鮮尿：色調は、外観判定とした。pH、蛋白質、ブドウ糖、ケトン体、ビリルビン、潜血及びウロビリノーゲンは、尿検査試験紙 (シーメンスメディカルソリューションズ・ダイアグノスティクス株式会社) に尿を滴下後、反射分光光度法により尿化学分析装置 (クリニテック アドバンタス、シーメンスメディカルソリューションズ・ダイアグノスティクス株式会社) を用いて検査した。尿沈渣は、沈渣を尿沈渣染色液 (新 Sternheimer 法、シスマックス株式会社) で染色後に顕微鏡下で観察した。

24 時間尿：尿量 (UV) は、尿比重 (S.G) と重量 (電子天秤: PB3002-S/FACT 又は PB3002、メトラー・トレド株式会社) から算出した。尿比重は、屈折率により屈折型尿比重計 (ユリペット-II D、株式会社ニコン) を用いて測定した。

8.5.10. 血液学検査

最終投与の翌日 (投与 29 日) 及び回復期間終了後 (回復 15 日) にペントバルビタールナトリウムの腹腔内投与 (40 mg/kg) による麻酔下で腹大動脈から EDTA-2K コーティングチューブ (ベノジェクト[®] II 真空採血管、VP-DK052K05、テルモ株式会社) に血液を採取し、以下の血液学検査を実施した。測定後の残余血液は廃棄した。

赤血球数 (RBC) はシースフロー DC 検出法、ヘモグロビン量は SLS ヘモグロビン法、ヘマトクリット値は赤血球パルス波高値検出法、血小板数はシースフロー DC 検出法、白血球数 (WBC)、白血球分類及び網状赤血球比率はフローサイトメトリー法によりいずれも多項目自動血球分析装置 (XT-2000iV、シスマックス株式会社) を用いて測定した。平均赤血球容積 (MCV) は赤血球数とヘマトクリット値から、平均赤血球血色素量 (MCH) は赤血球数とヘモグロビン量から、平均赤血球血色素濃度 (MCHC) はヘマトクリット値とヘモグロビン量から多項目自動血球分析装置 (XT-2000iV、シスマックス株式会社) を用いて算出した。

プロトロンビン時間 (PT)、活性化部分トロンボプラスチン時間 (APTT) 及びフィブリノーゲン濃度は、血液を 3.2 w/v% クエン酸ナトリウムで処理後、遠心分離 [約 4°C, 3000 rpm (約 1972×g), 15 分間、遠心機: CF 8DL、日立工機株式会社] して得た血漿について、光散乱検出方式により全自动血液凝固測定装置 (CA-530、シスマックス株式会社) を用いて測定した。

8.5.11. 血液生化学検査

血液学検査用の血液と同時に腹大動脈から採取した血液から遠心分離 [約4°C, 3000 rpm(約1972×g), 15分間, 遠心機: CF 8DL, 日立工機株式会社] して得た血清は, 測定用血清, Cl測定用血清と保管用血清に分けて分取して, 測定用血清について以下の血液生化学検査を実施した.

ASTはMDH-UV法, ALTはLDH-UV法, ALPはp-ニトロフェニルリン酸基質法, γ-GTPはL-γ-グルタミル-3-カルボキシ-4-ニトロアニリド基質法, 総蛋白はBiuret法, 総ビリルビンはジアゾ法, 尿素窒素はウレアーゼ・GOD法, クレアチニンはクレアチニナーゼ・F-DAOS法, ブドウ糖はヘキソキナーゼ・G-6-PDH法, 総コレステロールはCOD・HDAOS法, トリグリセライドはGPO・HDAOS法, Caはo-CPC法, 無機リンはPNP・XDH法, Na及びKはイオン選択電極法によりいずれも生化学自動分析装置 (AU 400, オリンパス株式会社) を用いて測定した. Clは, イオン選択電極法による測定では, 被験物質中に含まれるBrが影響する⁴⁾ことが懸念されるため, 電量滴定法により測定した. すなわち, Cl測定用血清をドライアイス凍結下で修善寺分室に送付後, 修善寺分室にて全自動電解質分析装置 (EA04, 株式会社エイアンドティー) を用いて測定した.

アルブミンは総蛋白及び蛋白分画値 [電気泳動法, 自動電気泳動装置 (AES 310, オリンパス株式会社)] から, A/G (アルブミン/グロブリン) は蛋白分画値から算出した.

測定後の残余血清は廃棄し, 保管用血清は, 冷凍庫 (-80°C 設定, 超低温フリーザー: ULT1786-9JD, Kendro Laboratory Products) 内に保管した. その後, 保管用血清は再測定の必要がないことを確認後, 廃棄した.

8.5.12. 剖検及び器官重量

上記の 8.5.10.及び 8.5.11.の項で採血した動物をさらに放血して安樂死させた後, 剖検した. 脳(大脳, 小脳, 延髄), 下垂体, 唾液腺(舌下腺・顎下腺), 甲状腺, 胸腺, 心臓, 肝臓, 脾臓, 腎臓, 副腎, 精巢, 精巢上体及び卵巣は重量を測定した(電子天秤: AB204, メトラー・トレド株式会社). 各器官重量を最終体重で除して相対重量も算出した. 下垂体及び甲状腺重量は, 20 vol%中性緩衝ホルマリンで1晩固定後, 測定した. これらの器官は, 肺, 気管, 膵臓, 食道, 胃, 十二指腸, 空腸, 回腸, 盲腸, 結腸, 直腸, リンパ節(下頸・腸間膜), 膀胱, 精嚢, 前立腺, 子宮, 膝, 上皮小体, 脊髄, 坐骨神経, 眼球, ハーダー腺, 胸骨, 大腿骨, 大腿筋, 乳腺(雌のみ)とともに20 vol%中性緩衝ホルマリンで固定した. ただし, 精巢及び精巢上体はブアン液で2~3時間固定後, 20 vol%中性緩衝ホルマリンに再固定し, 眼球はグルタルアルデヒド・ホルマリンで1晩固定後, 20 vol%中性緩衝ホルマリンに再固定した.

8.5.13. 病理組織学検査

対照群及び 200 mg/kg 群の投与期間終了時に剖検した例について, 心臓, 肺, 気管, 肝臓, 脾臓, 唾液腺(舌下腺・顎下腺), 食道, 胃, 十二指腸, 空腸, 回腸, 盲腸, 結腸, 直腸, 胸腺, 脾臓, リンパ節(下頸・腸間膜), 腎臓, 膀胱, 精巢, 精巢上体, 精嚢, 前立腺, 卵巣, 子宮, 膝, 下垂体, 副腎, 甲状腺, 上皮小体, 脳(大脳・小脳・延髄), 脊髄, 坐骨神経, 眼球, ハーダー腺, 骨髄(胸骨・大腿骨), 骨(胸骨・大腿骨), 大腿筋, 乳腺(雌のみ)のHE染色組織標本を作製し,

病理組織学検査を実施した。なお、精巢については、PAS-ヘマトキシリン染色組織標本も作製した。200 mg/kg 群の検査において対照群と比べて異常を示す動物数に差があった肝臓及び肺臓については、40 及び 8 mg/kg 群の雌雄並びに回復群の雌雄についても HE 染色組織標本を作製し、病理組織学検査を実施した。さらに、剖検時に腺胃粘膜の潰瘍がみられた 200 mg/kg 群の 1 例については、その部位も病理組織学検査を実施した。切り出し後の器官・組織は、10 vol%中性緩衝ホルマリンで保存した。

8.6. 統計学的方法

測定値の統計学的解析は、下記のように行った。有意水準は、両側 5%及び 1%とした。一般状態及び剖検所見は統計学的解析を行わなかった。

体重、摂餌量、摂水量、毛づくろい及び立ち上がり回数 (FOB)、握力、自発運動量、尿量、尿比重、血液学検査、血液生化学検査及び器官重量 (相対重量を含む) については、各群で平均値及び標準偏差を算出した。次に、Bartlett検定⁵⁾により分散の一様性を検定した。その結果、等分散の場合には対照群と各被験物質投与群との間でDunnett検定⁶⁾を実施した。不等分散の場合には、対照群と各被験物質投与群との間でSteel検定⁷⁾を実施した。

行動機能 (FOB)(但し、毛づくろい及び立ち上がり回数を除く) 及び感覚反応は、各群で平均値及び範囲を算出した。その後、Steel 検定を実施した。

病理組織学検査において、200 mg/kg群で毒物学的影響が示唆され、40 及び 8 mg/kg群についても検査を実施した器官・組織の所見については、対照群との群間比較を上記のSteel検定を用いて行った。200 mg/kg群において対照群との間に有意差が認められた場合は、Cochran・Armitageの傾向検定^{8),9)}を用いて用量反応性の検定を行った。

Dunnett検定及びSteel検定には、統計パッケージSASのPROBMC関数¹⁰⁾を使用した。

9. 試験結果

9.1. 一般状態

9.1.1. 雄 (Table 1; Appendices 1-1 - 1-4)

死亡例及び瀕死例はいずれの群にも認められなかった。

投与期間中には、200 mg/kg 群で投与後に一過性の流涎が 10 例にみられた。40, 8 mg/kg 群及び対照群では、一般状態の異常はみられなかった。

回復期間中には、いずれの群とも一般状態の異常はみられなかった。

9.1.2. 雌 (Table 2; Appendices 2-1 - 2-4)

死亡例及び瀕死例はいずれの群にも認められなかった。

投与期間中には、200 mg/kg 群で投与後に一過性の流涎が 4 例にみられた。40, 8 mg/kg 群及び対照群では、一般状態の異常はみられなかった。

回復期間中には、いずれの群とも一般状態の異常はみられなかった。

9.2. 体重

9.2.1. 雄 (Table 3; Fig. 2; Appendices 3-1 - 3-4)

投与期間中には、各投与群とも対照群と比べて各測定日の体重に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の体重に有意差はみられなかった。

9.2.2. 雌 (Table 4; Fig. 3; Appendices 4-1 - 4-4)

投与期間中には、各投与群とも対照群と比べて各測定日の体重に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の体重に有意差はみられなかった。

9.3. 摂餌量

9.3.1. 雄 (Table 5; Fig. 4; Appendices 5-1 - 5-4)

投与期間中には、200 mg/kg 群で対照群と比べて投与 12 日に有意な摂餌量の高値がみられたが、一過性であり対照群との差はわずかであることから、被験物質による影響とは判断しなかった。

8 mg/kg 群では、対照群と比べて投与 12 日に摂餌量の有意な低値がみられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。40 mg/kg 群では、対照群と比べて各測定日の摂餌量に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の摂餌量に有意差はみられなかった。

9.3.2. 雌 (Table 6; Fig. 5; Appendices 6-1 - 6-4)

投与期間中には、各投与群とも対照群と比べて各測定日の摂餌量に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の摂餌量に有意差はみられなかった。

9.4. 摂水量

9.4.1. 雄 (Table 7; Fig. 6; Appendices 7-1 - 7-4)

投与期間中には、200 mg/kg 群で対照群と比べて投与 9, 12 及び 23 日に摂水量の有意な高値がみられた。40 及び 8 mg/kg 群では、対照群と比べて各測定日の摂水量に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の摂水量に有意差はみられなかった。

9.4.2. 雌 (Table 8; Fig. 7; Appendices 8-1 - 8-4)

投与期間中には、200 mg/kg 群で対照群と比べて投与 5 日に、40 mg/kg 群で投与 2 日に摂水量の有意な高値がみられた。8 mg/kg 群では、対照群と比べて各測定日の摂水量に有意差はみられなかった。

回復期間中には、各投与群とも対照群と比べて各測定日の摂水量に有意差はみられなかった。

9.5. FOB

9.5.1. 雄 (Table 9; Appendices 9-1 - 9-4)

200 mg/kg 群では、流涎がみられたが、投与後の流涎が継続したものと考えられる。40 及び 8 mg/kg 群では、各測定日のいずれの項目にも異常はみられなかった。

9.5.2. 雌 (Table 10; Appendices 10-1 - 10-4)

200 mg/kg 群では、流涎がみられたが、投与後の流涎が継続したものと考えられる。40 及び 8 mg/kg 群では、各測定日のいずれの項目にも異常はみられなかった。

9.6. 感覚反応

9.6.1. 雄 (Table 11; Appendices 11-1 - 11-4)

各投与群とも、いずれの項目にも異常はみられなかった。

9.6.2. 雌 (Table 12; Appendices 12-1 - 12-4)

各投与群とも、いずれの項目にも異常はみられなかった。

9.7. 握力

9.7.1. 雄 (Table 13; Appendices 13-1 - 13-4)

各投与群とも、対照群と比べて前肢及び後肢の握力に有意差はみられなかった。

9.7.2. 雌 (Table 14; Appendices 14-1 - 14-4)

各投与群とも、対照群と比べて前肢及び後肢の握力に有意差はみられなかった。

9.8. 自発運動量

9.8.1. 雄 (Table 15; Appendices 15-1 - 15-4)

各投与群とも、対照群と比べて各測定項目に有意差はみられなかった。

9.8.2. 雌 (Table 16; Appendices 16-1 - 16-4)

各投与群とも、対照群と比べて各測定項目に有意差はみられなかった。

9.9. 尿検査

9.9.1. 投与期間終了時雄 (Table 17; Appendices 17-1 - 17-4)

各投与群とも、対照群と比べて尿量及び尿比重に有意差はみられなかった。

各投与群とも、色調、pH、蛋白質、ブドウ糖、ケトン体、ビリルビン、潜血、ウロビリノーゲン及び沈渣は対照群とほぼ同程度であった。

9.9.2. 投与期間終了時雌 (Table 18; Appendices 18-1 - 18-4)

各投与群とも、対照群と比べて尿量及び尿比重に有意差はみられなかった。

各投与群とも、色調、pH、蛋白質、ブドウ糖、ケトン体、ビリルビン、潜血、ウロビリノーゲン及び沈渣は対照群とほぼ同程度であった。

9.9.3. 回復期間終了時雄 (Table 19; Appendices 19-1 - 19-3)

各投与群とも、対照群と比べて尿量及び尿比重に有意差はみられなかった。

各投与群とも、色調、pH、蛋白質、ブドウ糖、ケトン体、ビリルビン、潜血、ウロビリノーゲン及び沈渣は対照群とほぼ同程度であった。

9.9.4. 回復期間終了時雌 (Table 20; Appendices 20-1 - 20-3)

200 mg/kg 群では、対照群と比べて尿比重の有意な低値が、40 mg/kg 群では、対照群と比べて尿量の有意な高値及び尿比重の有意な低値がみられたが、投与期間終了時には認められなかった変化であることから、被験物質による影響とは判断しなかった。

各投与群とも、色調、pH、蛋白質、ブドウ糖、ケトン体、ビリルビン、潜血、ウロビリノーゲン及び沈渣は対照群とほぼ同程度であった。

9.10. 血液学検査

9.10.1. 投与期間終了時雄 (Table 21; Appendices 21-1 - 21-4)

各投与群とも、対照群と比べて各測定項目に有意差はみられなかった。

9.10.2. 投与期間終了時雌 (Table 22; Appendices 22-1 - 22-4)

200 及び 8 mg/kg 群では、対照群と比べて白血球数の有意な高値がみられたが、当所の背景データ付近 [白血球数: $47.1 \pm 14.3 (10^3/\mu\text{L})$; Attachment 8] の変化であることから、被験物質による影響とは判断しなかった。8 mg/kg 群では、対照群と比べて単核球数比率の有意な高値がみられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。40 mg/kg 群では、対照群と比べて各測定項目に有意差はみられなかった。

9.10.3. 回復期間終了時雄 (Table 23; Appendices 23-1 - 23-3)

各投与群とも、対照群と比べて各測定項目に有意差はみられなかった。

9.10.4. 回復期間終了時雌 (Table 24; Appendices 24-1 - 24-3)

200 mg/kg 群では、対照群と比べて平均赤血球血色素濃度の有意な高値がみられたが、投与期間終了時には認められなかった変化であることから、被験物質による影響とは判断しなかった。

40 mg/kg 群では、対照群と比べて各測定項目に有意差はみられなかった。

9.11. 血液生化学検査

9.11.1. 投与期間終了時雄 (Table 25; Appendices 25-1 - 25-4)

200 及び 40 mg/kg 群では、対照群と比べて尿素窒素の有意な高値が、200 mg/kg 群では、Cl の有意な高値がみられた。

200 mg/kg 群では、対照群と比べて総コレステロールの有意な低値がみられたが、当所の背景データ付近 [総コレステロール: 56.6 ± 13.0 (mg/dL); Attachment 9] の変化であることから、被験物質による影響とは判断しなかった。40 mg/kg 群では、対照群と比べて総ビリルビンの有意な低値がみられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。8 mg/kg 群では、対照群と比べて各測定項目に有意差はみられなかった。

9.11.2. 投与期間終了時雌 (Table 26; Appendices 26-1 - 26-4)

200 mg/kg 群では、対照群と比べて Cl の有意な高値がみられた。

200 mg/kg 群では、対照群と比べてアルブミン及び A/G の有意な高値及びクレアチニンの有意な低値がみられたが、対照群との差はわずかであること及び当所の背景データ付近 [アルブミン: 3.31 ± 0.25 (g/dL); A/G: 1.25 ± 0.11 ; クレアチニン: 0.27 ± 0.03 (mg/dL); Attachment 10] の変化であることから、被験物質による影響とは判断しなかった。また、40 及び 8 mg/kg 群では尿素窒素及びグルコースの有意な高値みられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。

9.11.3. 回復期間終了時雄 (Table 27; Appendices 27-1 - 27-3)

各投与群とも、対照群と比べて各測定項目に有意差はみられなかった。

9.11.4. 回復期間終了時雌 (Table 28; Appendices 28-1 - 28-3)

200 mg/kg 群では、対照群と比べて総コレステロールの有意な低値及び無機リンの有意な高値がみられたが、投与期間終了時には認められなかった変化であることから、被験物質による影響とは判断しなかった。40 mg/kg 群では、対照群と比べて各測定項目に有意差はみられなかった。

9.12. 剖検所見

9.12.1. 投与期間終了時雄 (Table 29; Appendices 29-1 - 29-4)

肝臓の褪色が 200 及び 40 mg/kg 群で 3 及び 1 例に、腺胃粘膜の潰瘍が 200 mg/kg 群で 1 例にみられた。8 mg/kg 群及び対照群では、異常はみられなかった。

9.12.2. 投与期間終了時雌 (Table 30; Appendices 30-1 - 30-4)

いずれの群とも、異常はみられなかった。

9.12.3. 回復期間終了時雄 (Table 31; Appendices 31-1 - 31-3)

いずれの群とも、異常はみられなかった。

9.12.4. 回復期間終了時雌 (Table 32; Appendices 32-1 - 32-3)

いずれの群とも、異常はみられなかった。

9.13. 器官重量

9.13.1. 投与期間終了時雄 (Table 33; Appendices 33-1 - 33-4)

剖検日の体重は、各投与群とも対照群と比べて有意差はみられなかった。

200 及び 40 mg/kg 群では、対照群と比べて肝臓の相対重量の有意な高値がみられた。

40 及び 8 mg/kg 群では、対照群と比べて唾液腺の絶対重量の有意な低値がみられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。

9.13.2. 投与期間終了時雌 (Table 34; Appendices 34-1 - 34-4)

剖検日の体重は、各投与群とも対照群と比べて有意差はみられなかった。

200 mg/kg 群では、対照群と比べて肝臓及び腎臓の絶対及び相対重量の有意な高値がみられた。

200 及び 40 mg/kg 群では、対照群と比べて卵巣の絶対重量の有意な高値がみられたが、相対重量に差が認められないことから、被験物質による影響とは判断しなかった。8 mg/kg 群では、対照群と比べて各器官の絶対及び相対重量に有意差はみられなかった。

9.13.3. 回復期間終了時雄 (Table 35; Appendices 35-1 - 35-3)

剖検日の体重は、各投与群とも対照群と比べて有意差はみられなかった。

200 mg/kg 群では、対照群と比べて脾臓の絶対及び相対重量の有意な低値がみられたが、投与期間終了時には認められなかった変化であることから、被験物質による影響とは判断しなかった。

40 mg/kg 群では、対照群と比べて各器官の絶対及び相対重量に有意差はみられなかった。

9.13.4. 回復期間終了時雌 (Table 36; Appendices 36-1 - 36-3)

剖検日の体重は、各投与群とも対照群と比べて有意差はみられなかった。

200 mg/kg 群では、対照群と比べて心臓の絶対重量の有意な低値、肝臓の相対重量の有意な低値がみられたが、投与期間終了時には認められなかった変化であることから、被験物質による影

響とは判断しなかった。40 mg/kg 群では、対照群と比べて脾臓の絶対重量の有意な高値、腎臓の相対重量の有意な低値がみられたが、投与量に関連した変化ではないことから、被験物質による影響とは判断しなかった。

9.14. 病理組織学所見

9.14.1. 投与期間終了時雄 (Table 37; Appendices 37-1 - 37-4)

肝臓: 門脈周囲性の肝細胞腫大が 200, 40 及び 8 mg/kg 群で 6 例全例にみられ、その程度は 200 及び 40 mg/kg 群で軽度、8 mg/kg 群でごく軽度又は軽度であった。門脈周囲性の肝細胞腫大は、対照群と比べて 200, 40 及び 8 mg/kg 群で有意差が認められ、かつ、用量反応性も確認された。微小肉芽腫が 200 mg/kg 群で 3 例、40 mg/kg 群で 4 例にみられ、その程度はごく軽度であった。なお、ごく軽度の微小肉芽腫は 8 mg/kg 群にも 1 例にみられたが、1 例のみの変化であり、本試験の対照群でも 1 例にみられたことから、偶発的変化と判断される。

脾臓: チモーゲン顆粒の減少が 200, 40 及び 8 mg/kg 群で 6 例全例にみられ、その程度はごく軽度又は軽度であった。チモーゲン顆粒の減少は、200, 40 及び 8 mg/kg 群で対照群と比べて有意差が認められ、かつ、用量反応性も確認された。

胃: 剖検所見で腺胃粘膜の潰瘍が認められた 200 mg/kg 群の 1 例に、腺胃粘膜の糜爛がみられ、その程度は軽度であった。

その他の変化として以下に示した所見が得られた。

心臓: 細胞浸潤が 200 mg/kg 群と対照群で各 1 例にみられた。

脾臓: 骨外造血が対照群で 1 例にみられた。

腎臓: 囊胞が対照群で 1 例にみられた。

なお、これらの変化は対照群でも通常観察される変化であること、それらの程度はいずれもごく軽度であることから、偶発的変化と判断される。

その他には、200 mg/kg 群及び対照群では、肺、気管、舌下腺、顎下腺、食道、十二指腸、空腸、回腸、盲腸、結腸、直腸、胸腺、下頸リンパ節、腸管膜リンパ節、膀胱、精巢、精巢上体、精嚢、前立腺、下垂体、副腎、甲状腺、上皮小体、大脳、小脳、延髄、脊髄、坐骨神経、眼球、ハーダー腺、骨髓(胸骨・大腿骨)、骨(胸骨・大腿骨) 及び大腿筋に異常はみられなかった。

9.14.2. 投与期間終了時雌 (Table 38; Appendices 38-1 - 38-4)

肝臓: 門脈周囲性の肝細胞腫大が 200, 40 及び 8 mg/kg 群で 6 例全例にみられ、その程度は 200 及び 40 mg/kg 群で軽度又はごく軽度、8 mg/kg 群でごく軽度であった。門脈周囲性の肝細胞腫大は、対照群と比べて 200, 40 及び 8 mg/kg 群で有意差が認められ、かつ、用量反応性も確認された。なお、ごく軽度の微小肉芽腫が 200 mg/kg 群で 1 例、40 mg/kg 群で 1 例及び 8 mg/kg 群で 2 例にみられたが、対照群でも通常観察される変化であり、その出現例数が投与量に関連した変化でないことから、偶発的変化と判断される。

脾臓: チモーゲン顆粒の減少が 200 及び 8 mg/kg 群で 6 例全例及び 40 mg/kg 群で 5 例にみられ、その程度はごく軽度又は軽度であった。チモーゲン顆粒の減少は、200, 40 及び 8 mg/kg 群で対照群と比べて有意差が認められ、かつ、用量反応性も確認された。

その他の変化として以下に示した所見が得られた.

心臓: 細胞浸潤が 200 mg/kg 群で 1 例にみられた.

肺: 血管壁への鉱質沈着が 200 mg/kg 群で 1 例と対照群で 2 例にみられ、泡沫細胞の集簇が 200 mg/kg 群で 1 例にみられた.

甲状腺: 鰓後体の遺残が 200 mg/kg 群で 2 例と対照群で 1 例にみられた.

なお、これらの変化は対照群でも通常観察される変化であること、それらの程度はいずれもごく軽度であることから、偶発的変化と判断される。

その他には、200 mg/kg 群及び対照群では、気管、舌下腺、顎下腺、食道、胃、十二指腸、空腸、回腸、盲腸、結腸、直腸、胸腺、脾臓、下頸リンパ節、腸管膜リンパ節、腎臓、膀胱、卵巣、子宮、腔、下垂体、副腎、上皮小体、大脳、小脳、延髄、脊髄、坐骨神経、眼球、ハーダー腺、骨髄(胸骨・大腿骨)、骨(胸骨・大腿骨)、大腿筋及び乳腺に異常はみられなかった。

9.14.3. 回復期間終了時雄 (Table 39; Appendices 39-1 – 39-3)

肝臓: 門脈周囲性の肝細胞腫大が 200 mg/kg 群で 3 例と 40 mg/kg 群で 2 例にみられ、それらの程度はごく軽度であった。

その他の変化として、肝臓に微小肉芽腫が 40 mg/kg 群で 1 例、対照群で 1 例にみられたが、対照群でも通常観察される変化であること、その程度はごく軽度であることから、偶発的変化と判断される。

その他には、200 及び 40 mg/kg 群並びに対照群では、脾臓に異常はみられなかった。

9.14.4. 回復期間終了時雌 (Table 40; Appendices 40-1 - 40-3)

肝臓: 門脈周囲性の肝細胞腫大が 200 mg/kg 群で 3 例にみられ、その程度はごく軽度であった。

その他には、200 及び 40 mg/kg 群並びに対照群では、脾臓に異常はみられなかった。

10. 考察

1,10-ジブロムデカンを雌雄ラットに 28 日間反復経口投与し、さらに一部の動物には 14 日間の回復期間を設けた反復投与による毒性学的影響を検討した。

死亡例は雌雄ともいずれの群にも認められなかつた。

一般状態では、雌雄の 200 mg/kg 群で流涎がみられた。しかしながら、流涎は投与後に一過性に認められたのみであり、痙攣などの神経症状あるいは唾液腺の剖検所見及び病理組織学検査において変化は認められないことから、被験物質の刺激性に基づく変化と判断され、毒性症状とはみなさなかつた。

体重、摂餌量、行動機能 (FOB) 觀察、感覚反応検査、握力測定、自発運動量測定では、雌雄のいずれの投与群にも投与に起因する変化は認められず、投与期間終了時及び回復期間終了時の尿検査及び血液学検査でも、雌雄のいずれの投与群にも投与に起因する影響は認められなかつた。

被験物質に起因すると考えられる影響は、以下の器官・組織でみられた。

肝臓では、投与期間終了時の剖検時に雄の 200 及び 40 mg/kg 群で褪色がみられ、雄の 200 及び 40 mg/kg 群で相対重量の有意な高値が、雌の 200 mg/kg 群で絶対重量及び相対重量の有意な高値みられた。また、病理組織学検査では、雌雄の 200, 40 及び 8 mg/kg 群で用量に依存した細胞内小器官の増大によると考えられる門脈周囲性の肝細胞腫大、雄の 200 及び 40 mg/kg 群で微小肉芽腫がみられ、1,10-ジブロムデカン投与による肝臓への毒性変化が認められた。一方、回復期間終了時には、門脈周囲性の肝細胞腫大が雄の 200 及び 40 mg/kg 群、雌の 200 mg/kg 群でみられたが、投与期間終了時と比べて例数並びにその程度が軽減していることから回復傾向にあつたと考えられる。

膵臓では、投与期間終了時の病理組織学検査において、雌雄の 200, 40 及び 8 mg/kg 群で用量に依存したチモーゲン顆粒の減少がみられた。膵腺房細胞の酵素原顆粒 (チモーゲン顆粒) にはアミラーゼ、リパーゼ、キモトリプシン、トリプシンなどの消化酵素が含まれており¹¹⁾、1,10-ジブロムデカン投与による消化酵素分泌抑制が示唆された。なお、回復期間終了時に膵臓のチモーゲン顆粒の減少は認められなかつた。

腎臓では、投与期間終了時に雄の 200 mg/kg 群で血清中尿素窒素の有意な高値がみられ、雌の 200 mg/kg 群で絶対重量及び相対重量の有意な高値みられたことから、1,10-ジブロムデカン投与による腎臓への影響が示唆された。また、血液生化学検査においては、電量滴定法を用いて Cl を測定したが、投与期間終了時に雌雄の 200 mg/kg 群で Cl の有意な高値がみられた。しかしながら、雌雄とも投与期間終了時及び回復期間終了時の尿検査に異常は認められず、さらに、剖検所見及び病理組織学検査においても、投与に起因する腎臓への影響は認められなかつた。また、回復期間終了時では器官重量及び血液生化学検査においても腎臓への影響は認められなかつた。

その他、投与期間中において、雄の 200 mg/kg 群、雌の 200 及び 40 mg/kg 群で摂水量の有意な高値がみられたが、一般状態において下痢等は認められず、投与期間終了時の尿量及び尿比重に異常は認められなかつた。さらに、雄の 200 mg/kg 群の 1 例にのみ剖検で腺胃粘膜の潰瘍がみられ、その部位の病理組織学検査で腺胃粘膜の糜爛が認められた。これらの変化は、いずれも 1,10-ジブロムデカン投与に起因する変化であると推察されるが、その機序及び毒性学的意義は不明で

あつた。

以上のように、1,10-ジブロムデカンの無影響量は、雌雄とも 8 mg/kg 投与により肝臓に門脈周囲性の肝細胞腫大及び脾臓にチモーゲン顆粒の減少が認められたことから、8 mg/kg/day 未満と考えられる。

11. 文献

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Table 1. General signs of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of males and general signs	Days of administration																											
			1		2		3		4		5		6		7		8		9		10		11		12		13		14	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post				
Control	0	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
1,10-dibromodecane	8	Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
	40	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
	200	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
		Salivation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Pre: Before administration, Post: after administration.

(Continued)

Table 1. (Continued) General signs of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of males and general signs	Days of administration																				Total ^{a)}								
			15		16		17		18		19		20		21		22		23		24		25		26		27		28		
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post			
Control	0	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-			
1,10-dibromodecane	8	Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-			
	40	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	-		
	200	Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12		
		Normal	12	9	12	9	12	8	12	7	12	7	12	7	12	7	12	9	12	7	12	8	12	10	12	9	12	8	6	-	
		Salivation	0	3	0	3	0	4	0	5	0	5	0	5	0	5	0	3	0	5	0	4	0	2	0	3	0	4	0	10	

Pre: Before administration, Post: after administration.

(Continued)

a): Number of males showing abnormal signs at least once between Days 1 and 29 of administration.

Table 1. (Continued) General signs of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of males and general signs	Days of recovery														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Control	0	Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1,10-dibromodecane	40	Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	200	Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Table 2. General signs of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of females and general signs	Days of administration																											
			1		2		3		4		5		6		7		8		9		10		11		12		13		14	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post				
Control	0	Number of females Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
1,10-dibromodecane	8	Number of females Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	40	Number of females Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	200	Number of females Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		

Pre: Before administration, Post: after administration.

(Continued)

Table 2. (Continued) General signs of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of females and general signs	Days of administration														Total ^{a)}																	
			15		16		17		18		19		20		21		22		23		24		25		26		27		28					
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post								
Control	0	Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12					
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	-					
1,10-dibromodecane	8	Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-			
	40	Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
		Normal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	-	
	200	Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		Normal	12	10	12	10	12	11	12	11	12	10	12	10	12	10	12	11	12	11	12	10	12	11	12	11	12	10	12	10	6	-		
		Salivation	0	2	0	2	0	1	0	1	0	2	0	2	0	2	0	1	0	1	0	2	0	1	0	1	0	2	0	2	0	4		

Pre: Before administration, Post: after administration.

(Continued)

a): Number of females showing abnormal signs at least once between Days 1 and 29 of administration.

Table 2. (Continued) General signs of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	mg/kg	Number of females and general signs	Days of recovery														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Control	0	Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1,10-dibromodecane	40	Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	200	Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Normal	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Table 3. Body weights of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane		
	0 mg/kg	8 mg/kg	40 mg/kg	200 mg/kg	
Number of males	12		6		12
Days of administration					
1	210 ± 7	211 ± 6	212 ± 8	212 ± 8	
4	234 ± 10	233 ± 8	232 ± 10	239 ± 12	
8	265 ± 13	261 ± 13	262 ± 11	269 ± 12	
11	292 ± 13	285 ± 17	293 ± 12	300 ± 16	
15	321 ± 17	313 ± 26	324 ± 15	328 ± 18	
18	345 ± 19	334 ± 31	349 ± 17	351 ± 24	
22	375 ± 23	360 ± 36	377 ± 18	378 ± 26	
25	393 ± 25	376 ± 39	397 ± 19	398 ± 27	
28	409 ± 26	387 ± 42	413 ± 23	413 ± 29	
Number of males	6	0	6	6	
Days of recovery					
1	413 ± 26	-	427 ± 20	424 ± 25	
4	427 ± 28	-	437 ± 19	433 ± 24	
8	439 ± 30	-	451 ± 18	445 ± 24	
11	452 ± 28	-	463 ± 16	459 ± 26	
14	466 ± 31	-	476 ± 15	470 ± 25	

Each value shows mean (g) ± S.D.

Table 4. Body weights of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane		
	0 mg/kg	8 mg/kg	40 mg/kg	200 mg/kg	
Number of females	12		6		12
Days of administration					
1	172 ± 9		171 ± 10		172 ± 7
4	183 ± 10		182 ± 11		185 ± 10
8	195 ± 11		194 ± 17		200 ± 13
11	203 ± 12		206 ± 18		213 ± 15
15	215 ± 14		217 ± 19		224 ± 17
18	227 ± 16		233 ± 22		233 ± 16
22	236 ± 17		242 ± 22		242 ± 17
25	245 ± 19		251 ± 21		252 ± 16
28	250 ± 20		256 ± 20		258 ± 17
Number of females	6		0		6
Days of recovery					
1	251 ± 24		-	261 ± 15	258 ± 16
4	258 ± 22		-	269 ± 14	258 ± 15
8	263 ± 26		-	275 ± 14	263 ± 16
11	266 ± 25		-	279 ± 14	265 ± 20
14	270 ± 26		-	287 ± 12	267 ± 22

Each value shows mean (g) ± S.D.

Table 5. Food consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	12	6	12	12	
Days of administration					
2	23 ± 2	21 ± 2	22 ± 2	23 ± 1	
5	23 ± 2	23 ± 3	21 ± 3	24 ± 2	
9	25 ± 3	23 ± 3	24 ± 2	27 ± 3	
12	26 ± 3	23 ± 4 *	25 ± 2	29 ± 2 *	
16	26 ± 4	23 ± 4	27 ± 2	29 ± 3	
19	26 ± 4	23 ± 3	25 ± 2	28 ± 2	
23	26 ± 4	24 ± 4	26 ± 3	27 ± 3	
26	25 ± 3	22 ± 2	24 ± 3	26 ± 3	
Number of males	6	0	6	6	
Days of recovery					
2	27 ± 3	-	26 ± 2	27 ± 4	
5	28 ± 2	-	27 ± 2	27 ± 2	
9	29 ± 2	-	28 ± 1	27 ± 2	
12	30 ± 2	-	30 ± 3	29 ± 1	

Each value shows mean (g/day) ± S.D.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

Table 6. Food consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	12	6	12	12	
Days of administration					
2	15 ± 3	15 ± 3	16 ± 2	16 ± 2	
5	15 ± 3	16 ± 2	16 ± 2	17 ± 2	
9	14 ± 3	16 ± 1	16 ± 2	16 ± 3	
12	19 ± 3	18 ± 2	18 ± 2	19 ± 3	
16	18 ± 4	16 ± 2	17 ± 2	18 ± 4	
19	17 ± 3	18 ± 1	19 ± 2	19 ± 2	
23	19 ± 2	19 ± 2	20 ± 3	20 ± 2	
26	17 ± 3	18 ± 3	19 ± 2	17 ± 3	
Number of females	6	0	6	6	
Days of recovery					
2	21 ± 3	-	22 ± 2	19 ± 4	
5	20 ± 4	-	20 ± 2	20 ± 2	
9	18 ± 4	-	19 ± 2	18 ± 2	
12	21 ± 3	-	21 ± 1	21 ± 2	

Each value shows mean (g/day) ± S.D.

Table 7. Water consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	12	6	12	12	
Days of administration					
2	30 ± 3	30 ± 3	30 ± 3	31 ± 2	
5	31 ± 2	33 ± 4	30 ± 3	33 ± 4	
9	33 ± 3	30 ± 4	33 ± 3	37 ± 5 *	
12	33 ± 3	31 ± 4	33 ± 5	38 ± 4 *	
16	36 ± 5	31 ± 4	37 ± 7	39 ± 4	
19	36 ± 6	34 ± 4	37 ± 5	40 ± 5	
23	38 ± 5	35 ± 4	38 ± 5	44 ± 5 **	
26	38 ± 4	34 ± 4	37 ± 4	41 ± 6	
Number of males	6	0	6	6	
Days of recovery					
2	40 ± 11	-	33 ± 3	39 ± 8	
5	43 ± 12	-	37 ± 1	41 ± 8	
9	44 ± 8	-	38 ± 4	42 ± 6	
12	44 ± 14	-	39 ± 6	40 ± 5	

Each value shows mean (g/day) ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 8. Water consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	12	6	12	12	
Days of administration					
2	23 ± 5	23 ± 5	26 ± 2 *	23 ± 3	
5	22 ± 4	25 ± 3	26 ± 3	27 ± 2 **	
9	22 ± 7	25 ± 2	25 ± 3	26 ± 3	
12	26 ± 5	25 ± 3	26 ± 5	27 ± 6	
16	28 ± 4	26 ± 2	27 ± 6	28 ± 7	
19	24 ± 5	25 ± 3	28 ± 6	27 ± 5	
23	26 ± 5	23 ± 3	28 ± 5	28 ± 7	
26	26 ± 4	25 ± 4	29 ± 5	26 ± 6	
Number of females	6	0	6	6	
Days of recovery					
2	35 ± 7	-	33 ± 6	32 ± 2	
5	28 ± 7	-	29 ± 7	29 ± 11	
9	27 ± 8	-	29 ± 6	24 ± 5	
12	30 ± 6	-	32 ± 8	27 ± 6	

Each value shows mean (g/day) ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 9. FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
Observation of animals in cages					
Posture	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Palpebral closure	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Biting behavior	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Clonic convulsions	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

(Continued)

Table 9. (Continued) FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	8	40	200
Number of males	6	6	6	6
Observation of animals in cages				
Tonic convulsions	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions, 5: asphyxial convulsions.

(Continued)

Table 9. (Continued) FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane	
	0	8	40	200
mg/kg				
Number of males	6	6	6	6
Observation of animals on observer's palm				
Ease of removal from cage	Pre	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)
Ease of handling	Pre	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)
Muscle tone	Pre	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)
Fur conditions	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

(Continued)

Ease of removal from cage

1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling

1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing, 3: struggling and trying to bite observer's hand.

Muscle tone

1: Decreased, 2: normal, 3: increased.

Fur conditions

1: Normal, 2: slightly soiled, 3: markedly soiled.

Table 9. (Continued) FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	8	40	200
Number of males	6	6	6	6
Observation of animals on observer's palm				
Lacrimation	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)
Salivation	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.2 (1-2)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.3 (1-2)
Respiration	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

(Continued)

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: Nonc, 2: mild, 3: marked.

Respiration 1: Normal, 2: bradypnca, 3: dyspnca.

Table 9. (Continued) FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane			
	0	8	40	200		
Number of males	6	6	6	6		
Open-field test						
Frequency of rearing	Pre	2.5 ± 2.1	3.7 ± 4.2	4.8 ± 5.2	5.3 ± 4.1	
Mean ± S.D.	Day 7	3.3 ± 3.6	4.3 ± 3.2	4.8 ± 2.6	2.8 ± 3.2	
	Day 14	3.8 ± 2.5	2.2 ± 3.4	2.0 ± 2.0	1.3 ± 2.0	
	Day 21	6.2 ± 6.1	6.0 ± 5.1	4.5 ± 3.0	3.0 ± 2.0	
	Day 27	4.8 ± 4.3	5.5 ± 3.9	4.7 ± 6.3	3.8 ± 2.9	
Frequency of grooming	Pre	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
Mean ± S.D.	Day 7	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 14	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 21	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 27	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
Gait	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Palpebral closure	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	

52

Frequency of rearing (during a 2-minute period).

(Continued)

Frequency of grooming (during a 2-minute period).

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended,
 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Table 9. (Continued) FOB of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group		Control		1,10-dibromodecane		
		mg/kg	0	8	40	200
Number of males			6	6	6	6
Open-field test						
Consciousness	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
Behavioral abnormalities	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Righting reflex	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	

Findings were graded as follows:

Consciousness

1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities

1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Table 10. FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	6	6	6	6	
Observation of animals in cages					
Posture	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Palpebral closure	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Biting behavior	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Clonic convulsions	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

(Continued)

Table 10. (Continued) FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	8	40	200
Number of females	6	6	6	6
Observation of animals in cages				
Tonic convulsions	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions, 5: asphyxial convulsions.

(Continued)

Table 10. (Continued) FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group		Control	1,10-dibromodecane		
mg/kg		0	8	40	200
Number of females		6	6	6	6
Observation of animals on observer's palm					
Ease of removal from cage	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Ease of handling	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Muscle tone	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Fur conditions	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

(Continued)

Ease of removal from cage

1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling

1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing, 3: struggling and trying to bite observer's hand.

Muscle tone

1: Decreased, 2: normal, 3: increased.

Fur conditions

1: Normal, 2: slightly soiled, 3: markedly soiled.

Table 10. (Continued) FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	8	40	200
Number of females	6	6	6	6
Observation of animals on observer's palm				
Lacrimation	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)
Salivation	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)
Respiration	Pre	1.0 (1)	1.0 (1)	1.0 (1)
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)

Findings were graded as follows:

(Continued)

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: Nonc, 2: mild, 3: marked.

Respiration 1: Normal, 2: bradypnca, 3: dyspnca.

Table 10. (Continued) FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane			
mg/kg	0	8	40	200		
Number of females	6	6	6	6		
Open-field test						
Frequency of rearing	Pre	5.7 ± 4.5	7.5 ± 5.5	1.8 ± 1.9	8.3 ± 3.8	
Mean ± S.D.	Day 7	7.2 ± 4.2	6.8 ± 3.6	6.8 ± 5.1	8.2 ± 4.8	
	Day 14	4.5 ± 4.0	6.7 ± 6.1	4.8 ± 5.6	5.0 ± 3.7	
	Day 21	3.0 ± 1.7	8.0 ± 6.0	5.7 ± 4.2	7.2 ± 6.3	
	Day 27	4.5 ± 3.6	5.3 ± 4.2	2.5 ± 2.5	2.8 ± 3.1	
Frequency of grooming	Pre	0.2 ± 0.4	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
Mean ± S.D.	Day 7	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 14	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 21	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
	Day 27	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
Gait	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Palpebral closure	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	

Frequency of rearing (during a 2-minute period)

Frequency of grooming (during a 2-minute period).

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

(Continued)

Table 10. (Continued) FOB of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group		Control		1,10-dibromodecane		
		mg/kg	0	8	40	200
Number of females			6	6	6	6
Open-field test						
Consciousness	Pre	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
Mean (range)	Day 7	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 14	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 21	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
	Day 27	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)	
Behavioral abnormalities	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Righting reflex	Pre	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
Mean (range)	Day 7	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 14	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 21	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	
	Day 27	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)	

Findings were graded as follows:

Consciousness

1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities

1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Table 11. Sensory response of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control	1,10-dibromodecane		
		8	40	200
Number of males	6	6	6	6
Pupillary reflex				
Mean (range)	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Approaching behavior				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Response to touch				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Auditory reflex				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Pain reflex				
Mean (range)	3.0 (3)	3.0 (3)	3.0 (3)	3.0 (3)

Findings were graded as follows:

Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.

Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.

Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.

Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.

Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Table 12. Sensory response of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control	1,10-dibromodecane		
		8	40	200
Number of females	6	6	6	6
Pupillary reflex				
Mean (range)	1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)
Approaching behavior				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Response to touch				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Auditory reflex				
Mean (range)	2.0 (2)	2.0 (2)	2.0 (2)	2.0 (2)
Pain reflex				
Mean (range)	3.0 (3)	3.0 (3)	3.0 (3)	3.0 (3)

Findings were graded as follows:

Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.

Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.

Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.

Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.

Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Table 13. Grip strength of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
Forelimb	1111 ± 218	1240 ± 155	1363 ± 269	1305 ± 189	
Hindlimb	251 ± 27	280 ± 39	276 ± 28	294 ± 50	

Each value shows mean (g) ± S.D.

Table 14. Grip strength of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane		
	mg/kg	0	8	40	200
Number of females		6	6	6	6
Forelimb		713 ± 207	627 ± 218	703 ± 216	746 ± 105
Hindlimb		302 ± 47	293 ± 62	284 ± 67	254 ± 19

Each value shows mean (g) ± S.D.

Table 15. Spontaneous motor activity of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
Ambulatory counts					
Minutes after administration					
70	683 ± 854	247 ± 102	365 ± 174	417 ± 103	
80	206 ± 266	55 ± 59	130 ± 98	150 ± 156	
90	30 ± 65	69 ± 88	157 ± 213	81 ± 72	
100	25 ± 60	43 ± 56	43 ± 105	32 ± 64	
110	0 ± 0	11 ± 24	118 ± 280	31 ± 36	
120	40 ± 73	53 ± 117	152 ± 302	23 ± 56	
Total	983 ± 1053	477 ± 196	965 ± 964	734 ± 383	
Vertical counts					
Minutes after administration					
70	52 ± 25	40 ± 22	52 ± 24	46 ± 10	
80	10 ± 8	9 ± 8	20 ± 13	24 ± 24	
90	5 ± 11	8 ± 10	8 ± 14	12 ± 9	
100	2 ± 6	7 ± 9	4 ± 10	5 ± 7	
110	0 ± 0	2 ± 4	5 ± 11	6 ± 10	
120	1 ± 2	9 ± 19	10 ± 16	1 ± 2	
Total	70 ± 31	75 ± 37	99 ± 65	93 ± 36	

Each value shows mean ± S.D.

Table 16. Spontaneous motor activity of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	6	6	6	6	
Ambulatory counts					
Minutes after administration					
70	495 ± 232	508 ± 249	676 ± 166	609 ± 134	
80	133 ± 89	167 ± 138	172 ± 159	214 ± 169	
90	16 ± 25	97 ± 148	5 ± 10	127 ± 137	
100	62 ± 132	25 ± 51	0 ± 0	19 ± 47	
110	0 ± 0	26 ± 63	21 ± 51	56 ± 136	
120	0 ± 0	1 ± 1	12 ± 14	58 ± 113	
Total	705 ± 303	824 ± 407	885 ± 268	1082 ± 401	
Vertical counts					
Minutes after administration					
70	56 ± 20	60 ± 34	82 ± 36	75 ± 30	
80	18 ± 11	28 ± 26	24 ± 16	27 ± 20	
90	2 ± 3	13 ± 20	1 ± 1	12 ± 14	
100	6 ± 15	5 ± 12	0 ± 0	2 ± 5	
110	1 ± 1	4 ± 10	2 ± 6	9 ± 22	
120	0 ± 0	0 ± 0	2 ± 4	8 ± 19	
Total	84 ± 30	110 ± 71	112 ± 45	132 ± 78	

Each value shows mean ± S.D.

Table 17. Urinary findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane			
	0	8	40	200		
Number of males	6	6	6	6		
Volume (mL): Mean±S.D.	11.1 ± 3.4	8.3 ± 2.3	11.6 ± 3.2	10.4 ± 1.5		
Specific gravity: Mean±S.D.	1.053 ± 0.011	1.056 ± 0.009	1.052 ± 0.012	1.057 ± 0.009		
Color						
Light yellow	6	6	6	6		
pH						
8.0	1	2	1	0		
8.5	4	2	5	5		
≥9.0	1	2	0	1		
Protein						
30 mg/dL	6	4	4	6		
100 mg/dL	0	2	2	0		
Glucose						
Negative	6	6	6	6		
Ketone body						
Trace	3	2	1	3		
Slight	3	4	5	2		
Moderate	0	0	0	1		
Bilirubin						
Negative	6	6	6	6		
Occult blood						
Negative	6	6	5	6		
Slight	0	0	1	0		
Urobilinogen						
0.1 E.U./dL	6	6	6	6		

(Continued)

Table 17. (Continued) Urinary findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane		
		40	200	
mg/kg	0	8		
Number of males	6	6	6	6
Urinary sediments				
Epithelial cells				
0-20 cells/100 fields	6	6	6	6
Erythrocytes				
0-20 cells/100 fields	6	6	6	6
Leukocytes				
0-20 cells/100 fields	6	6	6	6
Casts				
Not observed	6	6	6	6
Crystals				
Not observed	2	3	3	3
Observed	4	3	3	3

Table 18. Urinary findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane			
	0	8	40	200		
Number of females	6	6	6	6		
Volume (mL): Mean±S.D.	14.9 ± 10.7	11.3 ± 7.1	13.2 ± 5.5	13.3 ± 9.1		
Specific gravity: Mean±S.D.	1.037 ± 0.016	1.047 ± 0.014	1.042 ± 0.015	1.046 ± 0.017		
Color						
Light yellow	6	6	6	6		
pH						
8.0	1	2	0	1		
8.5	5	2	6	4		
≥9.0	0	2	0	1		
Protein						
Negative	1	0	0	0		
Trace	2	3	3	2		
30 mg/dL	3	3	3	1		
100 mg/dL	0	0	0	3		
Glucose						
Negative	6	6	6	6		
Ketone body						
Negative	3	1	2	1		
Trace	3	5	4	3		
Slight	0	0	0	2		
Bilirubin						
Negative	6	6	6	6		
Occult blood						
Negative	4	6	5	6		
Trace	1	0	1	0		
Slight	1	0	0	0		
Urobilinogen						
0.1 E.U./dL	5	5	5	2		
1.0 E.U./dL	1	1	1	4		

(Continued)

Table 18. (Continued) Urinary findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	8	40	200
Number of females	6	6	6	6
Urinary sediments				
Epithelial cells				
0-20 cells/100 fields	6	6	6	6
Erythrocytes				
0-20 cells/100 fields	6	6	6	6
Leukocytes				
0-20 cells/100 fields	6	6	6	6
Casts				
Not observed	6	6	6	6
Crystals				
Not observed	4	2	3	1
Observed	2	4	3	5

Table 19. Urinary findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane	
	mg/kg	0	40	200
Number of males		6	6	6
Volume (mL): Mean±S.D.	20.9 ± 6.4		14.7 ± 6.7	15.9 ± 2.7
Specific gravity: Mean±S.D.	1.035 ± 0.012		1.052 ± 0.020	1.044 ± 0.006
Color				
Light yellow		6	6	6
pH				
8.0		1	0	0
8.5		5	5	6
≥9.0		0	1	0
Protein				
Trace		0	0	1
30 mg/dL		6	2	3
100 mg/dL		0	4	2
Glucose				
Negative		6	6	6
Ketone body				
Negative		1	0	1
Trace		2	4	3
Slight		3	1	2
Moderate		0	1	0
Bilirubin				
Negative		6	6	6
Occult blood				
Negative		5	5	3
Trace		1	0	3
Slight		0	1	0
Urobilinogen				
0.1 E.U./dL		6	6	6

(Continued)

Table 19. (Continued) Urinary findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane	
		40	200
mg/kg	0	40	200
Number of males	6	6	6
Urinary sediments			
Epithelial cells			
0-20 cells/100 fields	6	6	6
Erythrocytes			
0-20 cells/100 fields	6	6	6
Leukocytes			
0-20 cells/100 fields	6	6	6
Casts			
Not observed	6	6	6
Crystals			
Not observed	2	2	1
Observed	4	4	5

Table 20. Urinary findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control		1,10-dibromodecane	
	mg/kg	0	40	200
Number of females		6	6	6
Volume (mL): Mean±S.D.	7.8 ± 2.6		17.7 ± 6.5 *	12.5 ± 8.3
Specific gravity: Mean±S.D.	1.060 ± 0.011		1.036 ± 0.014 *	1.041 ± 0.013 *
Color				
Light yellow	6		6	6
pH				
8.0	0		0	1
8.5	6		6	3
≥9.0	0		0	2
Protein				
Negative	6		6	5
Trace	0		0	1
Glucose				
Negative	6		6	6
Ketone body				
Negative	6		6	6
Bilirubin				
Negative	6		6	6
Occult blood				
Negative	6		6	6
Urobilinogen				
0.1 E.U./dL	6		6	6

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

Table 20. (Continued) Urinary findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane	
mg/kg	0	40	200
Number of females	6	6	6
Urinary sediments			
Epithelial cells			
0-20 cells/100 fields	6	6	6
Erythrocytes			
0-20 cells/100 fields	6	6	6
Leukocytes			
0-20 cells/100 fields	6	6	6
Casts			
Not observed	6	6	6
Crystals			
Not observed	2	2	2
Observed	4	4	4

Table 21. Hematological findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
RBC (10 ⁶ /μL)	787 ± 64	808 ± 38	792 ± 34	788 ± 40	
Hemoglobin (g/dL)	14.7 ± 0.7	15.3 ± 0.7	14.9 ± 0.6	15.0 ± 0.6	
Hematocrit (%)	42.0 ± 1.6	42.8 ± 1.6	42.5 ± 1.8	43.1 ± 1.6	
MCV (fL)	53.6 ± 2.9	53.1 ± 1.1	53.7 ± 1.5	54.8 ± 2.8	
MCH (pg)	18.7 ± 0.9	18.9 ± 0.2	18.9 ± 0.6	19.1 ± 0.8	
MCHC (g/dL)	34.9 ± 0.5	35.6 ± 0.5	35.2 ± 0.3	34.9 ± 0.6	
Platelet (10 ³ /μL)	124.0 ± 19.6	124.4 ± 17.2	116.4 ± 10.9	114.8 ± 11.5	
Reticulocyte (%)	4.07 ± 1.80	2.90 ± 0.51	3.27 ± 0.52	3.02 ± 0.37	
PT (sec.)	21.5 ± 2.3	21.7 ± 2.9	20.4 ± 3.1	23.5 ± 3.7	
APTT (sec.)	24.4 ± 1.7	24.4 ± 2.1	22.8 ± 1.7	23.4 ± 1.0	
Fibrinogen (mg/dL)	208.5 ± 16.8	206.2 ± 9.1	198.8 ± 20.3	205.3 ± 10.9	
WBC (10 ³ /μL)	73.4 ± 15.8	71.0 ± 13.0	75.3 ± 22.6	61.9 ± 12.5	
Differential leukocyte (%)					
Lymphocyte	79.2 ± 3.4	77.2 ± 3.6	78.8 ± 5.3	78.3 ± 6.4	
Neutrophil	16.0 ± 2.5	18.2 ± 3.9	16.5 ± 4.6	17.1 ± 6.0	
Eosinophil	1.1 ± 0.4	1.0 ± 0.3	0.8 ± 0.5	0.7 ± 0.3	
Basophil	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.1	0.0 ± 0.0	
Monocyte	3.7 ± 1.2	3.6 ± 0.6	3.9 ± 1.0	3.9 ± 1.1	

Each value shows mean ± S.D.

Table 22. Hematological findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	6	6	6	6	
RBC (10 ⁶ /μL)	740 ± 38	761 ± 34	751 ± 24	770 ± 11	
Hemoglobin (g/dL)	14.3 ± 0.5	14.4 ± 0.5	14.6 ± 0.7	14.8 ± 0.4	
Hematocrit (%)	39.6 ± 1.3	40.4 ± 1.3	40.9 ± 1.7	41.4 ± 1.0	
MCV (fL)	53.5 ± 1.8	53.1 ± 2.4	54.5 ± 1.0	53.8 ± 0.8	
MCH (pg)	19.3 ± 0.5	19.0 ± 0.7	19.5 ± 0.3	19.2 ± 0.4	
MCHC (g/dL)	36.0 ± 0.3	35.8 ± 0.4	35.7 ± 0.4	35.8 ± 0.4	
Platelet (10 ³ /μL)	129.3 ± 16.2	132.7 ± 10.5	121.1 ± 5.9	113.4 ± 15.8	
Reticulocyte (%)	2.88 ± 0.56	2.58 ± 0.37	2.92 ± 0.36	2.37 ± 0.59	
PT (sec.)	15.3 ± 0.9	14.6 ± 0.4	15.7 ± 0.4	15.6 ± 0.6	
APTT (sec.)	16.8 ± 0.5	17.6 ± 1.7	17.4 ± 1.1	16.0 ± 1.8	
Fibrinogen (mg/dL)	178.8 ± 8.6	184.2 ± 7.5	170.0 ± 15.0	175.6 ± 11.7	
WBC (10 ³ /μL)	38.5 ± 5.1	58.8 ± 10.5 **	47.9 ± 13.5	58.1 ± 5.9 **	
Differential leukocyte (%)					
Lymphocyte	81.5 ± 5.4	80.7 ± 3.5	78.6 ± 5.6	81.4 ± 5.6	
Neutrophil	14.8 ± 4.9	13.8 ± 3.8	17.0 ± 5.0	14.4 ± 3.9	
Eosinophil	1.6 ± 0.4	1.3 ± 0.6	1.1 ± 0.6	1.1 ± 0.2	
Basophil	0.1 ± 0.1	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.1	
Monocyte	2.1 ± 0.7	4.2 ± 1.0 *	3.3 ± 1.1	3.0 ± 2.0	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 23. Hematological findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	40	200	
Number of males	6	6	6	
RBC ($10^6/\mu\text{L}$)	828 ± 32	818 ± 28	811 ± 45	
Hemoglobin (g/dL)	15.3 ± 0.6	15.3 ± 0.5	15.2 ± 0.5	
Hematocrit (%)	42.2 ± 1.5	42.1 ± 1.3	42.0 ± 0.9	
MCV (fL)	51.1 ± 1.7	51.5 ± 1.2	51.9 ± 2.4	
MCH (pg)	18.5 ± 0.6	18.7 ± 0.4	18.8 ± 0.7	
MCHC (g/dL)	36.3 ± 0.2	36.2 ± 0.4	36.2 ± 0.5	
Platelet ($10^3/\mu\text{L}$)	110.3 ± 16.3	114.9 ± 12.8	114.0 ± 7.5	
Reticulocyte (%)	3.33 ± 0.46	3.28 ± 0.30	3.19 ± 0.36	
PT (sec.)	19.1 ± 4.0	20.5 ± 4.2	18.9 ± 2.2	
APTT (sec.)	22.3 ± 1.9	22.2 ± 1.8	23.6 ± 1.0	
Fibrinogen (mg/dL)	215.5 ± 15.2	218.6 ± 17.4	214.4 ± 11.7	
WBC ($10^3/\mu\text{L}$)	77.9 ± 32.9	62.7 ± 14.4	59.3 ± 19.1	
Differential leukocyte (%)				
Lymphocyte	77.6 ± 3.0	78.1 ± 5.1	73.6 ± 6.1	
Neutrophil	17.4 ± 2.9	16.1 ± 3.7	20.4 ± 5.0	
Eosinophil	1.4 ± 0.3	1.7 ± 0.9	1.7 ± 0.4	
Basophil	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0	
Monocyte	3.6 ± 0.6	4.1 ± 1.4	4.3 ± 1.5	

Each value shows mean ± S.D.

Table 24. Hematological findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	40	200	
Number of females	6	6	6	
RBC ($10^6/\mu\text{L}$)	773 ± 31	794 ± 13	779 ± 33	
Hemoglobin (g/dL)	14.5 ± 0.4	15.0 ± 0.3	14.6 ± 0.6	
Hematocrit (%)	40.2 ± 1.3	41.4 ± 1.1	39.8 ± 1.3	
MCV (fL)	52.1 ± 2.0	52.2 ± 1.9	51.1 ± 1.2	
MCH (pg)	18.7 ± 0.7	18.9 ± 0.5	18.7 ± 0.7	
MCHC (g/dL)	35.9 ± 0.5	36.2 ± 0.4	36.6 ± 0.5 *	
Platelet ($10^3/\mu\text{L}$)	111.6 ± 6.9	108.0 ± 9.4	116.9 ± 8.1	
Reticulocyte (%)	3.14 ± 0.61	3.23 ± 0.93	2.70 ± 0.65	
PT (sec.)	15.5 ± 0.4	16.1 ± 0.5	15.9 ± 0.8	
APTT (sec.)	17.1 ± 1.4	17.2 ± 1.1	17.8 ± 0.4	
Fibrinogen (mg/dL)	173.9 ± 6.1	199.6 ± 39.2	175.7 ± 11.4	
WBC ($10^3/\mu\text{L}$)	37.3 ± 8.0	38.4 ± 12.7	35.7 ± 5.0	
Differential leukocyte (%)				
Lymphocyte	73.8 ± 4.9	73.9 ± 7.8	76.0 ± 5.6	
Neutrophil	21.6 ± 5.3	20.6 ± 7.1	18.8 ± 5.3	
Eosinophil	1.8 ± 0.6	2.5 ± 1.6	2.6 ± 1.0	
Basophil	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	
Monocyte	2.9 ± 0.8	3.0 ± 0.8	2.6 ± 0.7	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

Table 25. Blood chemical findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
AST (IU/L)	89.5 ± 16.1	83.9 ± 11.9	96.5 ± 15.7	91.3 ± 10.1	
ALT (IU/L)	34.9 ± 18.6	32.5 ± 6.0	33.8 ± 10.0	30.1 ± 7.4	
ALP (IU/L)	624.6 ± 134.8	650.2 ± 61.5	582.4 ± 126.0	637.0 ± 57.6	
γ-GTP (IU/L)	0.37 ± 0.21	0.53 ± 0.13	0.46 ± 0.20	0.40 ± 0.21	
Total protein (g/dL)	5.54 ± 0.20	5.53 ± 0.22	5.52 ± 0.15	5.48 ± 0.17	
Albumin (g/dL)	2.95 ± 0.09	2.95 ± 0.17	2.93 ± 0.09	2.96 ± 0.08	
A/G	1.14 ± 0.02	1.15 ± 0.11	1.14 ± 0.11	1.17 ± 0.04	
Total bilirubin (mg/dL)	0.12 ± 0.01	0.11 ± 0.01	0.10 ± 0.01 *	0.12 ± 0.01	
Urea nitrogen (mg/dL)	14.0 ± 2.8	14.5 ± 1.2	20.1 ± 3.0 **	20.5 ± 2.2 **	
Creatinine (mg/dL)	0.22 ± 0.02	0.22 ± 0.02	0.22 ± 0.03	0.23 ± 0.02	
Glucose (mg/dL)	112.7 ± 11.6	123.0 ± 9.1	116.3 ± 6.6	114.7 ± 10.2	
Total cholesterol (mg/dL)	54.0 ± 10.2	51.9 ± 6.0	41.3 ± 7.8	34.2 ± 10.4 **	
Triglyceride (mg/dL)	50.0 ± 23.1	48.4 ± 25.2	36.1 ± 16.2	28.4 ± 7.9	
Na (mEq/L)	145.2 ± 0.8	144.5 ± 0.9	144.8 ± 1.1	145.4 ± 0.6	
K (mEq/L)	4.09 ± 0.25	4.25 ± 0.09	4.29 ± 0.29	4.34 ± 0.23	
Cl (mEq/L)	107.8 ± 0.9	108.5 ± 1.8	109.2 ± 2.1	111.7 ± 1.4 **	
Ca (mg/dL)	9.7 ± 0.2	9.7 ± 0.2	9.3 ± 0.2	9.4 ± 0.4	
Inorganic phosphate (mg/dL)	8.0 ± 0.7	8.4 ± 0.3	8.1 ± 0.6	8.6 ± 0.6	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 26. Blood chemical findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	6	6	6	6	
AST (IU/L)	78.9 ± 14.5	80.2 ± 15.5	68.6 ± 8.5	71.5 ± 8.6	
ALT (IU/L)	21.0 ± 4.3	21.5 ± 3.6	19.9 ± 4.6	21.1 ± 4.5	
ALP (IU/L)	354.8 ± 99.1	273.2 ± 31.1	383.9 ± 116.6	297.7 ± 104.3	
γ-GTP (IU/L)	0.70 ± 0.29	0.52 ± 0.19	0.75 ± 0.14	0.73 ± 0.22	
Total protein (g/dL)	5.65 ± 0.22	5.85 ± 0.36	5.72 ± 0.22	5.98 ± 0.32	
Albumin (g/dL)	3.12 ± 0.15	3.33 ± 0.27	3.27 ± 0.24	3.51 ± 0.20 *	
A/G	1.24 ± 0.08	1.32 ± 0.08	1.34 ± 0.14	1.43 ± 0.10 *	
Total bilirubin (mg/dL)	0.14 ± 0.01	0.12 ± 0.01	0.13 ± 0.01	0.13 ± 0.02	
Urea nitrogen (mg/dL)	15.0 ± 1.9	18.1 ± 2.2 *	19.0 ± 2.7 *	16.7 ± 1.5	
Creatinine (mg/dL)	0.27 ± 0.03	0.27 ± 0.03	0.27 ± 0.02	0.22 ± 0.02 *	
Glucose (mg/dL)	106.2 ± 9.2	124.5 ± 10.7 **	120.9 ± 8.3 *	115.0 ± 6.3	
Total cholesterol (mg/dL)	69.3 ± 4.1	65.7 ± 12.9	61.0 ± 15.7	60.2 ± 10.7	
Triglyceride (mg/dL)	26.3 ± 6.5	29.2 ± 24.8	16.2 ± 6.6	22.0 ± 6.5	
Na (mEq/L)	142.8 ± 1.7	142.2 ± 1.3	142.4 ± 1.7	142.2 ± 0.8	
K (mEq/L)	4.16 ± 0.23	4.25 ± 0.23	4.16 ± 0.24	4.31 ± 0.24	
Cl (mEq/L)	107.7 ± 0.9	108.6 ± 0.6	108.9 ± 0.9	109.8 ± 1.5 **	
Ca (mg/dL)	9.5 ± 0.3	9.6 ± 0.3	9.4 ± 0.3	9.6 ± 0.2	
Inorganic phosphate (mg/dL)	7.3 ± 0.7	7.2 ± 0.3	7.4 ± 0.5	7.6 ± 0.6	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 27. Blood chemical findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	40	200	
Number of males	6	6	6	
AST (IU/L)	101.9 ± 15.7	85.5 ± 8.0	87.7 ± 10.7	
ALT (IU/L)	35.1 ± 7.9	28.7 ± 9.3	28.4 ± 3.5	
ALP (IU/L)	444.4 ± 67.7	485.2 ± 65.0	415.1 ± 136.4	
γ-GTP (IU/L)	0.50 ± 0.08	0.42 ± 0.09	0.45 ± 0.13	
Total protein (g/dL)	5.76 ± 0.18	5.80 ± 0.11	5.66 ± 0.29	
Albumin (g/dL)	2.86 ± 0.09	2.90 ± 0.15	2.79 ± 0.14	
A/G	0.99 ± 0.03	1.00 ± 0.10	0.97 ± 0.02	
Total bilirubin (mg/dL)	0.12 ± 0.01	0.12 ± 0.01	0.12 ± 0.01	
Urea nitrogen (mg/dL)	15.5 ± 2.7	15.3 ± 2.1	14.3 ± 1.5	
Creatinine (mg/dL)	0.24 ± 0.02	0.25 ± 0.04	0.24 ± 0.04	
Glucose (mg/dL)	126.2 ± 16.5	119.6 ± 10.5	125.3 ± 18.5	
Total cholesterol (mg/dL)	46.5 ± 12.7	58.4 ± 9.5	53.7 ± 8.6	
Triglyceride (mg/dL)	39.4 ± 13.6	59.6 ± 21.2	55.1 ± 19.2	
Na (mEq/L)	143.1 ± 1.1	144.2 ± 0.7	144.2 ± 1.3	
K (mEq/L)	4.26 ± 0.12	4.16 ± 0.17	4.11 ± 0.15	
Cl (mEq/L)	107.2 ± 1.0	107.2 ± 0.5	106.9 ± 0.6	
Ca (mg/dL)	9.6 ± 0.2	9.8 ± 0.1	9.6 ± 0.3	
Inorganic phosphate (mg/dL)	7.0 ± 0.4	7.1 ± 0.3	7.4 ± 0.4	

Each value shows mean ± S.D.

Table 28. Blood chemical findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	40	200	
Number of females	6	6	6	
AST (IU/L)	88.1 ± 9.3	77.5 ± 11.3	78.6 ± 8.5	
ALT (IU/L)	31.6 ± 16.2	22.0 ± 3.6	20.4 ± 2.3	
ALP (IU/L)	249.4 ± 29.5	241.0 ± 46.9	287.5 ± 78.3	
γ-GTP (IU/L)	0.56 ± 0.14	0.77 ± 0.31	0.76 ± 0.35	
Total protein (g/dL)	6.27 ± 0.56	6.12 ± 0.20	5.84 ± 0.32	
Albumin (g/dL)	3.51 ± 0.35	3.39 ± 0.23	3.14 ± 0.27	
A/G	1.28 ± 0.09	1.24 ± 0.11	1.17 ± 0.12	
Total bilirubin (mg/dL)	0.16 ± 0.01	0.17 ± 0.01	0.15 ± 0.02	
Urea nitrogen (mg/dL)	15.4 ± 2.5	16.2 ± 1.7	16.2 ± 0.7	
Creatinine (mg/dL)	0.28 ± 0.04	0.28 ± 0.04	0.28 ± 0.03	
Glucose (mg/dL)	131.0 ± 13.4	120.5 ± 10.9	120.2 ± 8.5	
Total cholesterol (mg/dL)	77.0 ± 10.4	72.6 ± 10.4	52.4 ± 12.0 **	
Triglyceride (mg/dL)	34.1 ± 13.5	35.8 ± 14.2	23.7 ± 10.4	
Na (mEq/L)	141.9 ± 1.3	142.5 ± 1.0	142.2 ± 1.4	
K (mEq/L)	3.80 ± 0.13	3.88 ± 0.28	3.96 ± 0.09	
Cl (mEq/L)	109.2 ± 0.8	109.2 ± 1.2	108.9 ± 1.8	
Ca (mg/dL)	9.7 ± 0.4	9.8 ± 0.1	9.4 ± 0.3	
Inorganic phosphate (mg/dL)	5.2 ± 0.6	5.2 ± 0.7	6.1 ± 0.7 *	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 29. Necropsy findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane		
		40	200	
mg/kg	0	8	40	200
Number of males	6	6	6	6
Findings				
Normal	6	6	5	3
Stomach				
Ulcer, glandular mucosa	0	0	0	1
Liver				
Discoloration	0	0	1	3

Table 30. Necropsy findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane		
		8	40	200
mg/kg	0	8	40	200
Number of females	6	6	6	6
Findings				
Normal	6	6	6	6

Table 31. Necropsy findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane	
		40	200
mg/kg	0	40	200
Number of males	6	6	6
Findings			
Normal	6	6	6

Table 32. Necropsy findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group	Control	1,10-dibromodecane	
		40	200
mg/kg	0	40	200
Number of females	6	6	6
Findings			
Normal	6	6	6

Table 33. Organ weights of male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of males	6	6	6	6	
Body weight (g)	378 ± 25	360 ± 37	372 ± 18	371 ± 37	
Brain (g)	2.00 ± 0.09	1.99 ± 0.05	1.99 ± 0.12	2.02 ± 0.06	
(g%)	0.53 ± 0.04	0.56 ± 0.06	0.54 ± 0.04	0.55 ± 0.05	
Pituitary (mg)	12.9 ± 1.9	12.7 ± 1.7	13.7 ± 1.3	12.8 ± 0.8	
(mg%)	3.4 ± 0.5	3.5 ± 0.4	3.7 ± 0.3	3.5 ± 0.3	
Salivary glands (mg)	672 ± 52	597 ± 61 *	593 ± 48 *	599 ± 40	
(mg%)	178 ± 16	167 ± 16	159 ± 12	162 ± 8	
Thyroids (mg)	21.9 ± 3.9	19.4 ± 1.3	19.0 ± 2.8	21.2 ± 1.5	
(mg%)	5.8 ± 1.1	5.5 ± 0.6	5.1 ± 0.8	5.8 ± 0.6	
Thymus (mg)	527 ± 82	508 ± 147	573 ± 115	582 ± 194	
(mg%)	140 ± 22	139 ± 29	154 ± 28	155 ± 38	
Heart (g)	1.33 ± 0.11	1.27 ± 0.16	1.24 ± 0.11	1.26 ± 0.17	
(g%)	0.35 ± 0.03	0.36 ± 0.04	0.33 ± 0.02	0.34 ± 0.02	
Liver (g)	11.44 ± 1.49	11.02 ± 1.96	12.72 ± 0.57	13.79 ± 2.19	
(g%)	3.02 ± 0.20	3.05 ± 0.26	3.42 ± 0.09 *	3.70 ± 0.30 **	
Spleen (mg)	720 ± 69	661 ± 94	700 ± 61	627 ± 109	
(mg%)	192 ± 27	184 ± 11	188 ± 12	169 ± 26	
Kidneys (g)	2.91 ± 0.27	2.75 ± 0.31	2.92 ± 0.20	2.91 ± 0.33	
(g%)	0.77 ± 0.08	0.77 ± 0.06	0.79 ± 0.04	0.78 ± 0.03	
Adrenals (mg)	54.9 ± 4.7	53.6 ± 5.5	55.0 ± 6.8	52.8 ± 8.3	
(mg%)	14.6 ± 2.0	15.0 ± 1.7	14.7 ± 1.4	14.3 ± 2.4	
Testes (g)	3.37 ± 0.24	3.20 ± 0.24	3.25 ± 0.09	3.13 ± 0.12	
(g%)	0.90 ± 0.09	0.90 ± 0.13	0.88 ± 0.05	0.85 ± 0.09	
Epididymides (mg)	939 ± 120	881 ± 64	878 ± 65	880 ± 81	
(mg%)	250 ± 41	247 ± 31	236 ± 21	239 ± 31	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 34. Organ weights of female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	8	40	200	
Number of females	6	6	6	6	
Body weight (g)	236 ± 17	241 ± 20	251 ± 18	245 ± 20	
Brain (g)	1.92 ± 0.07	1.91 ± 0.04	1.94 ± 0.11	1.86 ± 0.07	
(g%)	0.82 ± 0.07	0.79 ± 0.08	0.78 ± 0.05	0.77 ± 0.06	
Pituitary (mg)	14.7 ± 1.9	15.2 ± 0.9	15.2 ± 2.2	14.9 ± 2.1	
(mg%)	6.2 ± 0.6	6.3 ± 0.5	6.1 ± 0.6	6.1 ± 0.6	
Salivary glands (mg)	416 ± 41	418 ± 31	407 ± 31	398 ± 31	
(mg%)	177 ± 14	175 ± 20	162 ± 7	163 ± 15	
Thyroids (mg)	14.1 ± 3.5	15.9 ± 4.2	15.5 ± 3.9	19.2 ± 3.9	
(mg%)	6.0 ± 1.4	6.6 ± 1.4	6.2 ± 1.4	7.9 ± 1.6	
Thymus (mg)	444 ± 119	477 ± 77	535 ± 135	496 ± 78	
(mg%)	188 ± 46	198 ± 24	212 ± 49	202 ± 24	
Heart (g)	0.83 ± 0.06	0.89 ± 0.08	0.89 ± 0.07	0.89 ± 0.08	
(g%)	0.35 ± 0.02	0.37 ± 0.02	0.35 ± 0.02	0.36 ± 0.01	
Liver (g)	7.21 ± 0.77	7.35 ± 0.72	7.95 ± 0.80	9.09 ± 0.54 **	
(g%)	3.06 ± 0.15	3.06 ± 0.15	3.17 ± 0.13	3.72 ± 0.13 **	
Spleen (mg)	504 ± 95	513 ± 33	529 ± 62	517 ± 34	
(mg%)	213 ± 27	213 ± 13	211 ± 24	212 ± 14	
Kidneys (g)	1.73 ± 0.09	1.81 ± 0.14	1.87 ± 0.13	2.06 ± 0.17 **	
(g%)	0.74 ± 0.04	0.76 ± 0.04	0.75 ± 0.04	0.84 ± 0.02 **	
Adrenals (mg)	64.0 ± 8.0	58.0 ± 8.9	65.4 ± 8.8	59.3 ± 6.6	
(mg%)	27.3 ± 4.0	24.3 ± 5.0	26.1 ± 2.7	24.3 ± 2.7	
Ovaries (mg)	77.7 ± 8.1	81.7 ± 9.3	94.0 ± 8.9 **	90.0 ± 6.3 *	
(mg%)	33.1 ± 3.5	34.3 ± 5.6	37.6 ± 3.0	37.0 ± 4.1	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

Table 35. Organ weights of male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane	
	0	40	200	
Number of males	6	6	6	
Body weight (g)	433 ± 28	445 ± 14	438 ± 24	
Brain (g)	2.02 ± 0.13	2.06 ± 0.05	2.09 ± 0.10	
(g%)	0.47 ± 0.02	0.46 ± 0.01	0.48 ± 0.03	
Pituitary (mg)	15.7 ± 2.8	15.4 ± 2.5	16.3 ± 2.6	
(mg%)	3.6 ± 0.4	3.5 ± 0.5	3.7 ± 0.6	
Salivary glands (mg)	690 ± 43	671 ± 43	665 ± 87	
(mg%)	160 ± 7	151 ± 14	152 ± 23	
Thyroids (mg)	27.0 ± 5.5	28.1 ± 6.4	24.1 ± 2.1	
(mg%)	6.3 ± 1.4	6.3 ± 1.3	5.5 ± 0.6	
Thymus (mg)	546 ± 89	519 ± 73	449 ± 96	
(mg%)	126 ± 22	117 ± 18	103 ± 23	
Heart (g)	1.42 ± 0.16	1.45 ± 0.11	1.48 ± 0.12	
(g%)	0.33 ± 0.02	0.33 ± 0.03	0.34 ± 0.02	
Liver (g)	12.52 ± 0.62	13.01 ± 0.58	12.83 ± 0.90	
(g%)	2.90 ± 0.16	2.93 ± 0.10	2.93 ± 0.16	
Spleen (mg)	785 ± 71	765 ± 81	667 ± 75 *	
(mg%)	182 ± 16	172 ± 19	153 ± 22 *	
Kidneys (g)	3.15 ± 0.54	3.05 ± 0.20	3.05 ± 0.24	
(g%)	0.73 ± 0.08	0.69 ± 0.05	0.70 ± 0.08	
Adrenals (mg)	57.3 ± 8.4	50.1 ± 4.0	60.5 ± 5.9	
(mg%)	13.3 ± 2.2	11.3 ± 1.0	13.9 ± 1.7	
Testes (g)	3.31 ± 0.28	3.42 ± 0.22	3.40 ± 0.37	
(g%)	0.77 ± 0.05	0.77 ± 0.06	0.78 ± 0.09	
Epididymides (mg)	1178 ± 64	1126 ± 75	1121 ± 69	
(mg%)	273 ± 14	253 ± 19	256 ± 15	

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

Table 36. Organ weights of female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control		1,10-dibromodecane		
	0	40	200		
Number of females	6	6	6		
Body weight (g)	255 ± 25	265 ± 11	250 ± 19		
Brain (g)	1.89 ± 0.05	1.90 ± 0.06	1.87 ± 0.05		
(g%)	0.75 ± 0.07	0.72 ± 0.05	0.75 ± 0.07		
Pituitary (mg)	18.2 ± 3.3	17.5 ± 2.1	17.7 ± 2.4		
(mg%)	7.2 ± 1.5	6.6 ± 0.7	7.1 ± 0.7		
Salivary glands (mg)	432 ± 31	409 ± 42	401 ± 51		
(mg%)	170 ± 12	155 ± 18	161 ± 18		
Thyroids (mg)	18.2 ± 2.9	20.1 ± 2.8	22.0 ± 4.8		
(mg%)	7.2 ± 1.2	7.6 ± 1.0	8.8 ± 1.8		
Thymus (mg)	418 ± 63	452 ± 31	369 ± 87		
(mg%)	164 ± 13	171 ± 15	147 ± 27		
Heart (g)	0.92 ± 0.10	0.91 ± 0.04	0.82 ± 0.05 *		
(g%)	0.36 ± 0.02	0.34 ± 0.02	0.33 ± 0.02		
Liver (g)	7.37 ± 0.89	7.23 ± 0.43	6.62 ± 0.62		
(g%)	2.89 ± 0.18	2.73 ± 0.12	2.65 ± 0.14 *		
Spleen (mg)	510 ± 72	624 ± 110 *	525 ± 37		
(mg%)	200 ± 18	236 ± 45	211 ± 16		
Kidneys (g)	2.00 ± 0.16	1.90 ± 0.10	1.83 ± 0.13		
(g%)	0.79 ± 0.06	0.72 ± 0.04 *	0.73 ± 0.05		
Adrenals (mg)	70.4 ± 8.8	65.8 ± 11.2	66.6 ± 4.7		
(mg%)	27.7 ± 2.7	24.8 ± 3.7	26.8 ± 3.2		
Ovaries (mg)	75.4 ± 16.5	87.9 ± 12.8	85.8 ± 5.9		
(mg%)	29.6 ± 6.1	33.2 ± 4.2	34.4 ± 1.7		

Each value shows mean ± S.D.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

Table 37. Histopathological findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane																		
	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+							
Grade																									
Findings																									
Heart	[6] ^{c)}						[0] ^{c)}						[0] ^{c)}					[6] ^{c)}							
Cellular infiltration	5	1	1	0	0	0								5	1	1	0	0	0						
Lung	[6]						[0]						[0]					[6]							
Trachea	[6]						[0]						[0]					[6]							
Liver	[6]						[6]						[6]					[6]							
Swelling, hepatocyte, periportal	6	0	0	0	0	0	0	6	4	2	0	0	##	0	6	0	6	0	## &&						
Microgranuloma	5	1	1	0	0	0	5	1	1	0	0	0	2	4	4	0	0	0	3	3	3	0	0	0	
Pancreas	[6]						[6]						[6]					[6]							
Decreased, zymogen granules	6	0	0	0	0	0	0	6	5	1	0	0	##	0	6	1	5	0	0	##	6	4	2	0	0
Sublingual gland	[6]						[0]						[0]					[6]							
Submandibular gland	[6]						[0]						[0]					[6]							
Esophagus	[6]						[0]						[0]					[6]							
Stomach	[6]						[0]						[0]					[6]							
Erosion, glandular stomach	6	0	0	0	0	0	0							5	1	0	1	0	0						
Duodenum	[6]						[0]						[0]					[6]							
Jejunum	[6]						[0]						[0]					[6]							
Ileum	[6]						[0]						[0]					[6]							
Cecum	[6]						[0]						[0]					[6]							
Colon	[6]						[0]						[0]					[6]							
Rectum	[6]						[0]						[0]					[6]							
Thymus	[6]						[0]						[0]					[6]							
Spleen	[6]						[0]						[0]					[6]							
Hematopoiesis, extramedullary	5	1	1	0	0	0	0								6	0	0	0	0	0					
Mandibular lymph node	[6]						[0]						[0]					[6]							
Mesenteric lymph node	[6]						[0]						[0]					[6]							

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

(Continued)

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of males examined.

Significantly different from the control group (##: p<0.01 by Steel's test).

Significantly different by dose response test (&&: p<0.01 by Cochran-Armitage exact test).

Table 37. (Continued) Histopathological findings in male rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane											
	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+
Grade																		
Findings																		
Kidney	[6] ^{c)}						[0] ^{c)}						[0] ^{c)}					[6] ^{c)}
Cyst, right	5	1	1	0	0	0								6	0	0	0	0
Urinary bladder	[6]						[0]						[0]					[6]
Testis	[6]						[0]						[0]					[6]
Epididymis	[6]						[0]						[0]					[6]
Seminal vesicle	[6]						[0]						[0]					[6]
Prostate	[6]						[0]						[0]					[6]
Pituitary	[6]						[0]						[0]					[6]
Adrenal	[6]						[0]						[0]					[6]
Thyroid	[6]						[0]						[0]					[6]
Parathyroid	[6]						[0]						[0]					[6]
Cerebrum	[6]						[0]						[0]					[6]
Cerebellum	[6]						[0]						[0]					[6]
Medulla oblongata	[6]						[0]						[0]					[6]
Spinal cord	[6]						[0]						[0]					[6]
Sciatic nerve	[6]						[0]						[0]					[6]
Eyeball	[6]						[0]						[0]					[6]
Harderian gland	[6]						[0]						[0]					[6]
Bone marrow (sternum, femur)	[6]						[0]						[0]					[6]
Bone (sternum, femur)	[6]						[0]						[0]					[6]
Femur muscle	[6]						[0]						[0]					[6]

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of males examined.

Table 38. Histopathological findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane												
	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	
Grade																			
Findings																			
Heart	[6] ^{c)}						[0] ^{c)}						[0] ^{c)}					[6] ^{c)}	
Cellular infiltration	6	0	0	0	0	0								5	1	1	0	0	0
Lung	[6]						[0]						[0]					[6]	
Mineralization, vascular wall, lateral	4	2	2	0	0	0								5	1	1	0	0	0
Accumulation, foam cell, left	6	0	0	0	0	0								5	1	1	0	0	0
Trachea	[6]						[0]						[0]					[6]	
Liver	[6]						[6]						[6]					[6]	
Swelling, hepatocyte, periportal	6	0	0	0	0	0	0	6	6	0	0	0	##	0	6	5	1	0	## &&
Microgranuloma	6	0	0	0	0	0	4	2	2	0	0	0	##	5	1	1	0	0	0
Pancreas	[6]						[6]						[6]					[6]	
Decreased, zymogen granules	6	0	0	0	0	0	0	6	5	1	0	0	##	1	5	1	4	0	# &&
Sublingual gland	[6]						[0]						[0]					[6]	
Submandibular gland	[6]						[0]						[0]					[6]	
Esophagus	[6]						[0]						[0]					[6]	
Stomach	[6]						[0]						[0]					[6]	
Duodenum	[6]						[0]						[0]					[6]	
Jejunum	[6]						[0]						[0]					[6]	
Ileum	[6]						[0]						[0]					[6]	
Cecum	[6]						[0]						[0]					[6]	
Colon	[6]						[0]						[0]					[6]	
Rectum	[6]						[0]						[0]					[6]	
Thymus	[6]						[0]						[0]					[6]	
Spleen	[6]						[0]						[0]					[6]	
Mandibular lymph node	[6]						[0]						[0]					[6]	
Mesenteric lymph node	[6]						[0]						[0]					[6]	

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

(Continued)

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of females examined.

Significantly different from the control group (#: P<0.05, ##: P<0.01 by Steel's test).

Significantly different by dose response test (&&: p<0.01 by Cochran-Armitage exact test).

Table 38. (Continued) Histopathological findings in female rats on termination of administration period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane											
	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+
Grade																		
Findings																		
Kidney	[6] ^{c)}						[0] ^{c)}						[0] ^{c)}					[6] ^{c)}
Urinary bladder	[6]						[0]						[0]					[6]
Ovary	[6]						[0]						[0]					[6]
Uterus	[6]						[0]						[0]					[6]
Vagina	[6]						[0]						[0]					[6]
Pituitary	[6]						[0]						[0]					[6]
Adrenal	[6]						[0]						[0]					[6]
Thyroid	[6]						[0]						[0]					[6]
Ultimobranchial remnant	5	1	1	0	0	0												4 2 2 0 0 0
Parathyroid	[6]						[0]						[0]					[6]
Cerebrum	[6]						[0]						[0]					[6]
Cerebellum	[6]						[0]						[0]					[6]
Medulla oblongata	[6]						[0]						[0]					[6]
Spinal cord	[6]						[0]						[0]					[6]
Sciatic nerve	[6]						[0]						[0]					[6]
Eyeball	[6]						[0]						[0]					[6]
Harderian gland	[6]						[0]						[0]					[6]
Bone marrow (sternum, femur)	[6]						[0]						[0]					[6]
Bone (sternum, femur)	[6]						[0]						[0]					[6]
Femur muscle	[6]						[0]						[0]					[6]
Mammary gland	[6]						[0]						[0]					[6]

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of females examined.

Table 39. Histopathological findings in male rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane					
	0						40			200		
Grade	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+
Findings												
Liver	[6] ^{c)}						[6] ^{c)}					[6] ^{c)}
Swelling, hepatocyte, periportal	6	0	0	0	0	0	4	2	2	0	0	0
Microgranuloma	5	1	1	0	0	0	5	1	1	0	0	0
Pancreas	[6]						[6]					[6]

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of males examined.

Table 40. Histopathological findings in female rats on termination of recovery period in repeated dose 28-day oral toxicity study of 1,10-dibromodecane

Group mg/kg	Control						1,10-dibromodecane												
	0						40						200						
Grade	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	N ^{a)}	A ^{b)}	±	+	2+	3+	
Findings																			
Liver	[6] ^{c)}						[6] ^{c)}						[6] ^{c)}						
Swelling, hepatocyte, periportal	6	0	0	0	0	0	6	0	0	0	0	0	3	3	3	0	0	0	
Pancreas	[6]						[6]						[6]						

Grade of histopathological findings; ±: slight, +: mild, 2+: moderate, 3+: marked.

a): No abnormality detected.

b): Abnormality detected.

c): Number in brackets is number of females examined.



Fig. 1. Chemical structure of 1,10-dibromodecane.

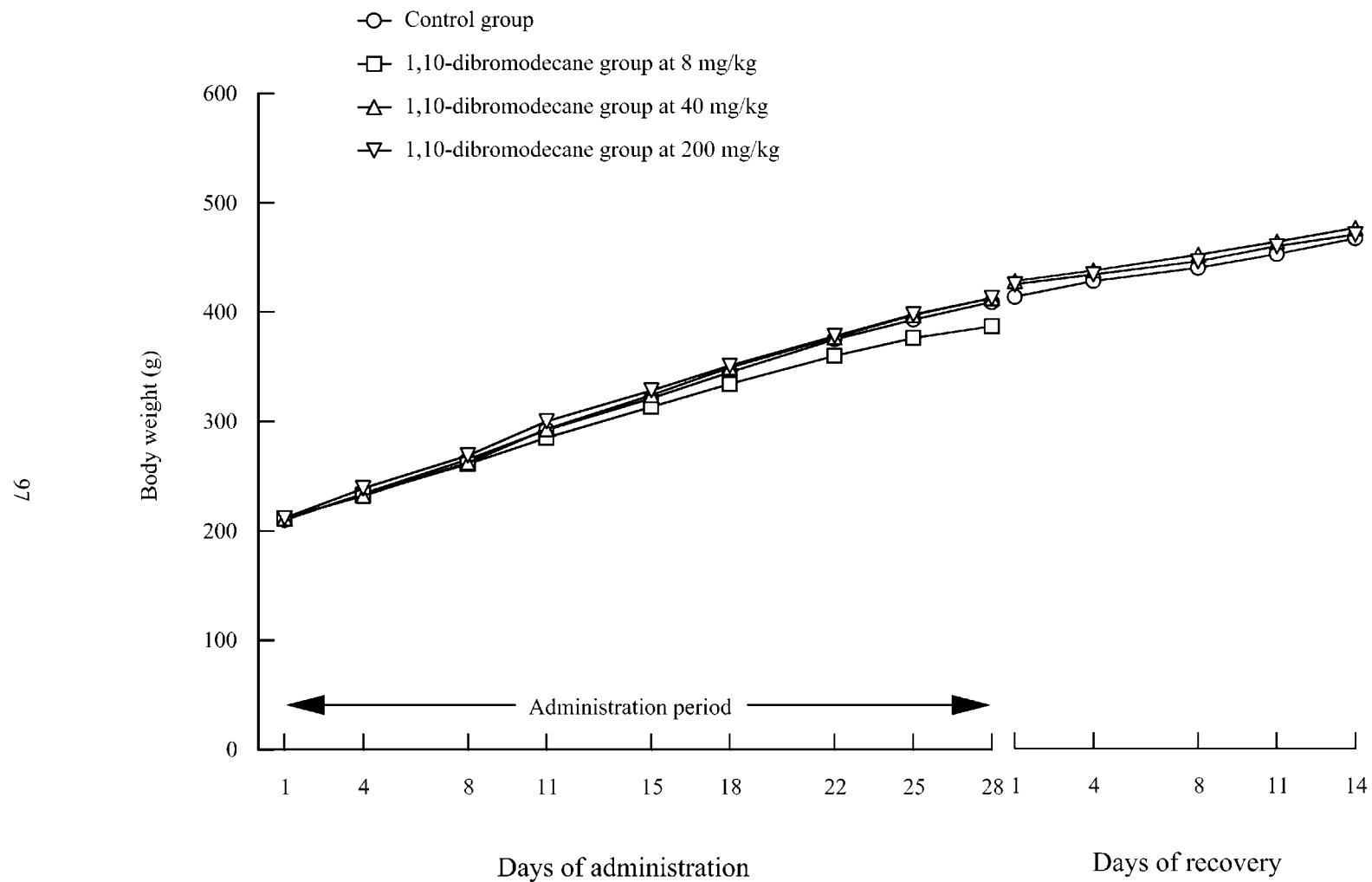


Fig. 2. Body weights of male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

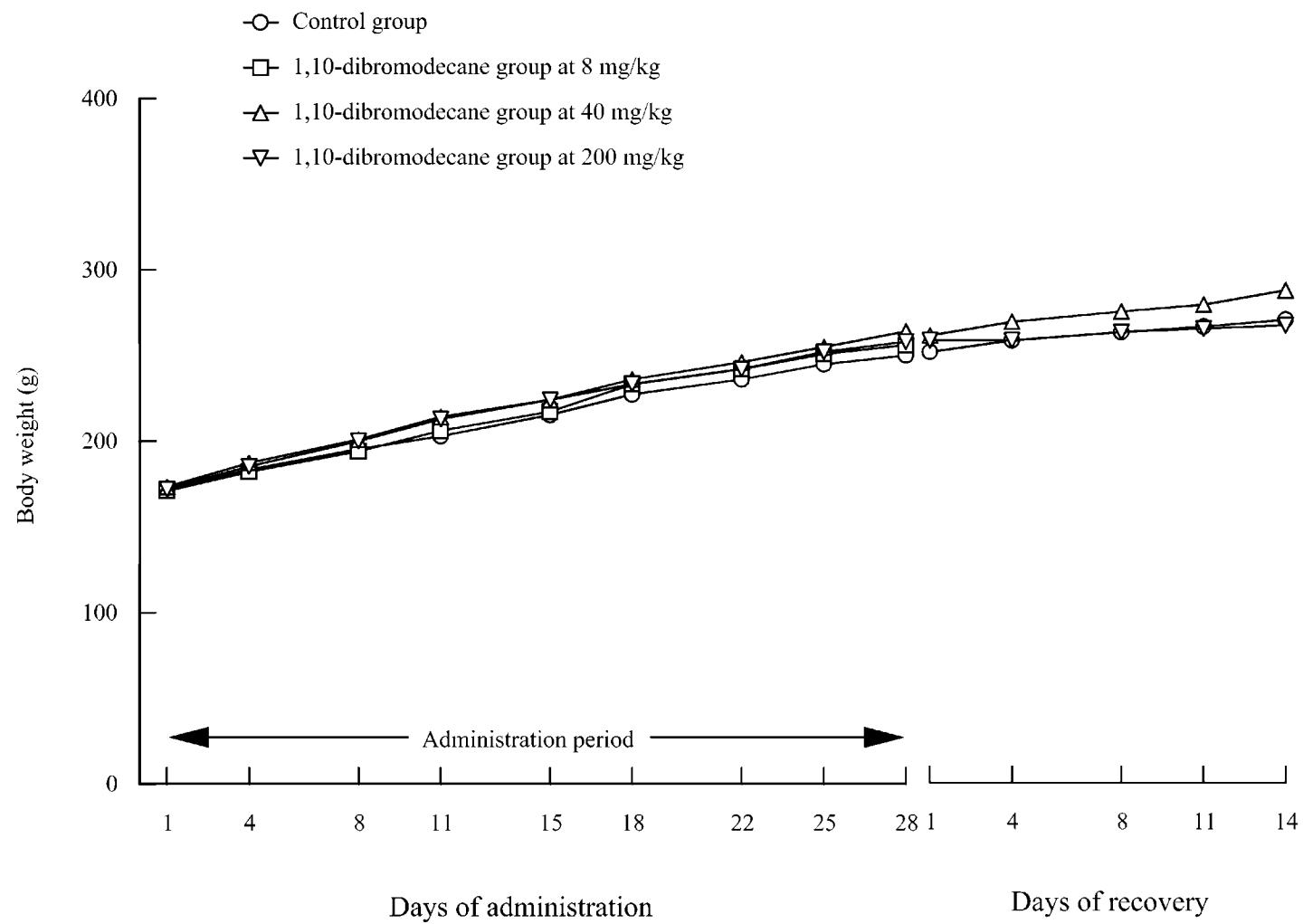


Fig. 3. Body weights of female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

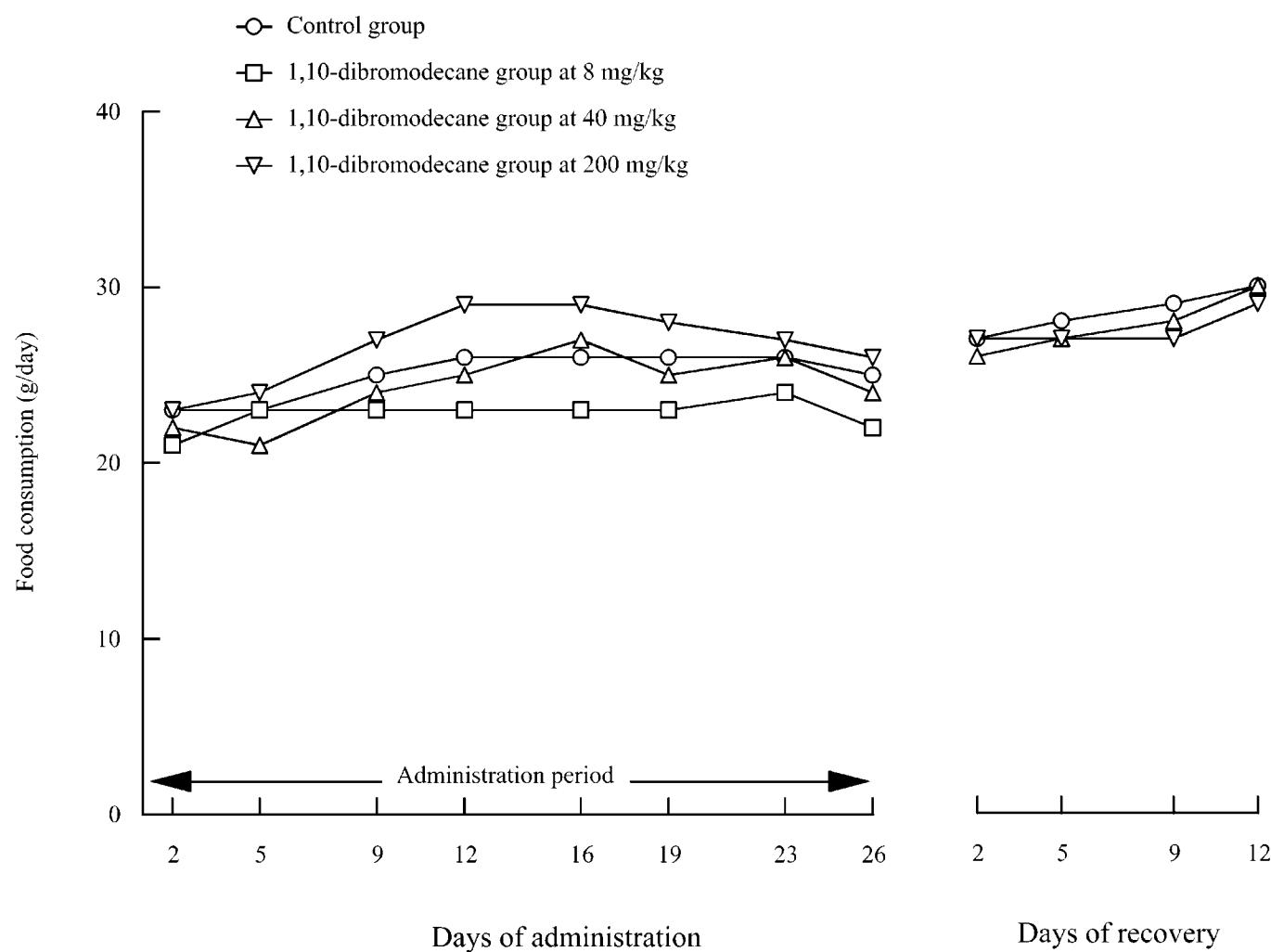


Fig. 4. Food consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

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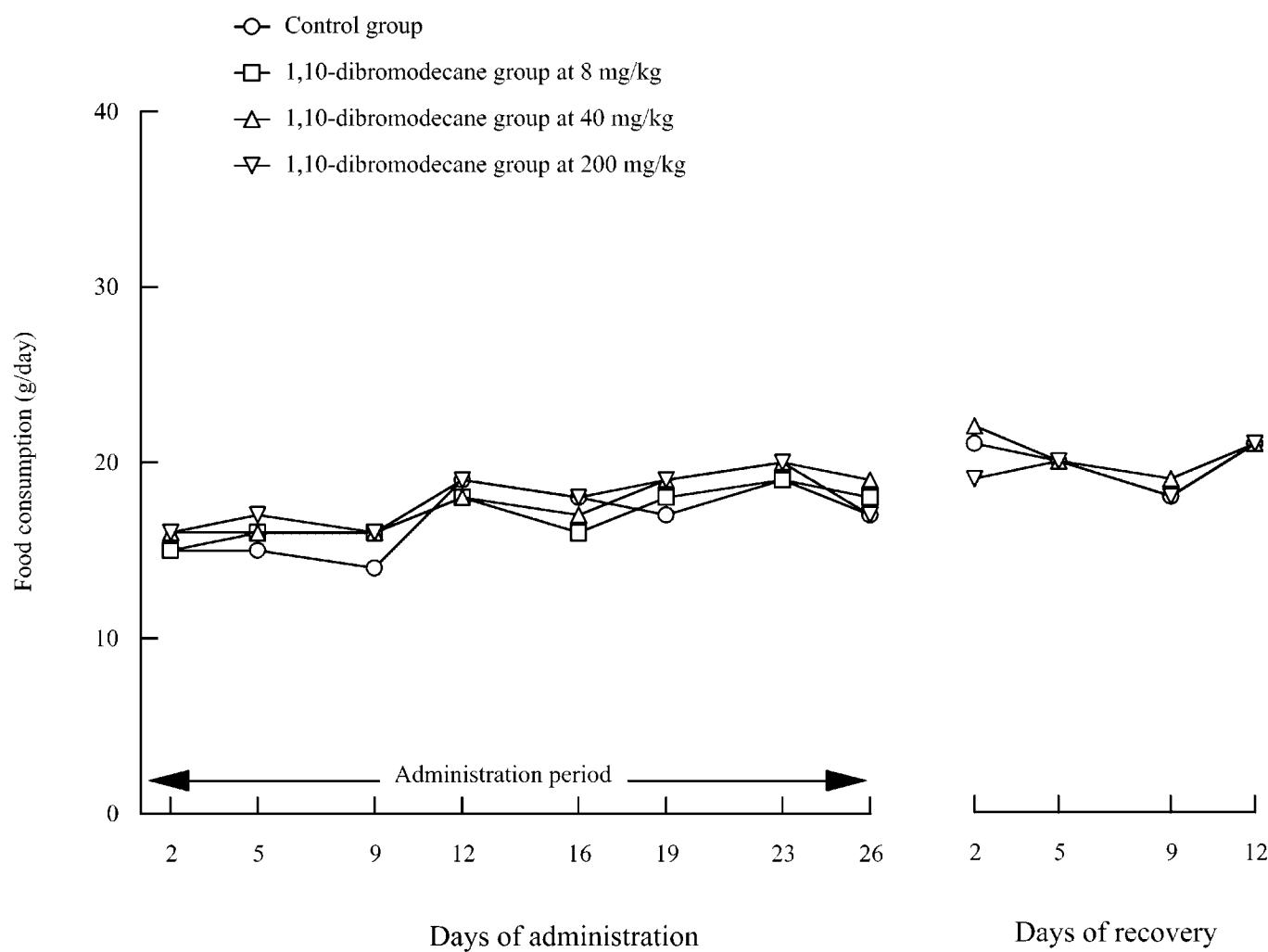


Fig. 5. Food consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

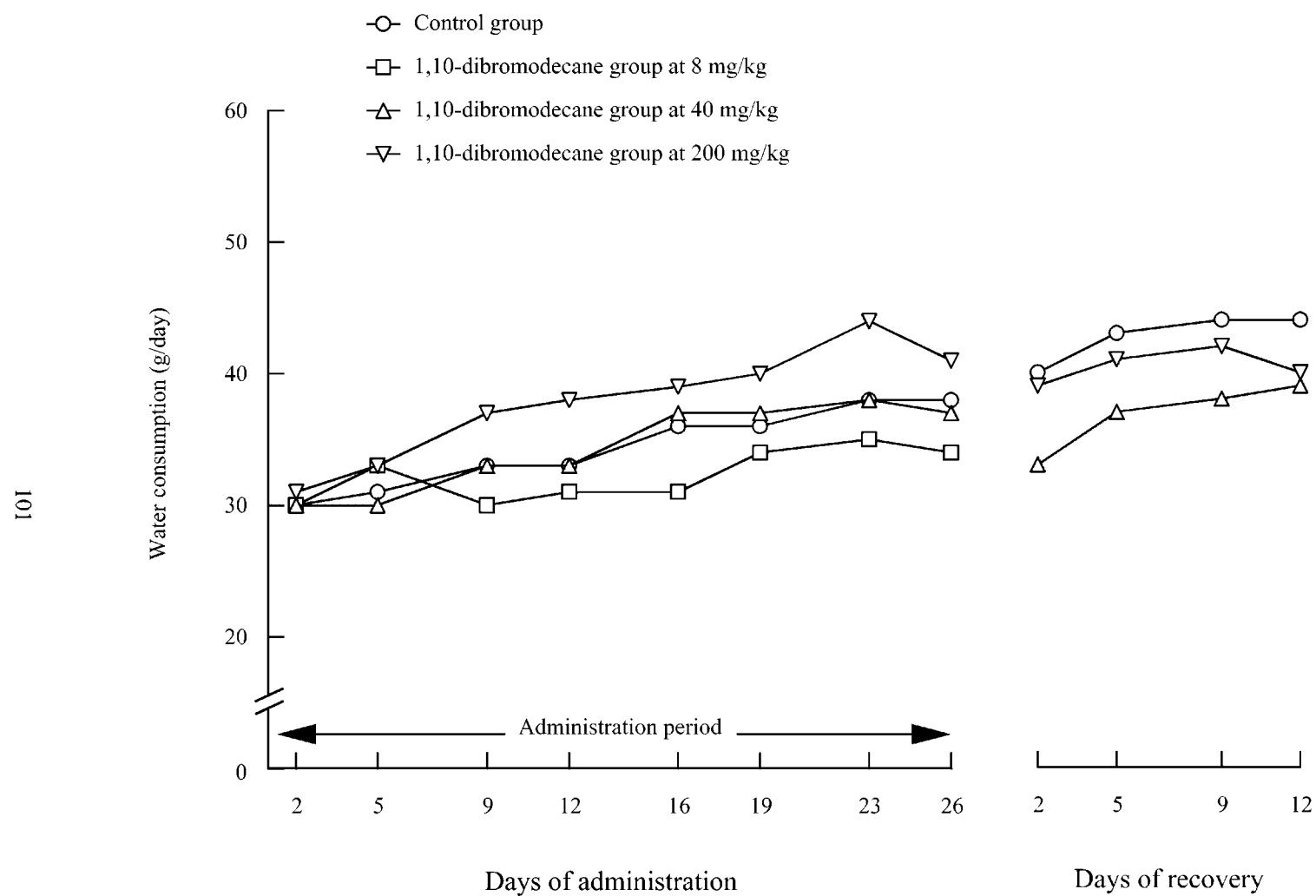


Fig. 6. Water consumption in male rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

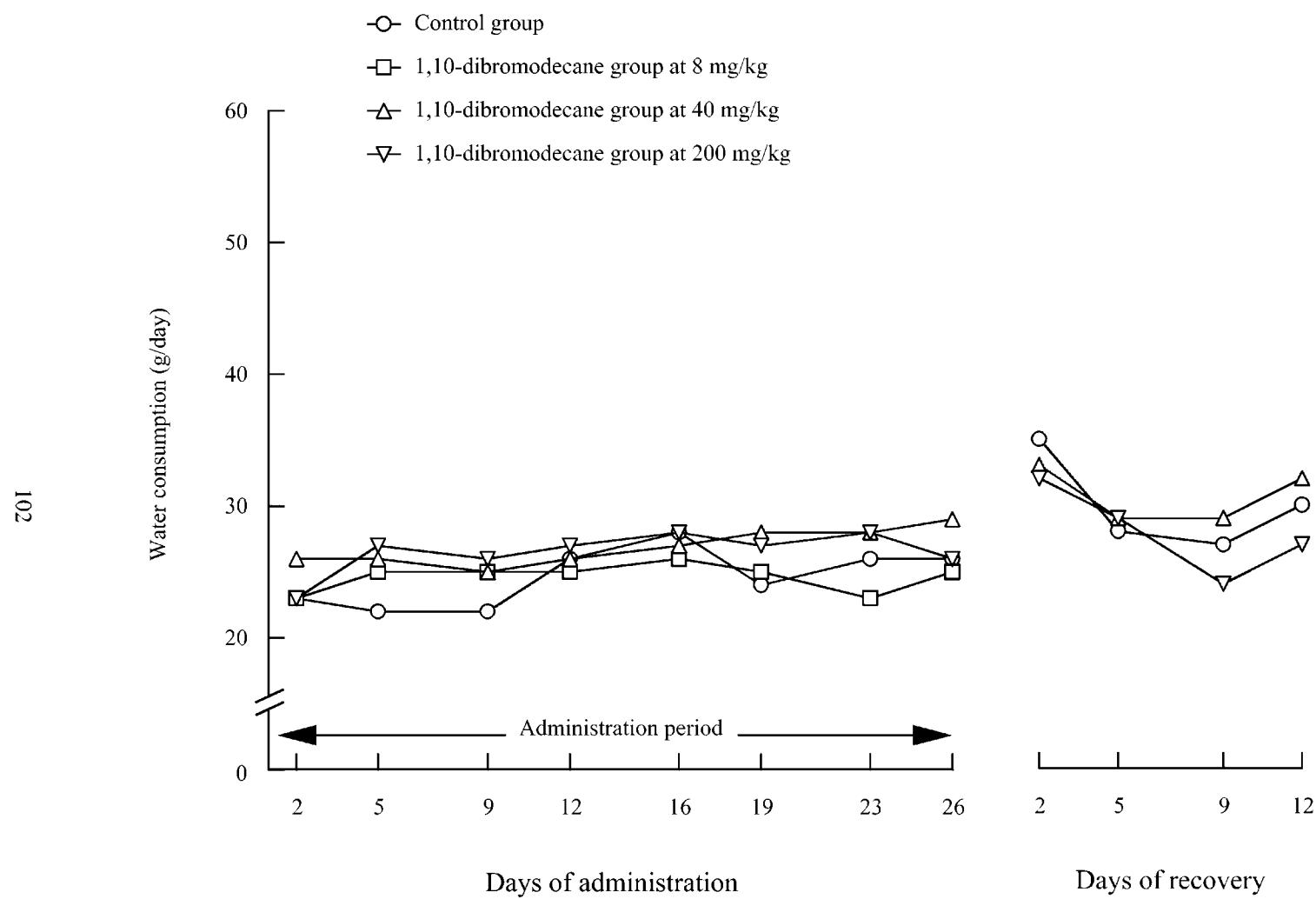


Fig. 7. Water consumption in female rats in repeated dose 28-day oral toxicity study of 1,10-dibromodecane.

Appendix 1-1. Individual general signs in male rats

Control group

Male No.	Days of administration																											
	1		2		3		4		5		6		7		8		9		10		11		12		13		14	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post		
M01101	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M01102	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01103	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01104	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01105	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01106	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01107	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01108	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01109	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01110	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01111	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M01112	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		

Pre: Before administration, Post: after administration.

N: Normal.

(Continued)

Appendix 1-1. (Continued) Individual general signs in male rats

Control group		Days of administration																												
		Male No.		Days of administration																										
				15		16		17		18		19		20		21		22		23		24		25		26		27		28
104	M01101	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
	M01102	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	
	M01103	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	
	M01104	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	
	M01105	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	
	M01106	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	
	M01107	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	M01108	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	M01109	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	M01110	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	M01111	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	M01112	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
Number of males		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	
N		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

N: Normal.

Appendix 1-1. (Continued) Individual general signs in male rats

Male No.	Control group														
	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
M01107	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M01108	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M01109	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M01110	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M01111	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M01112	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 1-2. Individual general signs in male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Days of administration																										
	1		2		3		4		5		6		7		8		9		10		11		12		13		14
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
M02201	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M02202	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M02203	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M02204	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M02205	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M02206	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Pre: Before administration, Post: after administration.

(Continued)

N: Normal.

Appendix 1-2. (Continued) Individual general signs in male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Days of administration																												
	15		16		17		18		19		20		21		22		23		24		25		26		27		28		29
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre
M02201	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M02202	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M02203	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M02204	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M02205	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M02206	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Pre: Before administration, Post: after administration.

*: Euthanized.

N: Normal.

Appendix 1-3. Individual general signs in male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Days of administration																										
	1		2		3		4		5		6		7		8		9		10		11		12		13		14
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
M03301	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03302	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03303	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03304	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03305	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03306	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03307	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03308	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03309	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03310	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03311	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
M03312	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Pre: Before administration, Post: after administration.

N: Normal.

(Continued)

Appendix 1-3. (Continued) Individual general signs in male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Days of administration																												
	15		16		17		18		19		20		21		22		23		24		25		26		27		28		29
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	*
M03301	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03302	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03303	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03304	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03305	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03306	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
M03307	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M03308	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M03309	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M03310	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M03311	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
M03312	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	
	N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

N: Normal.

Appendix 1-3. (Continued) Individual general signs in male rats

Male No.	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
M03307	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M03308	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M03309	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M03310	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M03311	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M03312	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 1-4. Individual general signs in male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of administration																											
	1		2		3		4		5		6		7		8		9		10		11		12		13		14	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post		
M04401	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A		
M04402	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04403	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04404	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04405	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04406	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04407	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	A		
M04408	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	A	N	A	A		
M04409	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04410	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	N	N	N	N	N		
M04411	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
M04412	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
Number of males	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	10	12	11	12	10	12		
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	2	0		

Pre: Before administration, Post: after administration.

N: Normal.

A: Salivation.

(Continued)

Appendix 1-4. (Continued) Individual general signs in male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of administration																									Total ^{a)}			
	15		16		17		18		19		20		21		22		23		24		25		26		27		28		
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	A		
112	M04401	N	N	N	N	N	A	N	A	N	N	N	N	A	N	N	N	N	A	N	N	N	N	N	N	N	*	+	
	M04402	N	N	N	A	N	N	N	N	A	N	N	N	N	N	N	A	N	N	A	N	N	N	A	N	A	*	+	
	M04403	N	A	N	A	N	N	N	N	N	N	A	N	N	N	N	N	N	N	A	N	N	N	N	N	N	*	+	
	M04404	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	-	
	M04405	N	N	N	N	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	+	
	M04406	N	A	N	N	N	A	N	A	N	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	*	+	
	M04407	N	N	N	N	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	+	
	M04408	N	N	N	A	N	A	N	N	A	N	N	N	A	N	N	A	N	N	N	N	N	N	N	N	A	+		
	M04409	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	N	A	N	N	N	N	N	N	+		
	M04410	N	N	N	N	N	N	N	A	N	N	N	N	A	N	A	N	N	N	N	N	N	N	N	N	N	+		
	M04411	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-		
	M04412	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	+		
Number of males		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12	
N		12	9	12	9	12	8	12	7	12	7	12	7	12	7	12	9	12	7	12	8	12	10	12	9	12	8	6	-
A		0	3	0	3	0	4	0	5	0	5	0	5	0	3	0	5	0	4	0	2	0	3	0	4	0	10		

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

a): Number of males showing abnormal signs at least once between Days 1 and 29 of administration.

N: Normal.

A: Salivation.

Appendix 1-4. (Continued) Individual general signs in male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
M04407	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M04408	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M04409	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M04410	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M04411	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
M04412	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 2-1. Individual general signs in female rats

Control group		Days of administration																											
Female No.		1		2		3		4		5		6		7		8		9		10		11		12		13		14	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post		
F01151		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01152		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01153		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01154		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01155		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01156		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01157		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01158		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01159		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01160		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01161		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F01162		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Number of females		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	

Pre: Before administration, Post: after administration.

(Continued)

N: Normal.

Appendix 2-1. (Continued) Individual general signs in female rats

Control group Female No.		Days of administration																												
		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre		
115	F01151	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01152	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01153	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01154	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01155	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01156	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*		
	F01157	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
	F01158	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
	F01159	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
	F01160	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
	F01161	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
	F01162	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
Number of females		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6		
N		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6		

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

N: Normal.

Appendix 2-1. (Continued) Individual general signs in female rats

Female No.	Control group														
	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
F01157	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F01158	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F01159	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F01160	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F01161	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F01162	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 2-2. Individual general signs in female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Days of administration																											
	1		2		3		4		5		6		7		8		9		10		11		12		13		14	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
F02251	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F02252	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F02253	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F02254	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F02255	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F02256	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Pre: Before administration, Post: after administration.

(Continued)

N: Normal.

Appendix 2-2. (Continued) Individual general signs in female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Days of administration																												
	15		16		17		18		19		20		21		22		23		24		25		26		27		28		29
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	*
F02251	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F02252	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F02253	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F02254	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F02255	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F02256	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	

Pre: Before administration, Post: after administration.

*: Euthanized.

N: Normal.

Appendix 2-3. Individual general signs in female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Days of administration																										
	1		2		3		4		5		6		7		8		9		10		11		12		13		14
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
F03351	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F03352	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03353	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03354	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03355	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03356	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03357	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03358	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03359	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03360	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03361	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03362	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	

Pre: Before administration, Post: after administration.

N: Normal.

(Continued)

Appendix 2-3. (Continued) Individual general signs in female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Days of administration																												
	15		16		17		18		19		20		21		22		23		24		25		26		27		28		29
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	*
F03351	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03352	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03353	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03354	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03355	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03356	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*
F03357	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03358	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03359	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03360	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03361	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
F03362	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	
	N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

N: Normal.

Appendix 2-3. (Continued) Individual general signs in female rats

Female No.	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
F03357	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F03358	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F03359	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F03360	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F03361	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F03362	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 2-4. Individual general signs in female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Days of administration																										
	1		2		3		4		5		6		7		8		9		10		11		12		13		14
Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
F04451	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04452	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04453	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04454	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04455	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04456	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04457	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04458	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04459	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04460	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04461	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
F04462	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of females	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

Pre: Before administration, Post: after administration.

(Continued)

N: Normal.

Appendix 2-4. (Continued) Individual general signs in female rats

		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		Total ^{a)}	
		Female No.	Pre	Post	A																												
123	F04451	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	-			
	F04452	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	A	*	+			
	F04453	N	A	N	A	N	N	N	N	A	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	A	N	N	*	+			
	F04454	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	-			
	F04455	N	A	N	A	N	A	N	A	N	N	A	N	N	N	A	N	N	N	A	N	N	N	N	N	A	N	*	+				
	F04456	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	*	-				
	F04457	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-				
	F04458	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-				
	F04459	N	N	N	N	N	N	N	N	N	A	N	A	N	N	N	A	N	A	N	A	N	A	N	A	N	N	+					
	F04460	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-					
	F04461	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-					
	F04462	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-					
Number of females		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	6	12				
N		12	10	12	10	12	11	12	11	12	10	12	10	12	10	12	11	12	11	12	10	12	11	12	10	12	10	6	-				
A		0	2	0	2	0	1	0	1	0	2	0	2	0	1	0	1	0	2	0	1	0	1	0	2	0	2	0	4				

Pre: Before administration, Post: after administration.

(Continued)

*: Euthanized.

a): Number of females showing abnormal signs at least once between Days 1 and 29 of administration.

N: Normal.

A: Salivation.

Appendix 2-4. (Continued) Individual general signs in female rats

Female No.	Days of recovery														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
F04457	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F04458	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F04459	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F04460	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F04461	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
F04462	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N *
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

*: Euthanized.

N: Normal.

Appendix 3-1. Individual body weights (g) of male rats

Control group Male No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
M01101	205	230	265	294	332	364	413	430	447					
M01102	204	225	254	281	304	324	356	373	388					
M01103	220	250	282	297	332	362	391	411	423					
M01104	213	234	265	298	317	341	360	380	394					
M01105	212	234	264	289	308	327	348	361	370					
M01106	219	244	273	308	334	364	390	407	423					
M01107	215	243	272	298	329	351	373	387	397	393	414	422	437	452
M01108	206	232	263	301	336	359	389	409	426	425	440	451	462	474
M01109	209	234	266	293	322	350	377	396	418	423	436	457	471	484
M01110	200	219	249	278	301	327	364	378	400	405	414	424	441	452
M01111	201	220	241	263	292	311	340	356	373	378	388	399	411	423
M01112	218	246	285	307	348	361	404	430	445	452	469	483	491	511
Number of males	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	210	234	265	292	321	345	375	393	409	413	427	439	452	466
S.D.	7	10	13	13	17	19	23	25	26	26	28	30	28	31

Appendix 3-2. Individual body weights (g) of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Days of administration								
	1	4	8	11	15	18	22	25	28
M02201	215	236	271	299	331	352	389	409	427
M02202	207	231	259	284	321	348	374	393	408
M02203	216	239	281	310	352	381	409	428	439
M02204	218	237	256	275	291	309	327	341	348
M02205	206	237	245	266	286	306	325	336	345
M02206	206	218	253	273	296	310	333	348	357
Number of males	6	6	6	6	6	6	6	6	6
Mean	211	233	261	285	313	334	360	376	387
S.D.	6	8	13	17	26	31	36	39	42
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 3-3. Individual body weights (g) of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
M03301	201	225	248	285	310	334	362	391	405					
M03302	212	231	263	295	324	352	379	398	418					
M03303	217	235	268	297	330	356	384	408	421					
M03304	222	240	264	292	320	348	371	393	409					
M03305	209	225	249	275	294	317	342	356	362					
M03306	216	233	271	304	331	351	368	388	393					
M03307	218	232	267	296	325	350	379	400	411	419	422	433	446	461
M03308	203	228	251	281	313	338	369	387	403	405	419	433	445	461
M03309	197	211	249	278	313	337	365	385	405	406	421	439	457	468
M03310	208	234	261	294	330	359	396	416	437	442	445	465	474	483
M03311	219	246	275	309	344	371	397	421	442	442	457	474	483	499
M03312	221	249	281	311	351	380	409	424	444	449	459	462	471	482
Number of males	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	212	232	262	293	324	349	377	397	413	427	437	451	463	476
S.D.	8	10	11	12	15	17	18	19	23	20	19	18	16	15
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 3-4. Individual body weights (g) of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
M04401	206	236	255	280	304	323	337	354	366					
M04402	215	246	270	302	326	343	376	386	399					
M04403	217	245	272	305	331	350	375	390	399					
M04404	214	233	252	275	300	318	341	359	375					
M04405	223	257	294	338	368	408	425	449	462					
M04406	215	246	279	312	342	372	396	417	429					
M04407	222	247	279	310	345	366	411	430	455	461	472	483	501	512
M04408	217	245	273	302	334	364	392	415	431	441	449	465	479	487
M04409	204	232	263	295	322	346	378	406	423	429	431	437	450	461
M04410	212	235	264	292	316	336	364	384	399	408	412	429	442	454
M04411	197	212	259	293	321	341	369	391	403	389	410	423	433	443
M04412	201	229	262	295	331	347	374	395	412	415	422	434	446	460
Number of males	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	212	239	269	300	328	351	378	398	413	424	433	445	459	470
S.D.	8	12	12	16	18	24	26	27	29	25	24	24	26	25
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 4-1. Individual body weights (g) of female rats

Control group Female No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
F01151	182	197	210	217	231	256	267	281	283					
F01152	164	174	188	200	210	222	235	246	250					
F01153	170	185	199	221	242	240	241	249	256					
F01154	172	180	196	200	209	214	226	241	251					
F01155	168	179	190	196	206	222	228	231	236					
F01156	160	167	174	189	197	218	222	230	234					
F01157	182	189	203	207	216	233	242	250	255	259	264	264	264	268
F01158	169	186	190	199	210	213	216	215	221	220	230	229	237	238
F01159	183	195	208	210	225	243	252	266	277	279	283	294	293	304
F01160	156	167	178	179	193	196	207	220	220	222	232	237	239	244
F01161	176	182	194	202	215	230	239	250	254	260	265	268	271	276
F01162	177	196	204	217	228	238	251	255	266	265	276	285	293	292
Number of females	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	172	183	195	203	215	227	236	245	250	251	258	263	266	270
S.D.	9	10	11	12	14	16	17	19	20	24	22	26	25	26

Appendix 4-2. Individual body weights (g) of female rats

Female No.	Days of administration								
	1	4	8	11	15	18	22	25	28
F02251	186	196	213	225	237	252	263	271	275
F02252	164	172	179	190	205	223	232	240	246
F02253	159	165	169	180	187	195	204	215	222
F02254	178	187	206	214	226	248	258	269	274
F02255	171	188	203	222	235	248	253	260	266
F02256	169	183	193	203	213	231	241	251	255
Number of females	6	6	6	6	6	6	6	6	6
Mean	171	182	194	206	217	233	242	251	256
S.D.	10	11	17	18	19	22	22	21	20
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 4-3. Individual body weights (g) of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
F03351	181	200	214	225	239	249	260	271	277					
F03352	183	197	210	221	234	246	260	274	282					
F03353	163	172	185	203	218	223	236	250	256					
F03354	174	191	211	221	235	253	266	277	287					
F03355	172	182	196	206	211	229	234	240	248					
F03356	176	190	202	217	221	225	233	245	253					
F03357	171	188	196	211	218	227	238	241	255	253	267	270	277	283
F03358	171	183	200	216	225	234	243	251	258	266	267	273	279	287
F03359	176	184	193	206	212	221	227	232	236	241	249	256	257	272
F03360	180	193	207	222	235	248	263	275	284	285	293	299	301	308
F03361	164	182	197	208	224	240	250	257	270	266	274	275	282	287
F03362	168	187	196	212	219	233	243	249	256	256	265	274	279	284
Number of females	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	173	187	201	214	224	236	246	255	264	261	269	275	279	287
S.D.	6	8	9	7	9	11	13	15	16	15	14	14	14	12
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 4-4. Individual body weights (g) of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Days of administration								Days of recovery					
	1	4	8	11	15	18	22	25	28	1	4	8	11	14
F04451	167	184	196	204	212	222	233	240	248					
F04452	162	168	182	190	201	216	223	233	235					
F04453	182	199	215	235	248	255	271	281	283					
F04454	171	183	199	210	225	236	251	265	272					
F04455	183	197	214	235	247	250	258	265	265					
F04456	178	191	210	221	232	242	250	261	275					
F04457	168	175	188	206	219	229	238	251	255	261	265	270	278	270
F04458	180	202	224	234	251	260	265	272	281	283	278	285	286	290
F04459	168	176	193	197	204	208	216	228	232	234	236	240	233	230
F04460	171	179	188	205	215	226	235	240	247	254	249	256	265	274
F04461	171	182	194	212	221	234	242	251	258	263	266	273	276	286
F04462	161	180	199	201	209	217	226	242	248	251	254	254	251	253
Number of females	12	12	12	12	12	12	12	12	12	6	6	6	6	6
Mean	172	185	200	213	224	233	242	252	258	258	258	263	265	267
S.D.	7	10	13	15	17	16	17	16	17	16	15	16	20	22
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 5-1. Individual food consumption (g/day) in male rats

Control group Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M01101	24	24	27	23	34	37	36	33				
M01102	23	22	24	24	24	24	24	24				
M01103	24	27	24	31	31	28	26	23				
M01104	23	22	27	24	24	22	25	24				
M01105	23	23	27	27	26	26	24	21				
M01106	24	20	26	28	27	27	30	27				
M01107	26	24	28	27	27	26	25	23	26	29	31	32
M01108	21	23	25	25	27	27	25	26	25	29	29	29
M01109	25	21	25	30	25	26	27	28	29	31	32	32
M01110	18	20	23	25	24	24	22	24	27	26	27	27
M01111	23	21	18	24	19	24	21	23	24	25	27	27
M01112	24	24	25	25	27	26	28	26	32	26	27	32
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	23	23	25	26	26	26	26	25	27	28	29	30
S.D.	2	2	3	3	4	4	4	3	3	2	2	2

Appendix 5-2. Individual food consumption (g/day) in male rats

Male No.	Days of administration							
	2	5	9	12	16	19	23	26
M02201	19	24	22	25	25	24	23	23
M02202	23	19	24	25	25	25	27	25
M02203	19	29	29	28	29	28	29	24
M02204	23	23	22	21	21	20	20	22
M02205	21	21	22	22	19	20	21	20
M02206	21	23	19	18	19	23	21	19
Number of males	6	6	6	6	6	6	6	6
Mean	21	23	23	23	23	23	24	22
S.D.	2	3	3	4	4	3	4	2
Significance	NS	NS	NS	*	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 5-3. Individual food consumption (g/day) in male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M03301	22	21	26	24	26	27	31	28				
M03302	24	24	24	25	30	26	32	26				
M03303	20	21	25	25	25	27	26	25				
M03304	24	20	25	24	25	24	25	26				
M03305	20	19	19	24	25	22	24	22				
M03306	18	26	27	26	24	23	21	21				
M03307	21	20	24	22	24	23	23	20	23	26	30	28
M03308	20	18	26	25	30	26	25	23	29	26	27	29
M03309	20	16	24	27	27	24	24	25	23	30	28	29
M03310	21	22	23	25	28	29	29	27	26	29	29	29
M03311	25	25	24	29	28	27	26	27	27	25	28	36
M03312	24	23	26	27	26	25	27	23	27	24	28	27
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	22	21	24	25	27	25	26	24	26	27	28	30
S.D.	2	3	2	2	2	2	3	3	2	2	1	3
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 5-4. Individual food consumption (g/day) in male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M04401	22	24	25	27	26	25	24	25				
M04402	22	25	26	27	33	26	23	23				
M04403	23	20	29	29	28	27	25	20				
M04404	23	24	28	26	26	26	27	23				
M04405	26	24	33	30	33	33	31	31				
M04406	22	26	23	30	30	28	30	30				
M04407	24	25	23	29	29	30	27	26	33	30	30	30
M04408	23	26	28	30	31	29	29	29	28	29	28	29
M04409	21	23	23	26	25	26	27	24	23	27	27	27
M04410	24	27	28	28	29	28	27	26	29	27	29	31
M04411	23	24	25	32	28	26	25	23	22	24	25	29
M04412	22	24	27	31	28	27	24	28	29	25	25	30
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	23	24	27	29	29	28	27	26	27	27	27	29
S.D.	1	2	3	2	3	2	3	3	4	2	2	1
Significance	NS	NS	NS	*	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 6-1. Individual food consumption (g/day) in female rats

Control group Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F01151	15	20	13	23	20	18	19	21				
F01152	13	15	17	19	17	17	16	18				
F01153	12	12	20	21	21	18	17	11				
F01154	12	12	15	24	19	21	23	16				
F01155	14	19	14	18	15	16	18	20				
F01156	20	16	13	14	17	19	18	21				
F01157	15	15	16	20	16	13	18	18	20	21	17	20
F01158	18	11	11	17	15	17	18	15	19	15	12	18
F01159	15	19	14	20	21	15	19	20	25	26	24	25
F01160	8	14	14	17	15	17	19	13	19	18	17	18
F01161	15	17	15	19	28	15	18	16	20	21	22	20
F01162	18	12	10	19	16	22	23	20	25	18	16	24
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	15	15	14	19	18	17	19	17	21	20	18	21
S.D.	3	3	3	3	4	3	2	3	3	4	4	3

Appendix 6-2. Individual food consumption (g/day) in female rats

Female No.	Days of administration							
	2	5	9	12	16	19	23	26
F02251	18	19	17	17	17	20	23	22
F02252	12	14	15	16	13	16	17	17
F02253	11	12	14	18	16	17	20	14
F02254	17	15	17	22	20	17	18	21
F02255	15	17	16	17	16	19	20	14
F02256	16	16	17	19	16	18	18	19
Number of females	6	6	6	6	6	6	6	6
Mean	15	16	16	18	16	18	19	18
S.D.	3	2	1	2	2	1	2	3
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 6-3. Individual food consumption (g/day) in female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F03351	15	14	18	21	21	19	22	21				
F03352	12	13	19	20	18	19	20	17				
F03353	17	15	18	18	16	19	19	19				
F03354	19	18	16	22	22	22	24	21				
F03355	15	16	18	17	18	15	17	20				
F03356	15	15	16	18	15	16	17	16				
F03357	15	13	15	17	15	18	19	17	20	19	16	21
F03358	15	17	14	17	15	21	20	21	21	20	19	19
F03359	17	20	16	15	14	16	17	17	21	22	20	21
F03360	18	18	18	16	18	18	20	22	26	23	23	20
F03361	18	15	15	21	17	21	25	19	23	18	17	23
F03362	17	12	10	17	16	19	19	17	21	20	18	20
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	16	16	16	18	17	19	20	19	22	20	19	21
S.D.	2	2	2	2	2	2	3	2	2	2	2	1
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 6-4. Individual food consumption (g/day) in female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F04451	14	17	13	19	16	17	19	16				
F04452	14	17	17	19	17	16	17	17				
F04453	18	20	19	20	23	20	21	21				
F04454	14	16	16	19	18	18	21	15				
F04455	17	19	17	19	29	19	16	20				
F04456	17	19	18	21	20	21	20	17				
F04457	16	16	18	15	17	23	23	21	19	22	19	21
F04458	18	16	21	23	14	20	23	16	22	22	17	24
F04459	15	15	15	22	19	18	18	12	16	19	15	22
F04460	17	18	15	15	12	19	20	20	18	17	19	19
F04461	17	19	16	14	15	18	22	20	25	21	18	20
F04462	13	17	10	20	17	18	20	11	15	17	17	21
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	16	17	16	19	18	19	20	17	19	20	18	21
S.D.	2	2	3	3	4	2	2	3	4	2	2	2
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 7-1. Individual water consumption (g/day) in male rats

Control group Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M01101	31	29	32	30	41	43	41	44				
M01102	26	30	31	30	35	36	37	36				
M01103	30	31	28	38	34	30	30	31				
M01104	32	30	35	31	34	30	37	36				
M01105	30	33	35	37	40	37	36	40				
M01106	29	28	31	31	35	40	41	43				
M01107	35	33	36	35	39	36	39	35	38	38	44	38
M01108	31	30	34	32	32	35	37	39	37	38	43	36
M01109	30	30	31	30	32	33	40	36	37	38	40	42
M01110	26	26	28	28	32	32	30	33	37	39	39	39
M01111	28	33	31	33	31	32	34	37	30	36	38	38
M01112	32	33	40	36	49	49	49	41	61	67	59	72
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	30	31	33	33	36	36	38	38	40	43	44	44
S.D.	3	2	3	3	5	6	5	4	11	12	8	14

Appendix 7-2. Individual water consumption (g/day) in male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Days of administration							
	2	5	9	12	16	19	23	26
M02201	26	34	32	35	34	38	37	36
M02202	29	29	29	30	35	34	40	35
M02203	32	35	30	33	29	33	35	37
M02204	29	29	29	28	32	31	34	33
M02205	33	39	34	34	31	39	37	35
M02206	28	31	23	24	23	27	27	25
Number of males	6	6	6	6	6	6	6	6
Mean	30	33	30	31	31	34	35	34
S.D.	3	4	4	4	4	4	4	4
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 7-3. Individual water consumption (g/day) in male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M03301	30	31	32	33	37	38	44	40				
M03302	35	33	30	34	39	39	47	39				
M03303	30	31	37	41	46	50	41	46				
M03304	31	31	35	33	39	42	43	43				
M03305	32	31	40	42	54	35	39	40				
M03306	27	34	33	33	34	35	33	35				
M03307	29	30	31	27	36	35	37	31	30	39	40	39
M03308	28	28	32	31	34	32	32	34	37	37	37	41
M03309	27	21	31	30	33	37	37	36	31	38	36	37
M03310	26	26	29	25	30	33	30	32	32	37	33	33
M03311	34	31	34	31	31	34	39	35	34	36	40	50
M03312	29	30	31	32	33	30	39	35	34	37	44	36
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	30	30	33	33	37	37	38	37	33	37	38	39
S.D.	3	3	3	5	7	5	5	4	3	1	4	6
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	STL	STL	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 7-4. Individual water consumption (g/day) in male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
M04401	30	36	40	34	43	44	47	45				
M04402	31	36	37	42	38	39	47	42				
M04403	32	27	39	37	40	42	40	37				
M04404	30	29	32	29	32	28	32	28				
M04405	28	27	35	32	39	41	48	39				
M04406	30	30	26	35	33	35	47	46				
M04407	31	35	40	42	48	45	45	45	46	48	51	43
M04408	31	36	42	43	41	40	49	46	48	49	46	44
M04409	29	31	38	39	39	43	45	42	35	40	42	39
M04410	36	37	42	41	40	43	47	40	36	40	41	39
M04411	30	32	35	40	41	38	37	32	28	28	34	31
M04412	30	35	38	39	39	37	44	48	43	38	40	44
Number of males	12	12	12	12	12	12	12	12	6	6	6	6
Mean	31	33	37	38	39	40	44	41	39	41	42	40
S.D.	2	4	5	4	4	5	5	6	8	8	6	5
Significance	NS	NS	*	*	NS	NS	**	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	STL	STL	DU	DU

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 8-1. Individual water consumption (g/day) in female rats

Control group Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F01151	26	29	32	33	36	23	30	32				
F01152	17	18	24	23	24	21	21	23				
F01153	19	22	30	27	29	24	21	19				
F01154	20	20	7	29	32	32	35	26				
F01155	24	26	26	26	26	26	25	27				
F01156	28	26	18	16	31	29	25	28				
F01157	23	24	22	27	26	16	24	27	29	26	25	28
F01158	26	17	20	23	24	21	24	20	47	19	16	21
F01159	24	25	26	33	32	17	19	26	31	36	34	35
F01160	13	20	20	29	29	26	30	26	35	29	26	29
F01161	25	25	22	24	25	23	28	29	27	36	39	35
F01162	27	17	17	24	25	29	28	27	38	22	24	34
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	23	22	22	26	28	24	26	26	35	28	27	30
S.D.	5	4	7	5	4	5	5	4	7	7	8	6

Appendix 8-2. Individual water consumption (g/day) in female rats

Female No.	Days of administration							
	2	5	9	12	16	19	23	26
F02251	28	28	29	27	28	30	28	30
F02252	22	23	25	25	23	22	21	27
F02253	15	21	23	23	27	25	22	22
F02254	26	29	24	27	26	23	21	26
F02255	22	23	23	19	23	22	23	18
F02256	27	26	26	27	28	28	25	28
Number of females	6	6	6	6	6	6	6	6
Mean	23	25	25	25	26	25	23	25
S.D.	5	3	2	3	2	3	3	4
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	STL	DU	STL	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 8-3. Individual water consumption (g/day) in female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F03351	25	23	24	29	27	34	31	35				
F03352	23	20	29	29	30	30	27	25				
F03353	25	28	29	23	25	26	23	24				
F03354	30	27	23	35	41	37	36	35				
F03355	25	28	26	28	27	22	25	28				
F03356	25	26	29	27	30	31	29	26				
F03357	23	20	21	17	23	21	23	22	28	21	21	25
F03358	28	30	22	25	30	36	30	35	40	38	37	39
F03359	27	25	21	20	18	24	26	28	26	26	27	27
F03360	28	28	27	25	20	20	24	31	32	30	33	30
F03361	27	24	27	26	26	23	28	25	31	22	23	26
F03362	30	28	23	23	29	33	37	31	40	37	32	46
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	26	26	25	26	27	28	28	29	33	29	29	32
S.D.	2	3	3	5	6	6	5	5	6	7	6	8
Significance	*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	STL	DU	STL	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 8-4. Individual water consumption (g/day) in female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Days of administration							Days of recovery				
	2	5	9	12	16	19	23	26	2	5	9	12
F04451	20	29	23	34	42	32	30	29				
F04452	25	30	31	29	29	23	25	34				
F04453	25	27	29	22	30	23	19	26				
F04454	20	25	24	26	29	26	27	19				
F04455	24	24	24	28	28	29	24	30				
F04456	23	31	28	32	37	34	33	25				
F04457	19	25	26	18	23	28	24	30	31	50	29	28
F04458	25	26	28	26	18	27	25	20	32	22	17	25
F04459	24	28	24	33	33	31	27	25	34	26	20	26
F04460	27	25	26	18	18	19	22	22	29	21	27	23
F04461	27	25	26	18	21	24	34	35	36	30	24	24
F04462	21	28	21	35	29	32	44	19	31	27	28	38
Number of females	12	12	12	12	12	12	12	12	6	6	6	6
Mean	23	27	26	27	28	27	28	26	32	29	24	27
S.D.	3	2	3	6	7	5	7	6	2	11	5	6
Significance	NS	**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	STL	DU	STL	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 9-1. Individual FOB of male rats

Control group		Observation of animals in cages									
Male No.	Blind No.	Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	2	2	2	2	2	1	1	1	1	1
M01102	M00037	2	2	2	2	2	1	1	1	1	1
M01103	M00008	2	2	2	2	2	1	1	1	1	1
M01104	M00034	2	2	2	2	2	1	1	1	1	1
M01105	M00028	2	2	2	2	2	1	1	1	1	1
M01106	M00020	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group

Male No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1	1	1	1	1	1
M01102	M00037	1	1	1	1	1	1	1	1	1	1
M01103	M00008	1	1	1	1	1	1	1	1	1	1
M01104	M00034	1	1	1	1	1	1	1	1	1	1
M01105	M00028	1	1	1	1	1	1	1	1	1	1
M01106	M00020	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1

Findings were graded as follows:

(Continued)

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 9-1. (Continued) Individual FOB of male rats

Male No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1
M01102	M00037	1	1	1	1	1
M01103	M00008	1	1	1	1	1
M01104	M00034	1	1	1	1	1
M01105	M00028	1	1	1	1	1
M01106	M00020	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

(Continued)

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group		Observation of animals on observer's palm									
Male No.	Blind No.	Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	2	2	2	2	2	2	2	2	2	2
M01102	M00037	2	2	2	2	2	2	2	2	2	2
M01103	M00008	2	2	2	2	2	2	2	2	2	2
M01104	M00034	2	2	2	2	2	2	2	2	2	2
M01105	M00028	2	2	2	2	2	2	2	2	2	2
M01106	M00020	2	2	2	2	2	2	2	2	2	2
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2

Findings were graded as follows:

(Continued)

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group		Observation of animals on observer's palm									
Male No.	Blind No.	Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	2	2	2	2	2	1	1	1	1	1
M01102	M00037	2	2	2	2	2	1	1	1	1	1
M01103	M00008	2	2	2	2	2	1	1	1	1	1
M01104	M00034	2	2	2	2	2	1	1	1	1	1
M01105	M00028	2	2	2	2	2	1	1	1	1	1
M01106	M00020	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group		Observation of animals on observer's palm									
Male No.	Blind No.	Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1	1	1	1	1	1
M01102	M00037	1	1	1	1	1	1	1	1	1	1
M01103	M00008	1	1	1	1	1	1	1	1	1	1
M01104	M00034	1	1	1	1	1	1	1	1	1	1
M01105	M00028	1	1	1	1	1	1	1	1	1	1
M01106	M00020	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1

Findings were graded as follows:

(Continued)

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: None, 2: mild, 3: marked.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group

Male No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1
M01102	M00037	1	1	1	1	1
M01103	M00008	1	1	1	1	1
M01104	M00034	1	1	1	1	1
M01105	M00028	1	1	1	1	1
M01106	M00020	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

(Continued)

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group		Open-field test									
Male No.	Blind No.	Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	2	10	5	5	13	0	0	0	0	0
M01102	M00037	0	0	1	3	3	0	0	0	0	0
M01103	M00008	5	3	2	11	2	0	0	0	0	0
M01104	M00034	1	1	2	1	2	0	0	0	0	0
M01105	M00028	2	4	7	16	3	0	0	0	0	0
M01106	M00020	5	2	6	1	6	0	0	0	0	0
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.5	3.3	3.8	6.2	4.8	0.0	0.0	0.0	0.0	0.0
S.D.		2.1	3.6	2.5	6.1	4.3	0.0	0.0	0.0	0.0	0.0

(Continued)

Appendix 9-1. (Continued) Individual FOB of male rats

Control group

Male No.	Blind No.	Open-field test										
		Gait					Palpebral closure					
		Pre	Day 7	Day 14	Day 21	Day 27		Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1	1	1	1	1	1	1
M01102	M00037	1	1	1	1	1	1	1	1	1	1	1
M01103	M00008	1	1	1	1	1	1	1	1	1	1	1
M01104	M00034	1	1	1	1	1	1	1	1	1	1	1
M01105	M00028	1	1	1	1	1	1	1	1	1	1	1
M01106	M00020	1	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1	1

Findings were graded as follows:

(Continued)

Gait

1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended,
 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure

1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group		Open-field test									
Male No.	Blind No.	Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	2	2	2	2	2	1	1	1	1	1
M01102	M00037	2	2	2	2	2	1	1	1	1	1
M01103	M00008	2	2	2	2	2	1	1	1	1	1
M01104	M00034	2	2	2	2	2	1	1	1	1	1
M01105	M00028	2	2	2	2	2	1	1	1	1	1
M01106	M00020	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 9-1. (Continued) Individual FOB of male rats

Control group

Male No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
M01101	M00040	1	1	1	1	1
M01102	M00037	1	1	1	1	1
M01103	M00008	1	1	1	1	1
M01104	M00034	1	1	1	1	1
M01105	M00028	1	1	1	1	1
M01106	M00020	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 9-2. Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	2	2	2	2	2	1	1	1	1	1
M02202	M00048	2	2	2	2	2	1	1	1	1	1
M02203	M00049	2	2	2	2	2	1	1	1	1	1
M02204	M00038	2	2	2	2	2	1	1	1	1	1
M02205	M00021	2	2	2	2	2	1	1	1	1	1
M02206	M00029	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg											
Male No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	1	1	1	1	1	1	1	1	1	1
M02202	M00048	1	1	1	1	1	1	1	1	1	1
M02203	M00049	1	1	1	1	1	1	1	1	1	1
M02204	M00038	1	1	1	1	1	1	1	1	1	1
M02205	M00021	1	1	1	1	1	1	1	1	1	1
M02206	M00029	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	1	1	1	1	1
M02202	M00048	1	1	1	1	1
M02203	M00049	1	1	1	1	1
M02204	M00038	1	1	1	1	1
M02205	M00021	1	1	1	1	1
M02206	M00029	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 9-2. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 8 mg/kg									
Male No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	2	2	2	2	2	2	2	2	2	2
M02202	M00048	2	2	2	2	2	2	2	2	2	2
M02203	M00049	2	2	2	2	2	2	2	2	2	2
M02204	M00038	2	2	2	2	2	2	2	2	2	2
M02205	M00021	2	2	2	2	2	2	2	2	2	2
M02206	M00029	2	2	2	2	2	2	2	2	2	2
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	2	2	2	2	2	1	1	1	1	1
M02202	M00048	2	2	2	2	2	1	1	1	1	1
M02203	M00049	2	2	2	2	2	1	1	1	1	1
M02204	M00038	2	2	2	2	2	1	1	1	1	1
M02205	M00021	2	2	2	2	2	1	1	1	1	1
M02206	M00029	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm									
		Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	1	1	1	1	1	1	1	1	1	1
M02202	M00048	1	1	1	1	1	1	1	1	1	1
M02203	M00049	1	1	1	1	1	1	1	1	1	1
M02204	M00038	1	1	1	1	1	1	1	1	1	1
M02205	M00021	1	1	1	1	1	1	1	1	1	1
M02206	M00029	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Lacrimation 1: None, 2: mild, 3: marked.
 Salivation 1: None, 2: mild, 3: marked.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	1	1	1	1	1
M02202	M00048	1	1	1	1	1
M02203	M00049	1	1	1	1	1
M02204	M00038	1	1	1	1	1
M02205	M00021	1	1	1	1	1
M02206	M00029	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg											
Male No.	Blind No.	Open-field test									
		Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	11	4	9	3	0	0	0	0	0	0
M02202	M00048	0	4	1	7	7	0	0	0	0	0
M02203	M00049	3	10	2	9	8	0	0	0	0	0
M02204	M00038	6	4	0	3	3	0	0	0	0	0
M02205	M00021	1	4	1	14	4	0	0	0	0	0
M02206	M00029	1	0	0	0	11	0	0	0	0	0
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		3.7	4.3	2.2	6.0	5.5	0.0	0.0	0.0	0.0	0.0
S.D.		4.2	3.2	3.4	5.1	3.9	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-2. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 8 mg/kg									
Male No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	2	2	2	2	2	1	1	1	1	1
M02202	M00048	2	2	2	2	2	1	1	1	1	1
M02203	M00049	2	2	2	2	2	1	1	1	1	1
M02204	M00038	2	2	2	2	2	1	1	1	1	1
M02205	M00021	2	2	2	2	2	1	1	1	1	1
M02206	M00029	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 9-2. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 8 mg/kg

Male No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
M02201	M00014	1	1	1	1	1
M02202	M00048	1	1	1	1	1
M02203	M00049	1	1	1	1	1
M02204	M00038	1	1	1	1	1
M02205	M00021	1	1	1	1	1
M02206	M00029	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 9-3. Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	2	2	2	2	2	1	1	1	1	1
M03302	M00011	2	2	2	2	2	1	1	1	1	1
M03303	M00051	2	2	2	2	2	1	1	1	1	1
M03304	M00027	2	2	2	2	2	1	1	1	1	1
M03305	M00007	2	2	2	2	2	1	1	1	1	1
M03306	M00009	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	1	1	1	1	1	1	1	1	1	1
M03302	M00011	1	1	1	1	1	1	1	1	1	1
M03303	M00051	1	1	1	1	1	1	1	1	1	1
M03304	M00027	1	1	1	1	1	1	1	1	1	1
M03305	M00007	1	1	1	1	1	1	1	1	1	1
M03306	M00009	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	1	1	1	1	1
M03302	M00011	1	1	1	1	1
M03303	M00051	1	1	1	1	1
M03304	M00027	1	1	1	1	1
M03305	M00007	1	1	1	1	1
M03306	M00009	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 9-3. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 40 mg/kg									
Male No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	2	2	2	2	2	2	2	2	2	2
M03302	M00011	2	2	2	2	2	2	2	2	2	2
M03303	M00051	2	2	2	2	2	2	2	2	2	2
M03304	M00027	2	2	2	2	2	2	2	2	2	2
M03305	M00007	2	2	2	2	2	2	2	2	2	2
M03306	M00009	2	2	2	2	2	2	2	2	2	2
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	2	2	2	2	2	1	1	1	1	1
M03302	M00011	2	2	2	2	2	1	1	1	1	1
M03303	M00051	2	2	2	2	2	1	1	1	1	1
M03304	M00027	2	2	2	2	2	1	1	1	1	1
M03305	M00007	2	2	2	2	2	1	1	1	1	1
M03306	M00009	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm										
		Lacrimation					Salivation					
		Pre	Day 7	Day 14	Day 21	Day 27		Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	1	1	1	1	1	1	1	1	1	1	1
M03302	M00011	1	1	1	1	1	1	1	1	1	1	1
M03303	M00051	1	1	1	1	1	1	1	1	1	1	1
M03304	M00027	1	1	1	1	1	1	1	1	1	1	1
M03305	M00007	1	1	1	1	1	1	1	1	1	1	1
M03306	M00009	1	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Lacrimation 1: None, 2: mild, 3: marked.
 Salivation 1: None, 2: mild, 3: marked.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	1	1	1	1	1
M03302	M00011	1	1	1	1	1
M03303	M00051	1	1	1	1	1
M03304	M00027	1	1	1	1	1
M03305	M00007	1	1	1	1	1
M03306	M00009	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 9-3. (Continued) Individual FOB of male rats

		Open-field test									
Male No.	Blind No.	Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	15	1	5	2	17	0	0	0	0	0
M03302	M00011	3	4	3	3	5	0	0	0	0	0
M03303	M00051	0	6	1	3	1	0	0	0	0	0
M03304	M00027	3	9	0	6	3	0	0	0	0	0
M03305	M00007	4	4	0	10	2	0	0	0	0	0
M03306	M00009	4	5	3	3	0	0	0	0	0	0
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		4.8	4.8	2.0	4.5	4.7	0.0	0.0	0.0	0.0	0.0
S.D.		5.2	2.6	2.0	3.0	6.3	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-3. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 40 mg/kg									
Male No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	2	2	2	2	2	1	1	1	1	1
M03302	M00011	2	2	2	2	2	1	1	1	1	1
M03303	M00051	2	2	2	2	2	1	1	1	1	1
M03304	M00027	2	2	2	2	2	1	1	1	1	1
M03305	M00007	2	2	2	2	2	1	1	1	1	1
M03306	M00009	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 9-3. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
M03301	M00019	1	1	1	1	1
M03302	M00011	1	1	1	1	1
M03303	M00051	1	1	1	1	1
M03304	M00027	1	1	1	1	1
M03305	M00007	1	1	1	1	1
M03306	M00009	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 9-4. Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	2	2	2	2	2	1	1	1	1	1
M04402	M00023	2	2	2	2	2	1	1	1	1	1
M04403	M00032	2	2	2	2	2	1	1	1	1	1
M04404	M00022	2	2	2	2	2	1	1	1	1	1
M04405	M00042	2	2	2	2	2	1	1	1	1	1
M04406	M00017	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	1	1	1	1	1	1	1	1	1	1
M04402	M00023	1	1	1	1	1	1	1	1	1	1
M04403	M00032	1	1	1	1	1	1	1	1	1	1
M04404	M00022	1	1	1	1	1	1	1	1	1	1
M04405	M00042	1	1	1	1	1	1	1	1	1	1
M04406	M00017	1	1	1	1	1	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	1	1	1	1	1
M04402	M00023	1	1	1	1	1
M04403	M00032	1	1	1	1	1
M04404	M00022	1	1	1	1	1
M04405	M00042	1	1	1	1	1
M04406	M00017	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 9-4. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 200 mg/kg									
Male No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	2	2	2	2	2	2	2	2	2	2
M04402	M00023	2	2	2	2	2	2	2	2	2	2
M04403	M00032	2	2	2	2	2	2	2	2	2	2
M04404	M00022	2	2	2	2	2	2	2	2	2	2
M04405	M00042	2	2	2	2	2	2	2	2	2	2
M04406	M00017	2	2	2	2	2	2	2	2	2	2
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	2	2	2	2	2	1	1	1	1	1
M04402	M00023	2	2	2	2	2	1	1	1	1	1
M04403	M00032	2	2	2	2	2	1	1	1	1	1
M04404	M00022	2	2	2	2	2	1	1	1	1	1
M04405	M00042	2	2	2	2	2	1	1	1	1	1
M04406	M00017	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm									
		Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	1	1	1	1	1	1	2	1	1	1
M04402	M00023	1	1	1	1	1	1	1	1	1	2
M04403	M00032	1	1	1	1	1	1	1	1	1	1
M04404	M00022	1	1	1	1	1	1	1	1	1	1
M04405	M00042	1	1	1	1	1	1	1	1	1	1
M04406	M00017	1	1	1	1	1	1	1	1	1	2
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0	1.3
Range		1	1	1	1	1	1	1-2	1	1	1-2
Significance		---	---	---	---	---	---	NS	---	---	NS
Statistical method		UA	UA	UA	UA	UA	UA	STL	UA	UA	STL

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

NS: Not significantly different from the control group.

STL: Analysis by Steel's test.

Findings were graded as follows:

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: None, 2: mild, 3: marked.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	1	1	1	1	1
M04402	M00023	1	1	1	1	1
M04403	M00032	1	1	1	1	1
M04404	M00022	1	1	1	1	1
M04405	M00042	1	1	1	1	1
M04406	M00017	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Open-field test									
		Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	3	0	0	1	4	0	0	0	0	0
M04402	M00023	11	0	0	2	4	0	0	0	0	0
M04403	M00032	3	5	0	1	3	0	0	0	0	0
M04404	M00022	0	7	2	4	0	0	0	0	0	0
M04405	M00042	6	0	1	6	9	0	0	0	0	0
M04406	M00017	9	5	5	4	3	0	0	0	0	0
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		5.3	2.8	1.3	3.0	3.8	0.0	0.0	0.0	0.0	0.0
S.D.		4.1	3.2	2.0	2.0	2.9	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 9-4. (Continued) Individual FOB of male rats

		1,10-dibromodecane group at 200 mg/kg									
Male No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	2	2	2	2	2	1	1	1	1	1
M04402	M00023	2	2	2	2	2	1	1	1	1	1
M04403	M00032	2	2	2	2	2	1	1	1	1	1
M04404	M00022	2	2	2	2	2	1	1	1	1	1
M04405	M00042	2	2	2	2	2	1	1	1	1	1
M04406	M00017	2	2	2	2	2	1	1	1	1	1
Number of males		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 9-4. (Continued) Individual FOB of male rats

1,10-dibromodecane group at 200 mg/kg

Male No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
M04401	M00001	1	1	1	1	1
M04402	M00023	1	1	1	1	1
M04403	M00032	1	1	1	1	1
M04404	M00022	1	1	1	1	1
M04405	M00042	1	1	1	1	1
M04406	M00017	1	1	1	1	1
Number of males		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 10-1. Individual FOB of female rats

Control group		Observation of animals in cages									
Female No.	Blind No.	Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	2	2	2	2	2	1	1	1	1	1
F01152	F00043	2	2	2	2	2	1	1	1	1	1
F01153	F00051	2	2	2	2	2	1	1	1	1	1
F01154	F00038	2	2	2	2	2	1	1	1	1	1
F01155	F00031	2	2	2	2	2	1	1	1	1	1
F01156	F00011	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals in cages									
Female No.	Blind No.	Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	1	1	1	1	1	1	1	1	1	1
F01152	F00043	1	1	1	1	1	1	1	1	1	1
F01153	F00051	1	1	1	1	1	1	1	1	1	1
F01154	F00038	1	1	1	1	1	1	1	1	1	1
F01155	F00031	1	1	1	1	1	1	1	1	1	1
F01156	F00011	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1

Findings were graded as follows:

(Continued)

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals in cages				
Female No.	Blind No.	Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	1	1	1	1	1
F01152	F00043	1	1	1	1	1
F01153	F00051	1	1	1	1	1
F01154	F00038	1	1	1	1	1
F01155	F00031	1	1	1	1	1
F01156	F00011	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

(Continued)

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals on observer's palm									
Female No.	Blind No.	Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	2	2	2	2	2	2	2	2	2	2
F01152	F00043	2	2	2	2	2	2	2	2	2	2
F01153	F00051	2	2	2	2	2	2	2	2	2	2
F01154	F00038	2	2	2	2	2	2	2	2	2	2
F01155	F00031	2	2	2	2	2	2	2	2	2	2
F01156	F00011	2	2	2	2	2	2	2	2	2	2
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2

Findings were graded as follows:

(Continued)

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals on observer's palm									
Female No.	Blind No.	Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	2	2	2	2	2	1	1	1	1	1
F01152	F00043	2	2	2	2	2	1	1	1	1	1
F01153	F00051	2	2	2	2	2	1	1	1	1	1
F01154	F00038	2	2	2	2	2	1	1	1	1	1
F01155	F00031	2	2	2	2	2	1	1	1	1	1
F01156	F00011	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals on observer's palm									
Female No.	Blind No.	Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	1	1	1	1	1	1	1	1	1	1
F01152	F00043	1	1	1	1	1	1	1	1	1	1
F01153	F00051	1	1	1	1	1	1	1	1	1	1
F01154	F00038	1	1	1	1	1	1	1	1	1	1
F01155	F00031	1	1	1	1	1	1	1	1	1	1
F01156	F00011	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1

Findings were graded as follows:

(Continued)

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: None, 2: mild, 3: marked.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Observation of animals on observer's palm				
Female No.	Blind No.	Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	1	1	1	1	1
F01152	F00043	1	1	1	1	1
F01153	F00051	1	1	1	1	1
F01154	F00038	1	1	1	1	1
F01155	F00031	1	1	1	1	1
F01156	F00011	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

(Continued)

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Open-field test									
Female No.	Blind No.	Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	3	1	0	1	2	0	0	0	0	0
F01152	F00043	4	10	5	3	4	1	0	0	0	0
F01153	F00051	1	12	4	4	1	0	0	0	0	0
F01154	F00038	13	10	9	4	6	0	0	0	0	0
F01155	F00031	9	6	9	5	11	0	0	0	0	0
F01156	F00011	4	4	0	1	3	0	0	0	0	0
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		5.7	7.2	4.5	3.0	4.5	0.2	0.0	0.0	0.0	0.0
S.D.		4.5	4.2	4.0	1.7	3.6	0.4	0.0	0.0	0.0	0.0

(Continued)

Appendix 10-1. (Continued) Individual FOB of female rats

Findings were graded as follows:

(Continued)

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.
 Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group		Open-field test									
Female No.	Blind No.	Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	2	2	2	2	2	1	1	1	1	1
F01152	F00043	2	2	2	2	2	1	1	1	1	1
F01153	F00051	2	2	2	2	2	1	1	1	1	1
F01154	F00038	2	2	2	2	2	1	1	1	1	1
F01155	F00031	2	2	2	2	2	1	1	1	1	1
F01156	F00011	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1

Findings were graded as follows:

(Continued)

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 10-1. (Continued) Individual FOB of female rats

Control group

Female No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
F01151	F00025	1	1	1	1	1
F01152	F00043	1	1	1	1	1
F01153	F00051	1	1	1	1	1
F01154	F00038	1	1	1	1	1
F01155	F00031	1	1	1	1	1
F01156	F00011	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 10-2. Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	2	2	2	2	2	1	1	1	1	1
F02252	F00021	2	2	2	2	2	1	1	1	1	1
F02253	F00009	2	2	2	2	2	1	1	1	1	1
F02254	F00001	2	2	2	2	2	1	1	1	1	1
F02255	F00012	2	2	2	2	2	1	1	1	1	1
F02256	F00034	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No. Blind No.

		Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	1	1	1	1	1	1	1	1	1	1
F02252	F00021	1	1	1	1	1	1	1	1	1	1
F02253	F00009	1	1	1	1	1	1	1	1	1	1
F02254	F00001	1	1	1	1	1	1	1	1	1	1
F02255	F00012	1	1	1	1	1	1	1	1	1	1
F02256	F00034	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	1	1	1	1	1
F02252	F00021	1	1	1	1	1
F02253	F00009	1	1	1	1	1
F02254	F00001	1	1	1	1	1
F02255	F00012	1	1	1	1	1
F02256	F00034	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	2	2	2	2	2	2	2	2	2	2
F02252	F00021	2	2	2	2	2	2	2	2	2	2
F02253	F00009	2	2	2	2	2	2	2	2	2	2
F02254	F00001	2	2	2	2	2	2	2	2	2	2
F02255	F00012	2	2	2	2	2	2	2	2	2	2
F02256	F00034	2	2	2	2	2	2	2	2	2	2
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	2	2	2	2	2	1	1	1	1	1
F02252	F00021	2	2	2	2	2	1	1	1	1	1
F02253	F00009	2	2	2	2	2	1	1	1	1	1
F02254	F00001	2	2	2	2	2	1	1	1	1	1
F02255	F00012	2	2	2	2	2	1	1	1	1	1
F02256	F00034	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	1	1	1	1	1	1	1	1	1	1
F02252	F00021	1	1	1	1	1	1	1	1	1	1
F02253	F00009	1	1	1	1	1	1	1	1	1	1
F02254	F00001	1	1	1	1	1	1	1	1	1	1
F02255	F00012	1	1	1	1	1	1	1	1	1	1
F02256	F00034	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Lacrimation	1: None, 2: mild, 3: marked.
Salivation	1: None, 2: mild, 3: marked.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	1	1	1	1	1
F02252	F00021	1	1	1	1	1
F02253	F00009	1	1	1	1	1
F02254	F00001	1	1	1	1	1
F02255	F00012	1	1	1	1	1
F02256	F00034	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Open-field test									
		Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	9	10	7	12	7	0	0	0	0	0
F02252	F00021	1	3	2	1	2	0	0	0	0	0
F02253	F00009	13	11	7	4	4	0	0	0	0	0
F02254	F00001	14	9	18	13	4	0	0	0	0	0
F02255	F00012	6	3	1	3	2	0	0	0	0	0
F02256	F00034	2	5	5	15	13	0	0	0	0	0
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		7.5	6.8	6.7	8.0	5.3	0.0	0.0	0.0	0.0	0.0
S.D.		5.5	3.6	6.1	6.0	4.2	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 10-2. (Continued) Individual FOB of female rats

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	2	2	2	2	2	1	1	1	1	1
F02252	F00021	2	2	2	2	2	1	1	1	1	1
F02253	F00009	2	2	2	2	2	1	1	1	1	1
F02254	F00001	2	2	2	2	2	1	1	1	1	1
F02255	F00012	2	2	2	2	2	1	1	1	1	1
F02256	F00034	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 10-2. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 8 mg/kg

Female No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
F02251	F00017	1	1	1	1	1
F02252	F00021	1	1	1	1	1
F02253	F00009	1	1	1	1	1
F02254	F00001	1	1	1	1	1
F02255	F00012	1	1	1	1	1
F02256	F00034	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 10-3. Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	2	2	2	2	2	1	1	1	1	1
F03352	F00035	2	2	2	2	2	1	1	1	1	1
F03353	F00044	2	2	2	2	2	1	1	1	1	1
F03354	F00023	2	2	2	2	2	1	1	1	1	1
F03355	F00029	2	2	2	2	2	1	1	1	1	1
F03356	F00030	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	1	1	1	1	1	1	1	1	1	1
F03352	F00035	1	1	1	1	1	1	1	1	1	1
F03353	F00044	1	1	1	1	1	1	1	1	1	1
F03354	F00023	1	1	1	1	1	1	1	1	1	1
F03355	F00029	1	1	1	1	1	1	1	1	1	1
F03356	F00030	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	1	1	1	1	1
F03352	F00035	1	1	1	1	1
F03353	F00044	1	1	1	1	1
F03354	F00023	1	1	1	1	1
F03355	F00029	1	1	1	1	1
F03356	F00030	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	2	2	2	2	2	2	2	2	2	2
F03352	F00035	2	2	2	2	2	2	2	2	2	2
F03353	F00044	2	2	2	2	2	2	2	2	2	2
F03354	F00023	2	2	2	2	2	2	2	2	2	2
F03355	F00029	2	2	2	2	2	2	2	2	2	2
F03356	F00030	2	2	2	2	2	2	2	2	2	2
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	2	2	2	2	2	1	1	1	1	1
F03352	F00035	2	2	2	2	2	1	1	1	1	1
F03353	F00044	2	2	2	2	2	1	1	1	1	1
F03354	F00023	2	2	2	2	2	1	1	1	1	1
F03355	F00029	2	2	2	2	2	1	1	1	1	1
F03356	F00030	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	1	1	1	1	1	1	1	1	1	1
F03352	F00035	1	1	1	1	1	1	1	1	1	1
F03353	F00044	1	1	1	1	1	1	1	1	1	1
F03354	F00023	1	1	1	1	1	1	1	1	1	1
F03355	F00029	1	1	1	1	1	1	1	1	1	1
F03356	F00030	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Lacrimation 1: None, 2: mild, 3: marked.
 Salivation 1: None, 2: mild, 3: marked.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	1	1	1	1	1
F03352	F00035	1	1	1	1	1
F03353	F00044	1	1	1	1	1
F03354	F00023	1	1	1	1	1
F03355	F00029	1	1	1	1	1
F03356	F00030	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Open-field test									
		Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	0	12	14	12	5	0	0	0	0	0
F03352	F00035	2	1	1	3	2	0	0	0	0	0
F03353	F00044	5	14	7	9	6	0	0	0	0	0
F03354	F00023	1	5	7	6	2	0	0	0	0	0
F03355	F00029	0	6	0	1	0	0	0	0	0	0
F03356	F00030	3	3	0	3	0	0	0	0	0	0
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.8	6.8	4.8	5.7	2.5	0.0	0.0	0.0	0.0	0.0
S.D.		1.9	5.1	5.6	4.2	2.5	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 10-3. (Continued) Individual FOB of female rats

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	2	2	2	2	2	1	1	1	1	1
F03352	F00035	2	2	2	2	2	1	1	1	1	1
F03353	F00044	2	2	2	2	2	1	1	1	1	1
F03354	F00023	2	2	2	2	2	1	1	1	1	1
F03355	F00029	2	2	2	2	2	1	1	1	1	1
F03356	F00030	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 10-3. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 40 mg/kg

Female No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
F03351	F00033	1	1	1	1	1
F03352	F00035	1	1	1	1	1
F03353	F00044	1	1	1	1	1
F03354	F00023	1	1	1	1	1
F03355	F00029	1	1	1	1	1
F03356	F00030	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		--	--	--	--	--
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 10-4. Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals in cages									
		Posture					Palpebral closure				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	2	2	2	2	2	1	1	1	1	1
F04452	F00019	2	2	2	2	2	1	1	1	1	1
F04453	F00013	2	2	2	2	2	1	1	1	1	1
F04454	F00004	2	2	2	2	2	1	1	1	1	1
F04455	F00047	2	2	2	2	2	1	1	1	1	1
F04456	F00022	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Posture 1: Prone or recumbent position, 2: resting normally, 3: moving or running about, 4: jumping.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals in cages									
		Biting behavior					Clonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	1	1	1	1	1	1	1	1	1	1
F04452	F00019	1	1	1	1	1	1	1	1	1	1
F04453	F00013	1	1	1	1	1	1	1	1	1	1
F04454	F00004	1	1	1	1	1	1	1	1	1	1
F04455	F00047	1	1	1	1	1	1	1	1	1	1
F04456	F00022	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Biting behavior 1: Not observed, 2: observed.

Clonic convulsions 1: Not observed, 2: jaw convulsions, 3: tremor.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals in cages				
		Tonic convulsions				
		Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	1	1	1	1	1
F04452	F00019	1	1	1	1	1
F04453	F00013	1	1	1	1	1
F04454	F00004	1	1	1	1	1
F04455	F00047	1	1	1	1	1
F04456	F00022	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Tonic convulsions 1: Not observed, 2: tonic extension, 3: opisthotonus convulsions, 4: saltatory convulsions,
 5: asphyxial convulsions.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Ease of removal from cage					Ease of handling				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	2	2	2	2	2	2	2	2	2	2
F04452	F00019	2	2	2	2	2	2	2	2	2	2
F04453	F00013	2	2	2	2	2	2	2	2	2	2
F04454	F00004	2	2	2	2	2	2	2	2	2	2
F04455	F00047	2	2	2	2	2	2	2	2	2	2
F04456	F00022	2	2	2	2	2	2	2	2	2	2
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Range		2	2	2	2	2	2	2	2	2	2
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Ease of removal from cage 1: Docile and allowing itself to be handled, 2: rearing or cowering, 3: running about; hard to catch.

Ease of handling 1: Docile and allowing itself to be handled, 2: struggling slightly or vocalizing,
3: struggling and trying to bite observer's hand.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Muscle tone					Fur conditions				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	2	2	2	2	2	1	1	1	1	1
F04452	F00019	2	2	2	2	2	1	1	1	1	1
F04453	F00013	2	2	2	2	2	1	1	1	1	1
F04454	F00004	2	2	2	2	2	1	1	1	1	1
F04455	F00047	2	2	2	2	2	1	1	1	1	1
F04456	F00022	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Muscle tone 1: Decreased, 2: normal, 3: increased.

Fur conditions 1: Normal, 2: slightly soiled, 3: markedly soiled.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm									
		Lacrimation					Salivation				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	1	1	1	1	1	1	1	1	1	1
F04452	F00019	1	1	1	1	1	1	1	1	1	1
F04453	F00013	1	1	1	1	1	1	1	1	2	1
F04454	F00004	1	1	1	1	1	1	1	1	1	1
F04455	F00047	1	1	1	1	1	1	1	1	1	1
F04456	F00022	1	1	1	1	1	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0
Range		1	1	1	1	1	1	1	1	1-2	1
Significance		---	---	---	---	---	---	---	---	NS	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	STL	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

NS: Not significantly different from the control group.

STL: Analysis by Steel's test.

Findings were graded as follows:

Lacrimation 1: None, 2: mild, 3: marked.

Salivation 1: None, 2: mild, 3: marked.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Observation of animals on observer's palm				
		Respiration				
		Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	1	1	1	1	1
F04452	F00019	1	1	1	1	1
F04453	F00013	1	1	1	1	1
F04454	F00004	1	1	1	1	1
F04455	F00047	1	1	1	1	1
F04456	F00022	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Respiration

1: Normal, 2: bradypnea, 3: dyspnea.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Open-field test									
		Frequency of rearing (during a 2-minute period)					Frequency of grooming (during a 2-minute period)				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	9	4	9	6	7	0	0	0	0	0
F04452	F00019	8	12	5	5	0	0	0	0	0	0
F04453	F00013	11	12	8	20	6	0	0	0	0	0
F04454	F00004	11	8	1	4	3	0	0	0	0	0
F04455	F00047	10	12	7	4	0	0	0	0	0	0
F04456	F00022	1	1	0	4	1	0	0	0	0	0
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		8.3	8.2	5.0	7.2	2.8	0.0	0.0	0.0	0.0	0.0
S.D.		3.8	4.8	3.7	6.3	3.1	0.0	0.0	0.0	0.0	0.0
Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnnett's test.

Appendix 10-4. (Continued) Individual FOB of female rats

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Gait 1: Normal, 2: unmoving, 3: staggering, 4: hind-limbs extended and dragged, 5: all fours extended, 6: forelimbs extended and dragged; unable to support body, 7: standing on tiptoe.

Palpebral closure 1: Eyelids open normally, 2: eyelids half-closed, 3: eyelids closed.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Open-field test									
		Consciousness					Behavioral abnormalities				
		Pre	Day 7	Day 14	Day 21	Day 27	Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	2	2	2	2	2	1	1	1	1	1
F04452	F00019	2	2	2	2	2	1	1	1	1	1
F04453	F00013	2	2	2	2	2	1	1	1	1	1
F04454	F00004	2	2	2	2	2	1	1	1	1	1
F04455	F00047	2	2	2	2	2	1	1	1	1	1
F04456	F00022	2	2	2	2	2	1	1	1	1	1
Number of females		6	6	6	6	6	6	6	6	6	6
Mean		2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
Range		2	2	2	2	2	1	1	1	1	1
Significance		---	---	---	---	---	---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA	UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

(Continued)

Findings were graded as follows:

Consciousness 1: Comatose; no response, 2: exploring behavior, 3: excited and moving spasmodically.

Behavioral abnormalities 1: Not observed, 2: straub's reaction, 3: moving backward, 4: writhing.

Appendix 10-4. (Continued) Individual FOB of female rats

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Open-field test				
		Righting reflex				
		Pre	Day 7	Day 14	Day 21	Day 27
F04451	F00037	1	1	1	1	1
F04452	F00019	1	1	1	1	1
F04453	F00013	1	1	1	1	1
F04454	F00004	1	1	1	1	1
F04455	F00047	1	1	1	1	1
F04456	F00022	1	1	1	1	1
Number of females		6	6	6	6	6
Mean		1.0	1.0	1.0	1.0	1.0
Range		1	1	1	1	1
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

Righting reflex

1: Righting itself immediately, 2: requiring 3 seconds or longer to right itself, 3: unable to right itself.

Appendix 11-1. Individual sensory response of male rats on termination of administration period

Control group						
Male No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
M01101	M00040	1	2	2	2	3
M01102	M00037	1	2	2	2	3
M01103	M00008	1	2	2	2	3
M01104	M00034	1	2	2	2	3
M01105	M00028	1	2	2	2	3
M01106	M00020	1	2	2	2	3
Number of males		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
 Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
 Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 11-2. Individual sensory response of male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Male No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
M02201	M00014	1	2	2	2	3
M02202	M00048	1	2	2	2	3
M02203	M00049	1	2	2	2	3
M02204	M00038	1	2	2	2	3
M02205	M00021	1	2	2	2	3
M02206	M00029	1	2	2	2	3
Number of males		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

238

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
 Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
 Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 11-3. Individual sensory response of male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Male No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
M03301	M00019	1	2	2	2	3
M03302	M00011	1	2	2	2	3
M03303	M00051	1	2	2	2	3
M03304	M00027	1	2	2	2	3
M03305	M00007	1	2	2	2	3
M03306	M00009	1	2	2	2	3
Number of males		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
 Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
 Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 11-4. Individual sensory response of male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg						
Male No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
M04401	M00001	1	2	2	2	3
M04402	M00023	1	2	2	2	3
M04403	M00032	1	2	2	2	3
M04404	M00022	1	2	2	2	3
M04405	M00042	1	2	2	2	3
M04406	M00017	1	2	2	2	3
Number of males		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
 Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
 4: jumping at or biting at stimulus.
 Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
 Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 12-1. Individual sensory response of female rats on termination of administration period

Control group						
Female No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
F01151	F00025	1	2	2	2	3
F01152	F00043	1	2	2	2	3
F01153	F00051	1	2	2	2	3
F01154	F00038	1	2	2	2	3
F01155	F00031	1	2	2	2	3
F01156	F00011	1	2	2	2	3
Number of females		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
- Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.
- Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing,
4: jumping at or biting at stimulus.
- Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
- Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus,
3: quickly moving forward to escape from stimulus or biting at it immediately after looking back,
4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 12-2. Individual sensory response of female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Female No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
F02251	F00017	1	2	2	2	3
F02252	F00021	1	2	2	2	3
F02253	F00009	1	2	2	2	3
F02254	F00001	1	2	2	2	3
F02255	F00012	1	2	2	2	3
F02256	F00034	1	2	2	2	3
Number of females		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

242

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
- Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
- Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus, 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back, 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 12-3. Individual sensory response of female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg						
Female No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
F03351	F00033	1	2	2	2	3
F03352	F00035	1	2	2	2	3
F03353	F00044	1	2	2	2	3
F03354	F00023	1	2	2	2	3
F03355	F00029	1	2	2	2	3
F03356	F00030	1	2	2	2	3
Number of females		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

243

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
- Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
- Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus, 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back, 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 12-4. Individual sensory response of female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Female No.	Blind No.	Pupillary reflex	Approaching behavior	Response to touch	Auditory reflex	Pain reflex
F04451	F00037	1	2	2	2	3
F04452	F00019	1	2	2	2	3
F04453	F00013	1	2	2	2	3
F04454	F00004	1	2	2	2	3
F04455	F00047	1	2	2	2	3
F04456	F00022	1	2	2	2	3
Number of females		6	6	6	6	6
Mean		1.0	2.0	2.0	2.0	3.0
Range		1	2	2	2	3
Significance		---	---	---	---	---
Statistical method		UA	UA	UA	UA	UA

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Findings were graded as follows:

- Pupillary reflex 1: Normal pupillary contraction observed, 2: pupils completely dilated, 3: pupils completely contracted.
- Approaching behavior 1: Not observed, 2: approaching and sniffing stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Response to touch 1: No response, 2: looking back and leaving stimulus, 3: reacting to stimulus, including vocalizing, 4: jumping at or biting at stimulus.
- Auditory reflex 1: Not observed, 2: hesitating at stimulus or moving ears, 3: jumping at and trying to bite at the source of sound.
- Pain reflex 1: Not observed, 2: slowly looking back or slowly moving forward to escape from stimulus, 3: quickly moving forward to escape from stimulus or biting at it immediately after looking back, 4: jumping forward to escape from stimulus, 5: loudly vocalizing and biting at stimulus after suddenly looking back.

Appendix 13-1. Individual grip strength (g) of male rats on termination of administration period

Control group		
Male No.	Forelimb	Hindlimb
M01101	1309	252
M01102	1372	301
M01103	953	251
M01104	930	234
M01105	1231	245
M01106	868	224
Number of males	6	6
Mean	1111	251
S.D.	218	27

Appendix 13-2. Individual grip strength (g) of male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg		
Male No.	Forelimb	Hindlimb
M02201	1546	288
M02202	1185	233
M02203	1224	242
M02204	1214	340
M02205	1163	290
M02206	1109	289
Number of males	6	6
Mean	1240	280
S.D.	155	39
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 13-3. Individual grip strength (g) of male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg		
Male No.	Forelimb	Hindlimb
M03301	1424	293
M03302	1467	260
M03303	997	251
M03304	1107	325
M03305	1740	267
M03306	1443	261
Number of males	6	6
Mean	1363	276
S.D.	269	28
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 13-4. Individual grip strength (g) of male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg		
Male No.	Forelimb	Hindlimb
M04401	1239	390
M04402	1454	252
M04403	1577	287
M04404	1238	261
M04405	1287	271
M04406	1036	303
Number of males	6	6
Mean	1305	294
S.D.	189	50
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 14-1 Individual grip strength (g) of female rats on termination of administration period

Control group		
Female No.	Forelimb	Hindlimb
F01151	610	328
F01152	489	267
F01153	492	282
F01154	894	359
F01155	940	336
F01156	854	237
Number of females	6	6
Mean	713	302
S.D.	207	47

Appendix 14-2 Individual grip strength (g) of female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg		
Female No.	Forelimb	Hindlimb
F02251	675	396
F02252	432	210
F02253	426	288
F02254	490	271
F02255	768	270
F02256	972	322
Number of females	6	6
Mean	627	293
S.D.	218	62
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 14-3 Individual grip strength (g) of female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg		
Female No.	Forelimb	Hindlimb
F03351	726	288
F03352	406	260
F03353	491	244
F03354	751	417
F03355	900	253
F03356	945	244
Number of females	6	6
Mean	703	284
S.D.	216	67
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 14-4 Individual grip strength (g) of female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg		
Female No.	Forelimb	Hindlimb
F04451	657	270
F04452	670	255
F04453	749	264
F04454	721	272
F04455	948	237
F04456	729	226
Number of females	6	6
Mean	746	254
S.D.	105	19
Significance	NS	NS
Statistical method	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 15-1. Individual spontaneous motor activity of male rats on termination of administration period

Control group Male No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120		70	80	90	100	110	120	
M01101	328	27	0	0	0	54	409	65	7	0	0	0	4	76
M01102	2392	530	1	0	0	0	2923	95	19	0	0	0	0	114
M01103	188	20	0	0	0	0	208	40	1	0	0	0	0	41
M01104	175	19	0	0	0	0	194	24	6	0	0	0	0	30
M01105	640	568	17	0	0	182	1407	48	20	3	0	0	2	73
M01106	374	74	162	148	0	1	759	41	4	27	14	0	0	86
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	683	206	30	25	0	40	983	52	10	5	2	0	1	70
S.D.	854	266	65	60	0	73	1053	25	8	11	6	0	2	31

Appendix 15-2. Individual spontaneous motor activity of male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Male No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
M02201	280	0	0	0	0	290	570	32	0	0	0	0	47	79
M02202	229	15	199	41	59	26	569	59	8	23	10	10	7	117
M02203	370	98	157	0	0	1	626	58	15	11	0	0	0	84
M02204	179	142	59	79	8	0	467	22	15	14	8	3	0	62
M02205	330	74	0	137	0	0	541	59	17	0	22	0	0	98
M02206	91	0	0	0	0	0	91	10	0	0	0	0	0	10
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	247	55	69	43	11	53	477	40	9	8	7	2	9	75
S.D.	102	59	88	56	24	117	196	22	8	10	9	4	19	37
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	STL	STL	STL	DU	STL	STL	STL	DU	STL	DU	DU	STL	STL	DU

254

NS: Not significantly different from the control group.

STL: Analysis by Steel's test.

DU: Analysis by Dunnett's test.

Appendix 15-3. Individual spontaneous motor activity of male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Male No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
M03301	42	0	0	0	0	1	43	6	0	0	0	0	1	7
M03302	490	115	1	0	0	0	606	60	9	1	0	0	0	70
M03303	310	127	38	0	21	152	648	60	31	4	0	5	40	140
M03304	495	303	199	0	0	1	998	47	35	8	0	0	0	90
M03305	387	131	145	0	0	0	663	75	21	37	24	27	16	200
M03306	468	101	560	256	689	756	2830	62	24	0	0	0	0	86
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	365	130	157	43	118	152	965	52	20	8	4	5	10	99
S.D.	174	98	213	105	280	302	964	24	13	14	10	11	16	65
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	STL	STL	STL	DU	STL	STL	STL	DU	STL	DU	DU	STL	STL	DU

255

NS: Not significantly different from the control group.

STL: Analysis by Steel's test.

DU: Analysis by Dunnett's test.

Appendix 15-4. Individual spontaneous motor activity of male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Male No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
M04401	280	40	62	0	0	0	382	54	11	8	0	0	0	73
M04402	490	18	0	0	0	0	508	47	2	0	0	0	0	49
M04403	365	170	25	0	0	0	560	55	25	6	0	0	0	86
M04404	356	4	69	29	50	0	508	27	0	10	14	26	0	77
M04405	443	293	134	161	51	137	1219	42	45	19	15	2	6	129
M04406	566	375	196	3	84	0	1224	50	58	26	3	8	0	145
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	417	150	81	32	31	23	734	46	24	12	5	6	1	93
S.D.	103	156	72	64	36	56	383	10	24	9	7	10	2	36
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	STL	STL	STL	DU	STL	STL	STL	DU	STL	DU	DU	STL	STL	DU

256

NS: Not significantly different from the control group.

STL: Analysis by Steel's test.

DU: Analysis by Dunnett's test.

Appendix 16-1. Individual spontaneous motor activity of female rats on termination of administration period

Control group Female No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
F01151	433	203	59	330	0	0	1025	57	19	3	36	3	0	118
F01152	124	89	35	0	0	0	248	29	26	7	0	0	0	62
F01153	599	52	0	0	0	0	651	62	3	0	0	0	0	65
F01154	430	195	0	39	0	0	664	64	30	3	2	0	0	99
F01155	826	235	0	0	0	0	1061	87	24	0	0	0	0	111
F01156	557	25	0	0	0	0	582	39	7	0	0	0	0	46
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	495	133	16	62	0	0	705	56	18	2	6	1	0	84
S.D.	232	89	25	132	0	0	303	20	11	3	15	1	0	30

Appendix 16-2. Individual spontaneous motor activity of female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Female No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
F02251	455	133	0	0	154	3	745	59	10	0	0	25	0	94
F02252	177	80	308	23	0	0	588	17	19	33	1	0	0	70
F02253	711	315	266	127	1	0	1420	89	57	43	30	1	0	220
F02254	414	123	10	0	0	1	548	42	17	0	0	0	0	59
F02255	413	0	0	0	0	0	413	44	0	0	0	0	0	44
F02256	879	353	0	0	0	0	1232	111	63	0	0	0	0	174
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	508	167	97	25	26	1	824	60	28	13	5	4	0	110
S.D.	249	138	148	51	63	1	407	34	26	20	12	10	0	71
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	---	NS
Statistical method	DU	DU	STL	STL	STL	STL	DU	DU	STL	STL	STL	UA	DU	

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Appendix 16-3. Individual spontaneous motor activity of female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Female No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
F03351	485	188	4	0	124	28	829	58	31	1	0	14	1	105
F03352	567	123	0	0	0	0	690	91	36	0	0	0	0	127
F03353	786	17	0	0	0	30	833	117	10	1	0	0	11	139
F03354	754	408	0	0	0	12	1174	130	39	0	0	0	1	170
F03355	549	0	0	0	1	0	550	38	0	0	0	0	0	38
F03356	912	294	26	0	0	0	1232	59	29	3	0	0	0	91
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	676	172	5	0	21	12	885	82	24	1	0	2	2	112
S.D.	166	159	10	0	51	14	268	36	16	1	0	6	4	45
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	STL	STL	STL	STL	DU	DU	STL	STL	STL	STL	STL	DU

259

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 16-4. Individual spontaneous motor activity of female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Female No.	Ambulatory counts							Vertical counts						
	Minutes after administration						Total	Minutes after administration						Total
	70	80	90	100	110	120	70	80	90	100	110	120		
F04451	544	432	258	115	333	1	1683	92	47	34	12	53	0	238
F04452	452	0	224	0	0	0	676	35	0	11	0	0	0	46
F04453	692	155	272	0	0	283	1402	118	26	24	0	0	46	214
F04454	832	168	0	0	0	62	1062	66	5	0	0	0	0	71
F04455	586	404	7	0	0	0	997	54	39	4	0	0	0	97
F04456	548	125	0	0	0	0	673	85	43	0	0	0	0	128
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	609	214	127	19	56	58	1082	75	27	12	2	9	8	132
S.D.	134	169	137	47	136	113	401	30	20	14	5	22	19	78
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	STL	STL	STL	STL	DU	DU	STL	STL	STL	STL	STL	DU

260

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 17-1. Individual urinary findings in male rats on termination of administration period

Control group	Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
												Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M01101	15.6	1.052	Light yellow	8.5	+	-	±	-	-	-	0.1	±	±	±	-	+
M01102	11.0	1.044	Light yellow	8.5	+	-	±	-	-	-	0.1	±	±	±	-	+
M01103	9.2	1.054	Light yellow	8.0	+	-	+	-	-	-	0.1	±	±	±	-	+
M01104	6.8	1.064	Light yellow	≥9.0	+	-	+	-	-	-	0.1	±	±	±	-	+
M01105	14.6	1.038	Light yellow	8.5	+	-	+	-	-	-	0.1	±	±	±	-	-
M01106	9.1	1.066	Light yellow	8.5	+	-	±	-	-	-	0.1	±	±	±	-	-
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	11.1	1.053	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	3.4	0.011	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++++; ≥1000 mg/dL.

261

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Appendix 17-2. Individual urinary findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg															
Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M02201	10.4	1.058	Light yellow	8.0	+	-	±	-	-	0.1	±	±	±	-	+
M02202	10.6	1.058	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	+
M02203	10.0	1.048	Light yellow	8.0	++	-	+	-	-	0.1	±	±	±	-	+
M02204	7.6	1.042	Light yellow	≥9.0	++	-	+	-	-	0.1	±	±	±	-	-
M02205	5.9	1.062	Light yellow	≥9.0	+	-	±	-	-	0.1	±	±	±	-	-
M02206	5.4	1.066	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	-
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	8.3	1.056	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	2.3	0.009	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

262 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 17-3. Individual urinary findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M03301	16.3	1.040	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	+
M03302	8.9	1.064	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	-
M03303	13.8	1.042	Light yellow	8.5	++	-	+	-	-	0.1	±	±	±	-	-
M03304	7.7	1.068	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	+
M03305	12.1	1.042	Light yellow	8.5	++	-	+	-	-	0.1	±	±	±	-	-
M03306	10.7	1.054	Light yellow	8.0	+	-	+	-	+	0.1	±	±	±	-	+
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	11.6	1.052	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	3.2	0.012	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 17-4. Individual urinary findings in male rats on termination of administration period

Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M04401	9.7	1.046	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	+
M04402	10.2	1.054	Light yellow	≥9.0	+	-	±	-	-	0.1	±	±	±	-	+
M04403	13.2	1.050	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	+
M04404	10.7	1.056	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	-
M04405	8.9	1.070	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	-
M04406	9.9	1.066	Light yellow	8.5	+	-	++	-	-	0.1	±	±	±	-	-
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	10.4	1.057	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	1.5	0.009	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 18-1. Individual urinary findings in female rats on termination of administration period

Control group Female No.	Urinary sediments														
	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F01151	12.0	1.046	Light yellow	8.5	+	-	±	-	±	1.0	±	±	±	-	-
F01152	5.8	1.058	Light yellow	8.0	+	-	±	-	+	0.1	±	±	±	-	-
F01153	9.9	1.046	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	-
F01154	14.7	1.032	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F01155	10.9	1.028	Light yellow	8.5	±	-	-	-	-	0.1	±	±	±	-	+
F01156	35.9	1.012	Light yellow	8.5	±	-	-	-	-	0.1	±	±	±	-	-
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	14.9	1.037	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	10.7	0.016	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

265

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Appendix 18-2. Individual urinary findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Female No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F02251	10.6	1.041	Light yellow	8.0	+	-	±	-	-	0.1	±	±	±	-	+
F02252	6.1	1.060	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	-
F02253	8.2	1.048	Light yellow	≥9.0	±	-	±	-	-	0.1	±	±	±	-	-
F02254	9.2	1.054	Light yellow	8.0	+	-	±	-	-	1.0	±	±	±	-	+
F02255	8.1	1.054	Light yellow	8.5	±	-	±	-	-	0.1	±	±	±	-	+
F02256	25.4	1.022	Light yellow	≥9.0	±	-	-	-	-	0.1	±	±	±	-	+
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	11.3	1.047	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	7.1	0.014	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

266

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 18-3. Individual urinary findings in female rats on termination of administration period

Female No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F03351	12.4	1.044	Light yellow	8.5	+	-	±	-	-	1.0	±	±	±	-	-
F03352	13.5	1.038	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	-
F03353	6.8	1.064	Light yellow	8.5	+	-	±	-	±	0.1	±	±	±	-	+
F03354	20.0	1.024	Light yellow	8.5	±	-	-	-	-	0.1	±	±	±	-	-
F03355	7.7	1.052	Light yellow	8.5	±	-	±	-	-	0.1	±	±	±	-	+
F03356	19.0	1.028	Light yellow	8.5	±	-	-	-	-	0.1	±	±	±	-	+
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	13.2	1.042	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	5.5	0.015	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

267 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 18-4. Individual urinary findings in female rats on termination of administration period

Female No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F04451	31.2	1.018	Light yellow	8.5	±	-	-	-	-	0.1	±	±	±	-	+
F04452	14.7	1.035	Light yellow	8.5	±	-	±	-	-	0.1	±	±	±	-	+
F04453	8.2	1.060	Light yellow	8.0	++	-	+	-	-	1.0	±	±	±	-	-
F04454	8.8	1.052	Light yellow	8.5	++	-	±	-	-	1.0	±	±	±	-	+
F04455	7.7	1.062	Light yellow	8.5	+	-	+	-	-	1.0	±	±	±	-	+
F04456	9.4	1.048	Light yellow	≥9.0	++	-	±	-	-	1.0	±	±	±	-	+
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	13.3	1.046	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	9.1	0.017	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

268

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 19-1. Individual urinary findings in male rats on termination of recovery period

Control group	Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
												Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M01107	16.2	1.043	Light yellow	8.5	+	-	+	-	-	-	0.1	±	±	±	-	+
M01108	11.5	1.054	Light yellow	8.5	+	-	+	-	-	-	0.1	±	±	±	-	-
M01109	19.4	1.039	Light yellow	8.5	+	-	+	-	-	-	0.1	±	±	±	-	+
M01110	24.5	1.028	Light yellow	8.5	+	-	±	-	-	-	0.1	±	±	±	-	+
M01111	25.1	1.021	Light yellow	8.5	+	-	±	-	-	-	0.1	±	±	±	-	-
M01112	28.7	1.027	Light yellow	8.0	+	-	-	-	-	±	0.1	±	±	±	-	+
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	20.9	1.035	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	6.4	0.012	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++++; ≥1000 mg/dL.

269

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Appendix 19-2. Individual urinary findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M03307	11.5	1.054	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	+
M03308	16.4	1.043	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	+
M03309	10.9	1.064	Light yellow	8.5	++	-	+	-	-	0.1	±	±	±	-	+
M03310	8.0	1.080	Light yellow	8.5	++	-	++	-	+	0.1	±	±	±	-	+
M03311	26.9	1.021	Light yellow	≥9.0	++	-	±	-	-	0.1	±	±	±	-	-
M03312	14.2	1.048	Light yellow	8.5	++	-	±	-	-	0.1	±	±	±	-	-
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	14.7	1.052	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	6.7	0.020	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

2/0 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 19-3. Individual urinary findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Male No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
M04407	19.8	1.041	Light yellow	8.5	±	-	-	-	±	0.1	±	±	±	-	+
M04408	13.3	1.050	Light yellow	8.5	+	-	±	-	±	0.1	±	±	±	-	+
M04409	17.3	1.042	Light yellow	8.5	++	-	±	-	±	0.1	±	±	±	-	+
M04410	13.7	1.045	Light yellow	8.5	+	-	+	-	-	0.1	±	±	±	-	+
M04411	17.7	1.035	Light yellow	8.5	++	-	+	-	-	0.1	±	±	±	-	+
M04412	13.7	1.050	Light yellow	8.5	+	-	±	-	-	0.1	±	±	±	-	-
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	15.9	1.044	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	2.7	0.006	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	NS	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

271 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 20-1. Individual urinary findings in female rats on termination of recovery period

Control group Female No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F01157	4.4	1.068	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F01158	5.1	1.072	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F01159	8.3	1.068	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	-
F01160	8.5	1.047	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F01161	10.9	1.048	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F01162	9.8	1.054	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	-
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	7.8	1.060	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	2.6	0.011	---	---	---	---	---	---	---	---	---	---	---	---	---

Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

272

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields, +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Appendix 20-2. Individual urinary findings in female rats on termination of recovery period

Female No.	UV mL	S.G. 1.060	Color Light yellow	pH 8.5	Protein -	Glucose -	Ketone body -	Bilirubin -	Occult blood -	Urobili- nogen E.U./dL 0.1	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F03357	7.9	1.060	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F03358	20.8	1.027	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F03359	24.9	1.027	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	-
F03360	12.2	1.045	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F03361	22.2	1.028	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F03362	18.3	1.029	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	-
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	17.7	1.036	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	6.5	0.014	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	*	*	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

273 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

DU: Analysis by Dunnett's test.

Appendix 20-3. Individual urinary findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Female No.	UV mL	S.G.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobili- nogen E.U./dL	Urinary sediments				
											Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
F04457	9.9	1.049	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F04458	27.9	1.020	Light yellow	8.0	-	-	-	-	-	0.1	±	±	±	-	-
F04459	5.9	1.048	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
F04460	16.0	1.030	Light yellow	≥9.0	-	-	-	-	-	0.1	±	±	±	-	+
F04461	7.6	1.043	Light yellow	≥9.0	±	-	-	-	-	0.1	±	±	±	-	-
F04462	7.7	1.054	Light yellow	8.5	-	-	-	-	-	0.1	±	±	±	-	+
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	12.5	1.041	---	---	---	---	---	---	---	---	---	---	---	---	---
S.D.	8.3	0.013	---	---	---	---	---	---	---	---	---	---	---	---	---
Significance	NS	*	---	---	---	---	---	---	---	---	---	---	---	---	---
Statistical method	DU	DU	---	---	---	---	---	---	---	---	---	---	---	---	---

274 Protein: -; negative, ±; trace, +; 30 mg/dL, ++; 100 mg/dL, +++; ≥300 mg/dL.

Glucose: -; negative, +; 100 mg/dL, ++; 250 mg/dL, +++; 500 mg/dL, +++; ≥1000 mg/dL.

Ketone body: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Bilirubin: -; negative, +; slight, ++; moderate, +++; marked.

Occult blood: -; negative, ±; trace, +; slight, ++; moderate, +++; marked.

Epithelial cells: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; ≥201 cells/100 fields.

Erythrocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Leukocytes: ±; 0-20 cells/100 fields, +; 21-100 cells/100 fields, ++; 101-200 cells/100 fields, +++; 201-500 cells/100 fields +++; ≥501 cells/100 fields.

Casts: -; not observed, +; observed.

Crystals: -; not observed, +; observed.

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 21-1. Individual hematological findings in male rats on termination of administration period

Control group											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M01101	824	14.7	42.1	51.1	17.8	34.9	139.7	4.25	22.6	24.1	227.5
M01102	827	14.7	41.9	50.7	17.8	35.1	143.6	2.61	25.1	26.3	210.9
M01103	818	14.9	43.2	52.8	18.2	34.5	112.6	3.06	21.7	24.4	177.4
M01104	717	14.1	41.0	57.2	19.7	34.4	101.8	4.04	18.2	21.3	213.1
M01105	842	15.8	44.1	52.4	18.8	35.8	105.0	2.95	20.0	24.9	206.5
M01106	695	13.7	39.7	57.1	19.7	34.5	141.5	7.51	21.6	25.2	215.4
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	787	14.7	42.0	53.6	18.7	34.9	124.0	4.07	21.5	24.4	208.5
S.D.	64	0.7	1.6	2.9	0.9	0.5	19.6	1.80	2.3	1.7	16.8

(Continued)

Appendix 21-1. (Continued) Individual hematological findings in male rats on termination of administration period

Control group						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M01101	97.2	81.7	12.9	1.1	0.1	4.2
M01102	57.3	83.2	14.5	0.7	0.0	1.6
M01103	83.4	81.1	15.0	0.8	0.0	3.1
M01104	72.4	74.0	20.1	1.1	0.0	4.8
M01105	55.6	77.9	16.5	1.8	0.0	3.8
M01106	74.3	77.4	16.8	1.1	0.0	4.7
Number of males	6	6	6	6	6	6
Mean	73.4	79.2	16.0	1.1	0.0	3.7
S.D.	15.8	3.4	2.5	0.4	0.0	1.2

Appendix 21-2. Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M02201	835	15.8	44.1	52.8	18.9	35.8	144.4	3.22	18.7	23.2	194.6
M02202	748	14.3	41.2	55.1	19.1	34.7	108.8	3.29	19.3	22.2	215.4
M02203	771	14.4	40.7	52.8	18.7	35.4	136.9	3.49	23.2	26.0	213.1
M02204	838	15.7	44.0	52.5	18.7	35.7	138.5	2.24	26.6	26.6	213.1
M02205	820	15.3	42.7	52.1	18.7	35.8	109.6	2.43	21.8	26.3	196.5
M02206	833	16.0	44.3	53.2	19.2	36.1	108.2	2.71	20.8	22.1	204.4
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	808	15.3	42.8	53.1	18.9	35.6	124.4	2.90	21.7	24.4	206.2
S.D.	38	0.7	1.6	1.1	0.2	0.5	17.2	0.51	2.9	2.1	9.1
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	STL	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 21-2. (Continued) Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M02201	77.1	82.1	13.1	0.9	0.1	3.8
M02202	64.1	74.9	21.4	0.6	0.0	3.1
M02203	70.0	80.6	15.2	0.9	0.0	3.3
M02204	94.0	78.0	16.1	1.3	0.0	4.6
M02205	62.8	74.5	20.7	1.0	0.0	3.8
M02206	58.1	73.3	22.5	1.4	0.0	2.8
Number of males	6	6	6	6	6	6
Mean	71.0	77.2	18.2	1.0	0.0	3.6
S.D.	13.0	3.6	3.9	0.3	0.0	0.6
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 21-3. Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M03301	817	14.6	41.7	51.0	17.9	35.0	107.1	3.67	16.9	21.2	194.6
M03302	791	14.7	42.2	53.4	18.6	34.8	104.0	3.47	23.0	24.5	208.7
M03303	788	15.3	43.8	55.6	19.4	34.9	125.2	3.54	18.7	22.0	232.8
M03304	729	14.0	39.4	54.0	19.2	35.5	132.8	3.70	18.7	21.7	189.1
M03305	822	15.6	44.2	53.8	19.0	35.3	115.0	2.82	20.0	22.0	194.6
M03306	803	15.4	43.5	54.2	19.2	35.4	114.1	2.43	25.3	25.3	172.8
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	792	14.9	42.5	53.7	18.9	35.2	116.4	3.27	20.4	22.8	198.8
S.D.	34	0.6	1.8	1.5	0.6	0.3	10.9	0.52	3.1	1.7	20.3
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	STL	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 21-3. (Continued) Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M03301	61.5	72.0	21.7	1.6	0.0	4.7
M03302	62.0	85.2	11.1	0.6	0.0	3.1
M03303	119.6	72.8	22.6	0.6	0.1	3.9
M03304	70.8	79.9	14.7	0.3	0.0	5.1
M03305	76.6	82.4	14.2	1.0	0.1	2.3
M03306	61.1	80.7	14.5	0.7	0.0	4.1
Number of males	6	6	6	6	6	6
Mean	75.3	78.8	16.5	0.8	0.0	3.9
S.D.	22.6	5.3	4.6	0.5	0.1	1.0
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 21-4. Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M04401	821	15.6	43.6	53.1	19.0	35.8	119.1	3.41	21.0	22.7	215.4
M04402	755	14.0	40.2	53.2	18.5	34.8	100.8	2.66	30.9	23.4	204.4
M04403	821	15.5	45.0	54.8	18.9	34.4	119.1	2.98	22.7	24.1	187.3
M04404	746	15.0	43.8	58.7	20.1	34.2	99.8	3.00	22.7	23.6	217.7
M04405	755	15.0	43.3	57.4	19.9	34.6	123.9	3.47	21.8	24.7	204.4
M04406	831	15.1	42.6	51.3	18.2	35.4	125.8	2.58	21.8	22.0	202.4
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	788	15.0	43.1	54.8	19.1	34.9	114.8	3.02	23.5	23.4	205.3
S.D.	40	0.6	1.6	2.8	0.8	0.6	11.5	0.37	3.7	1.0	10.9
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	STL	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 21-4. (Continued) Individual hematological findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M04401	47.7	69.2	26.0	0.8	0.0	4.0
M04402	71.2	75.1	21.7	0.3	0.1	2.8
M04403	61.6	83.0	12.0	0.8	0.0	4.2
M04404	77.1	86.3	10.2	0.5	0.0	3.0
M04405	46.5	81.3	14.4	0.6	0.0	3.7
M04406	67.4	74.6	18.4	1.2	0.0	5.8
Number of males	6	6	6	6	6	6
Mean	61.9	78.3	17.1	0.7	0.0	3.9
S.D.	12.5	6.4	6.0	0.3	0.0	1.1
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 22-1. Individual hematological findings in female rats on termination of administration period

Control group											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F01151	763	14.9	41.7	54.7	19.5	35.7	156.5	3.79	16.7	17.2	170.1
F01152	733	14.0	38.8	52.9	19.1	36.1	134.8	2.77	14.8	16.4	172.8
F01153	727	14.2	39.0	53.6	19.5	36.4	120.9	2.71	14.0	16.5	187.6
F01154	716	13.9	39.1	54.6	19.4	35.5	107.9	3.21	15.4	16.0	184.4
F01155	698	13.8	38.4	55.0	19.8	35.9	125.8	2.14	15.7	17.4	170.1
F01156	805	14.7	40.5	50.3	18.3	36.3	130.0	2.63	14.9	17.0	187.6
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	740	14.3	39.6	53.5	19.3	36.0	129.3	2.88	15.3	16.8	178.8
S.D.	38	0.5	1.3	1.8	0.5	0.3	16.2	0.56	0.9	0.5	8.6

(Continued)

Appendix 22-1. (Continued) Individual hematological findings in female rats on termination of administration period

Control group						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F01151	42.1	84.1	13.0	1.2	0.0	1.7
F01152	33.8	79.9	15.3	2.4	0.0	2.4
F01153	39.9	86.2	10.2	1.3	0.0	2.3
F01154	44.1	87.1	10.6	1.4	0.0	0.9
F01155	30.9	72.5	23.6	1.6	0.0	2.3
F01156	39.9	79.4	16.0	1.5	0.3	2.8
Number of females	6	6	6	6	6	6
Mean	38.5	81.5	14.8	1.6	0.1	2.1
S.D.	5.1	5.4	4.9	0.4	0.1	0.7

Appendix 22-2. Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F02251	798	15.4	42.6	53.4	19.3	36.2	140.4	2.51	14.7	18.6	189.2
F02252	725	13.9	39.1	53.9	19.2	35.5	137.4	2.61	14.9	17.9	187.6
F02253	802	14.1	39.0	48.6	17.6	36.2	126.7	2.61	14.0	17.2	194.2
F02254	757	14.4	40.5	53.5	19.0	35.6	132.8	2.56	14.9	17.2	178.4
F02255	724	14.2	40.3	55.7	19.6	35.2	115.1	3.16	14.1	20.0	181.4
F02256	762	14.6	40.6	53.3	19.2	36.0	144.0	2.01	14.7	14.9	174.2
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	761	14.4	40.4	53.1	19.0	35.8	132.7	2.58	14.6	17.6	184.2
S.D.	34	0.5	1.3	2.4	0.7	0.4	10.5	0.37	0.4	1.7	7.5
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 22-2. (Continued) Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F02251	60.2	79.9	13.3	1.3	0.0	5.5
F02252	53.4	85.0	9.6	1.5	0.0	3.9
F02253	69.7	78.3	17.9	0.4	0.1	3.3
F02254	51.2	80.7	11.9	2.1	0.0	5.3
F02255	45.9	75.8	19.0	1.5	0.2	3.5
F02256	72.1	84.2	11.0	1.1	0.0	3.7
Number of females	6	6	6	6	6	6
Mean	58.8	80.7	13.8	1.3	0.1	4.2
S.D.	10.5	3.5	3.8	0.6	0.1	1.0
Significance	**	NS	NS	NS	---	*
Statistical method	DU	DU	DU	DU	UA	DU

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Appendix 22-3. Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F03351	762	14.7	40.6	53.3	19.3	36.2	126.7	2.84	15.4	17.2	163.8
F03352	734	14.3	40.1	54.6	19.5	35.7	116.0	3.62	15.7	19.2	172.8
F03353	749	14.6	41.4	55.3	19.5	35.3	113.1	2.87	15.7	16.2	148.4
F03354	715	13.5	38.2	53.4	18.9	35.3	128.3	2.90	15.2	16.6	192.5
F03355	761	15.1	42.3	55.6	19.8	35.7	121.0	2.71	16.4	18.2	163.8
F03356	782	15.4	42.8	54.7	19.7	36.0	121.3	2.57	15.5	16.8	178.4
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	751	14.6	40.9	54.5	19.5	35.7	121.1	2.92	15.7	17.4	170.0
S.D.	24	0.7	1.7	1.0	0.3	0.4	5.9	0.36	0.4	1.1	15.0
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 22-3. (Continued) Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F03351	55.3	75.6	20.6	0.9	0.0	2.9
F03352	65.3	84.2	12.9	0.8	0.0	2.1
F03353	56.0	73.9	19.8	1.1	0.0	5.2
F03354	28.3	75.3	20.4	1.1	0.0	3.2
F03355	44.5	75.3	19.6	2.2	0.0	2.9
F03356	38.2	87.2	8.6	0.5	0.0	3.7
Number of females	6	6	6	6	6	6
Mean	47.9	78.6	17.0	1.1	0.0	3.3
S.D.	13.5	5.6	5.0	0.6	0.0	1.1
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 22-4. Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F04451	789	15.1	42.5	53.9	19.1	35.5	106.2	2.97	15.5	16.5	152.5
F04452	764	14.9	41.3	54.1	19.5	36.1	103.0	2.04	16.5	19.0	177.0
F04453	771	15.2	41.9	54.3	19.7	36.3	126.0	1.50	15.5	15.3	177.0
F04454	758	14.0	39.6	52.2	18.5	35.4	139.8	2.87	15.1	13.8	179.9
F04455	772	14.9	41.6	53.9	19.3	35.8	103.5	2.06	16.2	16.5	184.4
F04456	765	14.8	41.6	54.4	19.3	35.6	101.7	2.78	15.0	14.6	182.9
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	770	14.8	41.4	53.8	19.2	35.8	113.4	2.37	15.6	16.0	175.6
S.D.	11	0.4	1.0	0.8	0.4	0.4	15.8	0.59	0.6	1.8	11.7
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 22-4. (Continued) Individual hematological findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F04451	50.6	89.1	8.5	1.0	0.0	1.4
F04452	62.9	85.2	11.9	1.0	0.0	1.9
F04453	63.8	72.9	19.3	0.9	0.2	6.7
F04454	52.4	81.7	13.6	1.1	0.0	3.6
F04455	55.8	78.5	17.1	1.4	0.0	3.0
F04456	63.1	81.1	16.2	1.1	0.0	1.6
Number of females	6	6	6	6	6	6
Mean	58.1	81.4	14.4	1.1	0.0	3.0
S.D.	5.9	5.6	3.9	0.2	0.1	2.0
Significance	**	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 23-1. Individual hematological findings in male rats on termination of recovery period

Control group											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M01107	798	15.0	41.2	51.6	18.8	36.4	83.5	3.95	18.4	23.0	207.4
M01108	864	16.3	44.9	52.0	18.9	36.3	109.8	3.39	26.8	25.4	212.0
M01109	835	15.3	42.3	50.7	18.3	36.2	130.5	3.39	16.4	20.5	203.0
M01110	791	15.3	42.3	53.5	19.3	36.2	113.7	3.62	19.2	21.9	240.8
M01111	865	15.4	42.0	48.6	17.8	36.7	121.7	2.91	16.3	20.3	226.8
M01112	812	14.6	40.5	49.9	18.0	36.0	102.4	2.69	17.3	22.5	203.0
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	828	15.3	42.2	51.1	18.5	36.3	110.3	3.33	19.1	22.3	215.5
S.D.	32	0.6	1.5	1.7	0.6	0.2	16.3	0.46	4.0	1.9	15.2

(Continued)

Appendix 23-1. (Continued) Individual hematological findings in male rats on termination of recovery period

Control group						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M01107	143.0	79.5	16.2	1.1	0.1	3.1
M01108	53.4	77.3	15.9	1.9	0.2	4.7
M01109	76.2	74.1	21.3	1.6	0.0	3.0
M01110	62.2	74.6	20.3	1.4	0.0	3.7
M01111	70.3	78.1	17.0	1.1	0.0	3.8
M01112	62.0	82.1	13.6	1.1	0.0	3.2
Number of males	6	6	6	6	6	6
Mean	77.9	77.6	17.4	1.4	0.1	3.6
S.D.	32.9	3.0	2.9	0.3	0.1	0.6

Appendix 23-2. Individual hematological findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M03307	789	15.1	42.3	53.6	19.1	35.7	104.4	3.36	23.6	23.9	221.6
M03308	818	15.4	42.4	51.8	18.8	36.3	107.6	3.15	14.9	19.0	226.8
M03309	790	14.8	40.8	51.6	18.7	36.3	99.6	3.45	17.8	21.1	209.7
M03310	815	14.7	40.8	50.1	18.0	36.0	129.8	3.54	21.3	23.2	196.8
M03311	862	16.1	44.3	51.4	18.7	36.3	120.0	3.43	26.7	23.0	246.9
M03312	835	15.5	42.1	50.4	18.6	36.8	128.2	2.72	18.9	22.8	209.7
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	818	15.3	42.1	51.5	18.7	36.2	114.9	3.28	20.5	22.2	218.6
S.D.	28	0.5	1.3	1.2	0.4	0.4	12.8	0.30	4.2	1.8	17.4
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 23-2. (Continued) Individual hematological findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M03307	74.7	79.7	15.4	1.1	0.1	3.7
M03308	55.8	76.9	19.4	0.5	0.0	3.2
M03309	80.2	85.8	10.0	1.6	0.0	2.6
M03310	69.5	75.5	17.4	2.4	0.0	4.7
M03311	53.9	70.5	20.0	3.0	0.0	6.5
M03312	42.2	80.1	14.4	1.7	0.0	3.8
Number of males	6	6	6	6	6	6
Mean	62.7	78.1	16.1	1.7	0.0	4.1
S.D.	14.4	5.1	3.7	0.9	0.0	1.4
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 23-3. Individual hematological findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg											
Male No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
M04407	802	15.4	42.7	53.2	19.2	36.1	106.9	2.76	16.6	22.5	196.8
M04408	849	15.2	41.4	48.8	17.9	36.7	114.4	3.35	20.5	23.4	216.7
M04409	796	15.2	42.0	52.8	19.1	36.2	120.2	2.77	17.4	23.6	232.2
M04410	876	15.6	42.7	48.7	17.8	36.5	120.6	3.70	22.1	24.9	212.0
M04411	794	15.6	42.6	53.7	19.6	36.6	118.9	3.25	17.3	22.6	219.1
M04412	750	14.3	40.5	54.0	19.1	35.3	103.0	3.28	19.6	24.8	209.7
Number of males	6	6	6	6	6	6	6	6	6	6	6
Mean	811	15.2	42.0	51.9	18.8	36.2	114.0	3.19	18.9	23.6	214.4
S.D.	45	0.5	0.9	2.4	0.7	0.5	7.5	0.36	2.2	1.0	11.7
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 23-3. (Continued) Individual hematological findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg						
Male No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
M04407	91.5	77.0	19.3	1.0	0.0	2.7
M04408	67.0	77.9	16.6	1.9	0.0	3.6
M04409	61.6	81.7	13.0	1.9	0.0	3.4
M04410	46.1	68.8	23.2	1.7	0.0	6.3
M04411	52.7	70.0	24.7	1.5	0.0	3.8
M04412	36.9	66.4	25.7	1.9	0.0	6.0
Number of males	6	6	6	6	6	6
Mean	59.3	73.6	20.4	1.7	0.0	4.3
S.D.	19.1	6.1	5.0	0.4	0.0	1.5
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 24-1. Individual hematological findings in female rats on termination of recovery period

Control group											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F01157	785	14.7	42.0	53.5	18.7	35.0	118.1	3.57	14.9	19.8	178.2
F01158	795	14.3	39.9	50.2	18.0	35.8	111.2	2.85	15.8	17.1	168.5
F01159	767	14.7	40.4	52.7	19.2	36.4	98.6	3.65	15.5	16.5	179.7
F01160	766	13.8	38.3	50.0	18.0	36.0	116.7	2.53	15.1	16.2	164.7
F01161	719	14.3	39.5	54.9	19.9	36.2	111.8	3.80	15.8	15.7	173.9
F01162	806	14.9	41.2	51.1	18.5	36.2	112.9	2.41	15.9	17.4	178.2
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	773	14.5	40.2	52.1	18.7	35.9	111.6	3.14	15.5	17.1	173.9
S.D.	31	0.4	1.3	2.0	0.7	0.5	6.9	0.61	0.4	1.4	6.1

(Continued)

Appendix 24-1. (Continued) Individual hematological findings in female rats on termination of recovery period

Control group						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F01157	42.7	74.2	20.9	1.6	0.0	3.3
F01158	30.4	75.0	18.8	2.3	0.0	3.9
F01159	41.8	77.3	19.4	0.7	0.0	2.6
F01160	24.7	75.7	19.1	2.4	0.0	2.8
F01161	44.7	64.0	32.4	2.0	0.0	1.6
F01162	39.7	76.3	19.2	1.5	0.0	3.0
Number of females	6	6	6	6	6	6
Mean	37.3	73.8	21.6	1.8	0.0	2.9
S.D.	8.0	4.9	5.3	0.6	0.0	0.8

Appendix 24-2. Individual hematological findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F03357	793	14.7	40.2	50.7	18.5	36.6	116.4	2.49	16.2	18.8	182.7
F03358	796	14.9	41.2	51.8	18.7	36.2	102.1	2.86	16.0	18.1	184.2
F03359	769	15.1	42.5	55.3	19.6	35.5	101.5	5.02	17.1	16.9	276.2
F03360	805	15.3	42.7	53.0	19.0	35.8	96.2	3.29	16.0	16.4	205.1
F03361	797	15.2	41.9	52.6	19.1	36.3	111.6	3.17	15.8	17.3	173.9
F03362	803	14.6	40.0	49.8	18.2	36.5	120.0	2.55	15.6	15.7	175.3
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	794	15.0	41.4	52.2	18.9	36.2	108.0	3.23	16.1	17.2	199.6
S.D.	13	0.3	1.1	1.9	0.5	0.4	9.4	0.93	0.5	1.1	39.2
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	STL	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 24-2. (Continued) Individual hematological findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F03357	38.8	77.1	14.9	4.1	0.0	3.9
F03358	28.2	77.0	19.5	1.4	0.0	2.1
F03359	50.4	82.7	12.9	0.8	0.0	3.6
F03360	29.6	77.4	17.9	2.0	0.0	2.7
F03361	26.3	61.6	29.7	4.9	0.0	3.8
F03362	56.8	67.6	28.7	1.6	0.0	2.1
Number of females	6	6	6	6	6	6
Mean	38.4	73.9	20.6	2.5	0.0	3.0
S.D.	12.7	7.8	7.1	1.6	0.0	0.8
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 24-3. Individual hematological findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg											
Female No.	RBC 10 ⁶ /µL	Hemoglobin g/dL	Hematocrit %	MCV fL	MCH pg	MCHC g/dL	Platelet 10 ⁶ /µL	Reticulocyte %	PT sec.	APTT sec.	Fibrinogen mg/dL
F04457	765	14.4	39.0	51.0	18.8	36.9	114.8	2.16	14.8	17.6	195.9
F04458	754	14.7	39.7	52.7	19.5	37.0	121.8	2.39	17.2	17.8	176.7
F04459	741	14.1	38.7	52.2	19.0	36.4	119.3	1.94	15.8	18.3	169.8
F04460	782	13.8	38.6	49.4	17.6	35.8	114.8	3.12	15.4	17.2	178.2
F04461	825	15.1	41.4	50.2	18.3	36.5	127.2	3.67	16.2	17.6	171.2
F04462	809	15.3	41.3	51.1	18.9	37.0	103.5	2.90	15.9	18.1	162.2
Number of females	6	6	6	6	6	6	6	6	6	6	6
Mean	779	14.6	39.8	51.1	18.7	36.6	116.9	2.70	15.9	17.8	175.7
S.D.	33	0.6	1.3	1.2	0.7	0.5	8.1	0.65	0.8	0.4	11.4
Significance	NS	NS	NS	NS	NS	*	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	STL	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

301

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 24-3. (Continued) Individual hematological findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg						
Female No.	WBC $10^3/\mu\text{L}$	LYMPH %	NEUT %	EO %	BASO %	MONO %
F04457	35.4	79.7	16.0	2.3	0.0	2.0
F04458	44.8	85.0	11.0	2.0	0.0	2.0
F04459	36.9	74.8	20.6	1.9	0.0	2.7
F04460	34.6	73.1	20.5	2.6	0.0	3.8
F04461	31.4	68.8	26.8	2.5	0.0	1.9
F04462	31.3	74.8	17.8	4.5	0.0	2.9
Number of females	6	6	6	6	6	6
Mean	35.7	76.0	18.8	2.6	0.0	2.6
S.D.	5.0	5.6	5.3	1.0	0.0	0.7
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 25-1. Individual blood chemical findings in male rats on termination of administration period

Control group	Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
	M01101	87.3	27.8	473.4	0.14	5.75	3.04	1.12
	M01102	70.0	20.6	834.8	0.47	5.69	3.02	1.13
	M01103	99.6	32.7	728.4	0.52	5.34	2.87	1.16
	M01104	115.1	72.0	578.5	0.49	5.47	2.88	1.11
	M01105	87.7	26.0	520.6	0.53	5.29	2.85	1.17
	M01106	77.0	30.3	612.1	0.06	5.71	3.03	1.13
Number of males		6	6	6	6	6	6	6
Mean		89.5	34.9	624.6	0.37	5.54	2.95	1.14
S.D.		16.1	18.6	134.8	0.21	0.20	0.09	0.02

(Continued)

Appendix 25-1. (Continued) Individual blood chemical findings in male rats on termination of administration period

Control group		Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M01101		0.12	17.4	0.22	112.8	59.3	47.0
M01102		0.11	15.9	0.25	109.3	44.9	30.1
M01103		0.13	15.5	0.20	119.4	40.3	31.3
M01104		0.12	11.2	0.23	108.4	55.8	93.4
M01105		0.11	13.8	0.23	95.9	54.8	52.0
M01106		0.11	10.1	0.20	130.5	68.6	45.9
Number of males		6	6	6	6	6	6
Mean		0.12	14.0	0.22	112.7	54.0	50.0
S.D.		0.01	2.8	0.02	11.6	10.2	23.1

(Continued)

Appendix 25-1. (Continued) Individual blood chemical findings in male rats on termination of administration period

Control group	Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
	M01101	144.0	4.44	107.7	9.9	8.0
	M01102	144.7	4.18	108.8	9.5	9.0
	M01103	145.7	4.19	108.1	9.5	8.8
	M01104	146.2	3.89	106.2	9.6	7.5
	M01105	145.4	4.11	107.8	9.6	7.5
	M01106	145.4	3.72	108.2	9.9	7.2
	Number of males	6	6	6	6	6
	Mean	145.2	4.09	107.8	9.7	8.0
	S.D.	0.8	0.25	0.9	0.2	0.7

Appendix 25-2. Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg							
Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
M02201	100.5	24.4	693.7	0.45	5.48	2.87	1.10
M02202	85.0	42.5	563.5	0.44	5.11	2.74	1.16
M02203	95.1	31.1	718.1	0.51	5.63	2.91	1.07
M02204	70.8	31.4	681.0	0.44	5.63	2.92	1.08
M02205	73.8	35.1	587.7	0.53	5.74	3.02	1.11
M02206	78.4	30.3	657.3	0.79	5.60	3.23	1.36
Number of males	6	6	6	6	6	6	6
Mean	83.9	32.5	650.2	0.53	5.53	2.95	1.15
S.D.	11.9	6.0	61.5	0.13	0.22	0.17	0.11
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 25-2. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M02201	0.10	14.8	0.24	133.0	51.3	76.2
M02202	0.11	13.1	0.23	120.9	45.3	36.3
M02203	0.12	15.6	0.22	129.3	55.1	83.3
M02204	0.11	13.1	0.20	108.6	44.7	42.6
M02205	0.12	16.0	0.19	117.6	55.2	27.3
M02206	0.10	14.2	0.22	128.7	59.9	24.6
Number of males	6	6	6	6	6	6
Mean	0.11	14.5	0.22	123.0	51.9	48.4
S.D.	0.01	1.2	0.02	9.1	6.0	25.2
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 25-2. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
M02201	145.0	4.26	108.1	9.8	8.7
M02202	143.6	4.33	108.3	9.3	7.9
M02203	143.3	4.30	105.9	9.6	8.7
M02204	145.4	4.09	109.0	9.9	8.4
M02205	144.4	4.29	108.3	9.7	8.5
M02206	145.2	4.21	111.4	9.8	8.3
Number of males	6	6	6	6	6
Mean	144.5	4.25	108.5	9.7	8.4
S.D.	0.9	0.09	1.8	0.2	0.3
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 25-3. Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg							
Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
M03301	96.2	48.4	613.7	0.25	5.43	3.06	1.29
M03302	80.4	30.0	386.6	0.45	5.53	2.91	1.11
M03303	90.4	27.1	728.3	0.78	5.79	2.89	0.99
M03304	126.5	44.7	666.5	0.58	5.48	2.81	1.05
M03305	95.2	27.1	618.7	0.41	5.50	2.99	1.19
M03306	90.2	25.7	480.8	0.26	5.36	2.91	1.18
Number of males	6	6	6	6	6	6	6
Mean	96.5	33.8	582.4	0.46	5.52	2.93	1.14
S.D.	15.7	10.0	126.0	0.20	0.15	0.09	0.11
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 25-3. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M03301	0.10	23.8	0.25	109.4	46.3	56.7
M03302	0.10	21.0	0.24	122.4	51.2	42.1
M03303	0.11	19.2	0.22	112.3	40.0	50.7
M03304	0.11	17.4	0.19	109.5	36.2	29.8
M03305	0.09	22.8	0.23	123.6	44.8	20.3
M03306	0.08	16.1	0.17	120.8	29.5	17.2
Number of males	6	6	6	6	6	6
Mean	0.10	20.1	0.22	116.3	41.3	36.1
S.D.	0.01	3.0	0.03	6.6	7.8	16.2
Significance	*	**	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 25-3. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
M03301	142.5	4.27	109.1	9.3	7.8
M03302	145.0	4.10	108.7	9.3	7.9
M03303	145.1	4.22	106.6	9.7	8.4
M03304	145.2	4.43	108.0	9.0	8.0
M03305	145.4	4.76	110.4	9.2	9.1
M03306	145.4	3.93	112.6	9.4	7.3
Number of males	6	6	6	6	6
Mean	144.8	4.29	109.2	9.3	8.1
S.D.	1.1	0.29	2.1	0.2	0.6
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 25-4. Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg							
Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
M04401	104.0	33.4	700.3	0.41	5.49	2.93	1.15
M04402	92.8	32.6	626.9	0.39	5.16	2.84	1.22
M04403	92.1	28.8	554.4	0.04	5.48	2.90	1.12
M04404	74.5	30.7	597.5	0.37	5.56	3.06	1.23
M04405	86.5	16.5	700.8	0.51	5.61	3.00	1.15
M04406	97.7	38.6	642.0	0.68	5.60	3.02	1.17
Number of males	6	6	6	6	6	6	6
Mean	91.3	30.1	637.0	0.40	5.48	2.96	1.17
S.D.	10.1	7.4	57.6	0.21	0.17	0.08	0.04
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 25-4. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M04401	0.12	24.1	0.25	113.1	38.7	22.1
M04402	0.11	20.6	0.23	105.6	24.3	25.4
M04403	0.12	20.4	0.20	126.3	30.3	25.5
M04404	0.10	20.4	0.23	101.8	53.2	33.7
M04405	0.13	20.2	0.24	114.9	28.6	21.8
M04406	0.11	17.1	0.21	126.3	30.1	41.9
Number of males	6	6	6	6	6	6
Mean	0.12	20.5	0.23	114.7	34.2	28.4
S.D.	0.01	2.2	0.02	10.2	10.4	7.9
Significance	NS	**	NS	NS	**	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 25-4. (Continued) Individual blood chemical findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg					
Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
M04401	145.6	4.71	113.1	9.1	9.1
M04402	146.1	4.26	113.6	8.8	8.2
M04403	145.0	4.40	110.9	9.6	8.5
M04404	144.8	4.32	111.4	9.6	9.5
M04405	144.8	4.37	110.4	9.2	8.3
M04406	146.2	4.00	110.5	10.0	8.0
Number of males	6	6	6	6	6
Mean	145.4	4.34	111.7	9.4	8.6
S.D.	0.6	0.23	1.4	0.4	0.6
Significance	NS	NS	**	NS	NS
Statistical method	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 26-1. Individual blood chemical findings in female rats on termination of administration period

Control group	Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
	F01151	96.0	25.9	315.5	0.59	5.93	3.33	1.28
	F01152	78.5	25.7	380.6	1.09	5.71	3.02	1.12
	F01153	95.8	21.9	265.4	0.97	5.76	3.10	1.17
	F01154	60.3	15.6	486.7	0.70	5.38	2.97	1.23
	F01155	69.1	19.7	237.4	0.44	5.73	3.28	1.34
	F01156	73.7	17.4	442.9	0.38	5.38	3.02	1.28
Number of females		6	6	6	6	6	6	6
Mean		78.9	21.0	354.8	0.70	5.65	3.12	1.24
S.D.		14.5	4.3	99.1	0.29	0.22	0.15	0.08

(Continued)

Appendix 26-1. (Continued) Individual blood chemical findings in female rats on termination of administration period

Control group		Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F01151		0.13	17.3	0.32	102.9	73.3	34.9
F01152		0.13	15.7	0.28	118.8	70.6	27.7
F01153		0.14	12.6	0.24	108.0	62.3	28.3
F01154		0.14	12.7	0.27	114.3	68.6	15.6
F01155		0.14	16.0	0.25	96.3	67.7	22.5
F01156		0.15	15.6	0.24	96.8	73.3	28.5
Number of females		6	6	6	6	6	6
Mean		0.14	15.0	0.27	106.2	69.3	26.3
S.D.		0.01	1.9	0.03	9.2	4.1	6.5

(Continued)

Appendix 26-1. (Continued) Individual blood chemical findings in female rats on termination of administration period

Control group		Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
Female No.						
F01151		139.9	3.96	107.8	9.6	6.0
F01152		142.0	4.08	106.3	9.1	7.3
F01153		144.2	4.20	108.7	9.3	7.7
F01154		143.8	3.87	108.0	9.3	7.1
F01155		144.4	4.35	108.5	9.8	8.0
F01156		142.6	4.47	106.8	10.0	7.6
Number of females		6	6	6	6	6
Mean		142.8	4.16	107.7	9.5	7.3
S.D.		1.7	0.23	0.9	0.3	0.7

Appendix 26-2. Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg							
Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
F02251	94.4	23.0	272.4	0.50	5.77	3.13	1.18
F02252	90.0	24.7	315.4	0.45	5.89	3.40	1.36
F02253	89.0	23.0	243.8	0.28	5.36	3.05	1.32
F02254	70.5	16.3	246.0	0.49	5.64	3.19	1.30
F02255	53.4	17.7	255.0	0.53	5.96	3.43	1.36
F02256	83.8	24.4	306.8	0.85	6.45	3.79	1.42
Number of females	6	6	6	6	6	6	6
Mean	80.2	21.5	273.2	0.52	5.85	3.33	1.32
S.D.	15.5	3.6	31.1	0.19	0.36	0.27	0.08
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 26-2. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg						
Female No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F02251	0.14	15.2	0.23	126.3	81.0	19.6
F02252	0.11	21.0	0.27	129.0	59.7	26.2
F02253	0.11	19.9	0.29	139.9	66.0	19.4
F02254	0.13	18.6	0.29	121.7	44.9	16.2
F02255	0.12	16.5	0.27	122.6	76.8	79.2
F02256	0.11	17.4	0.24	107.3	66.0	14.8
Number of females	6	6	6	6	6	6
Mean	0.12	18.1	0.27	124.5	65.7	29.2
S.D.	0.01	2.2	0.03	10.7	12.9	24.8
Significance	NS	*	NS	**	NS	NS
Statistical method	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 26-2. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg					
Female No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
F02251	142.1	3.97	108.7	9.4	6.6
F02252	141.1	4.34	107.5	9.4	7.6
F02253	140.8	4.02	109.1	9.2	7.1
F02254	144.2	4.48	108.9	9.7	7.3
F02255	141.8	4.16	108.9	10.1	7.3
F02256	142.9	4.52	108.2	9.8	7.3
Number of females	6	6	6	6	6
Mean	142.2	4.25	108.6	9.6	7.2
S.D.	1.3	0.23	0.6	0.3	0.3
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 26-3. Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
F03351	76.7	28.8	504.7	0.99	5.64	3.08	1.20
F03352	70.1	19.2	383.1	0.84	5.51	3.26	1.45
F03353	60.5	17.6	226.9	0.62	6.11	3.72	1.56
F03354	58.7	18.6	533.2	0.65	5.64	3.11	1.23
F03355	65.7	15.7	336.1	0.69	5.83	3.31	1.31
F03356	79.6	19.5	319.5	0.71	5.57	3.11	1.26
Number of females	6	6	6	6	6	6	6
Mean	68.6	19.9	383.9	0.75	5.72	3.27	1.34
S.D.	8.5	4.6	116.6	0.14	0.22	0.24	0.14
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 26-3. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg						
Female No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F03351	0.12	20.4	0.28	113.4	51.7	9.6
F03352	0.11	18.6	0.26	119.9	50.0	21.0
F03353	0.14	22.7	0.27	129.6	76.7	18.2
F03354	0.13	14.4	0.29	120.6	74.2	25.9
F03355	0.14	19.0	0.27	131.1	39.7	12.7
F03356	0.13	18.7	0.22	110.7	73.5	10.0
Number of females	6	6	6	6	6	6
Mean	0.13	19.0	0.27	120.9	61.0	16.2
S.D.	0.01	2.7	0.02	8.3	15.7	6.6
Significance	NS	*	NS	*	NS	NS
Statistical method	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 26-3. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg					
Female No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
F03351	141.7	3.74	108.2	9.2	7.0
F03352	142.2	4.08	109.8	9.0	7.1
F03353	140.2	4.13	107.5	9.6	7.1
F03354	142.4	4.32	108.7	9.7	7.2
F03355	142.4	4.40	109.5	9.5	8.4
F03356	145.3	4.30	109.6	9.3	7.5
Number of females	6	6	6	6	6
Mean	142.4	4.16	108.9	9.4	7.4
S.D.	1.7	0.24	0.9	0.3	0.5
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 26-4. Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg							
Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
F04451	58.2	14.8	321.0	0.50	6.08	3.64	1.49
F04452	65.2	16.5	272.1	0.52	6.54	3.85	1.43
F04453	76.3	24.5	198.8	0.70	6.08	3.39	1.26
F04454	71.4	21.6	320.1	0.90	5.69	3.37	1.46
F04455	75.7	26.3	195.9	0.68	5.79	3.36	1.38
F04456	82.3	23.0	478.2	1.07	5.71	3.47	1.54
Number of females	6	6	6	6	6	6	6
Mean	71.5	21.1	297.7	0.73	5.98	3.51	1.43
S.D.	8.6	4.5	104.3	0.22	0.32	0.20	0.10
Significance	NS	NS	NS	NS	NS	*	*
Statistical method	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 26-4. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg						
Female No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F04451	0.13	16.1	0.20	112.7	65.2	13.4
F04452	0.13	18.2	0.21	122.7	43.2	28.3
F04453	0.11	14.2	0.21	108.4	72.6	18.4
F04454	0.11	17.7	0.22	114.3	67.2	22.3
F04455	0.12	17.6	0.24	122.4	59.9	30.7
F04456	0.17	16.3	0.26	109.2	52.9	19.1
Number of females	6	6	6	6	6	6
Mean	0.13	16.7	0.22	115.0	60.2	22.0
S.D.	0.02	1.5	0.02	6.3	10.7	6.5
Significance	NS	NS	*	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 26-4. (Continued) Individual blood chemical findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg					
Female No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
F04451	141.8	4.05	108.9	9.5	7.0
F04452	142.7	4.03	112.5	9.9	7.4
F04453	141.3	4.35	109.2	9.4	6.8
F04454	143.2	4.62	109.4	9.4	8.5
F04455	141.3	4.28	108.3	9.8	8.1
F04456	142.7	4.51	110.3	9.6	7.5
Number of females	6	6	6	6	6
Mean	142.2	4.31	109.8	9.6	7.6
S.D.	0.8	0.24	1.5	0.2	0.6
Significance	NS	NS	**	NS	NS
Statistical method	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 27-1. Individual blood chemical findings in male rats on termination of recovery period

Control group	Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
	M01107	107.7	29.3	313.9	0.46	5.87	2.83	0.93
	M01108	86.8	35.1	479.1	0.50	5.58	2.82	1.02
	M01109	80.7	26.5	445.5	0.58	5.69	2.82	0.98
	M01110	99.9	30.6	499.4	0.46	5.85	2.95	1.02
	M01111	118.2	46.5	484.9	0.39	6.00	2.98	0.99
	M01112	117.8	42.4	443.5	0.60	5.54	2.76	1.00
Number of males		6	6	6	6	6	6	6
Mean		101.9	35.1	444.4	0.50	5.76	2.86	0.99
S.D.		15.7	7.9	67.7	0.08	0.18	0.09	0.03

(Continued)

Appendix 27-1. (Continued) Individual blood chemical findings in male rats on termination of recovery period

Control group						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M01107	0.13	20.1	0.25	110.2	42.8	30.6
M01108	0.12	13.4	0.23	128.8	48.1	31.1
M01109	0.10	16.9	0.22	120.9	41.2	33.9
M01110	0.11	15.6	0.27	157.5	41.6	55.5
M01111	0.13	14.0	0.23	118.0	70.9	57.9
M01112	0.10	12.7	0.22	121.5	34.5	27.3
Number of males	6	6	6	6	6	6
Mean	0.12	15.5	0.24	126.2	46.5	39.4
S.D.	0.01	2.7	0.02	16.5	12.7	13.6

(Continued)

Appendix 27-1. (Continued) Individual blood chemical findings in male rats on termination of recovery period

Control group	Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
	M01107	143.1	4.09	108.7	9.4	7.6
	M01108	143.4	4.23	106.1	9.3	6.6
	M01109	141.6	4.21	106.7	9.8	7.2
	M01110	142.3	4.41	107.5	9.6	7.1
	M01111	143.1	4.40	107.8	9.8	6.8
	M01112	145.0	4.20	106.1	9.5	6.8
	Number of males	6	6	6	6	6
	Mean	143.1	4.26	107.2	9.6	7.0
	S.D.	1.1	0.12	1.0	0.2	0.4

Appendix 27-2. Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg							
Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
M03307	82.6	23.2	450.0	0.56	5.68	2.91	1.05
M03308	88.0	24.9	436.3	0.39	5.88	2.76	0.89
M03309	94.3	28.2	557.3	0.33	5.67	2.81	0.98
M03310	92.5	47.2	410.4	0.45	5.92	2.82	0.91
M03311	83.1	25.8	566.9	0.33	5.88	3.17	1.17
M03312	72.2	23.0	490.3	0.44	5.78	2.91	1.02
Number of males	6	6	6	6	6	6	6
Mean	85.5	28.7	485.2	0.42	5.80	2.90	1.00
S.D.	8.0	9.3	65.0	0.09	0.11	0.15	0.10
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 27-2. (Continued) Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M03307	0.12	15.7	0.26	140.2	68.0	42.7
M03308	0.12	13.7	0.24	112.1	67.1	68.6
M03309	0.13	19.1	0.24	114.7	58.2	48.0
M03310	0.12	13.9	0.21	115.5	52.1	33.3
M03311	0.12	16.0	0.32	121.1	62.0	84.9
M03312	0.10	13.5	0.23	114.1	43.2	80.1
Number of males	6	6	6	6	6	6
Mean	0.12	15.3	0.25	119.6	58.4	59.6
S.D.	0.01	2.1	0.04	10.5	9.5	21.2
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 27-2. (Continued) Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
M03307	143.2	4.32	107.1	9.7	7.0
M03308	144.8	4.17	107.0	9.8	6.9
M03309	143.8	4.10	106.4	9.7	7.6
M03310	144.2	4.38	107.2	9.8	6.8
M03311	144.0	3.91	108.1	10.0	7.3
M03312	145.2	4.07	107.2	9.8	6.9
Number of males	6	6	6	6	6
Mean	144.2	4.16	107.2	9.8	7.1
S.D.	0.7	0.17	0.5	0.1	0.3
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 27-3. Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg							
Male No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
M04407	104.7	28.1	678.1	0.58	5.76	2.86	0.98
M04408	88.2	27.1	382.0	0.39	5.32	2.62	0.97
M04409	83.2	26.9	330.5	0.29	5.41	2.68	0.98
M04410	91.6	29.6	394.1	0.61	6.11	3.02	0.98
M04411	72.1	24.1	413.5	0.48	5.82	2.81	0.93
M04412	86.1	34.4	292.1	0.35	5.54	2.74	0.98
Number of males	6	6	6	6	6	6	6
Mean	87.7	28.4	415.1	0.45	5.66	2.79	0.97
S.D.	10.7	3.5	136.4	0.13	0.29	0.14	0.02
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 27-3. (Continued) Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg						
Male No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
M04407	0.12	17.1	0.26	133.4	50.1	84.5
M04408	0.14	14.4	0.32	159.5	53.5	72.5
M04409	0.11	13.1	0.23	118.7	45.8	48.5
M04410	0.12	14.1	0.20	110.9	56.6	47.8
M04411	0.12	13.5	0.21	114.5	69.1	42.7
M04412	0.13	13.3	0.24	114.7	46.9	34.4
Number of males	6	6	6	6	6	6
Mean	0.12	14.3	0.24	125.3	53.7	55.1
S.D.	0.01	1.5	0.04	18.5	8.6	19.2
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 27-3. (Continued) Individual blood chemical findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Male No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
M04407	143.9	4.02	106.4	9.6	7.5
M04408	143.0	3.97	107.8	9.2	7.4
M04409	142.6	4.22	106.2	9.3	6.8
M04410	145.2	3.95	106.9	9.9	7.8
M04411	144.6	4.16	106.6	9.8	7.8
M04412	146.1	4.33	107.2	9.7	7.3
Number of males	6	6	6	6	6
Mean	144.2	4.11	106.9	9.6	7.4
S.D.	1.3	0.15	0.6	0.3	0.4
Significance	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 28-1. Individual blood chemical findings in female rats on termination of recovery period

Control group		AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
Female No.								
F01157	100.3	60.1	268.9	0.61	6.15	3.41	1.25	
F01158	77.8	21.5	259.1	0.48	5.83	3.24	1.25	
F01159	82.7	21.2	285.1	0.61	6.07	3.39	1.27	
F01160	92.0	41.5	210.3	0.31	7.38	4.18	1.30	
F01161	95.9	26.8	217.2	0.73	6.07	3.56	1.42	
F01162	79.6	18.6	255.9	0.60	6.12	3.28	1.16	
Number of females	6	6	6	6	6	6	6	
Mean	88.1	31.6	249.4	0.56	6.27	3.51	1.28	
S.D.	9.3	16.2	29.5	0.14	0.56	0.35	0.09	

(Continued)

Appendix 28-1. (Continued) Individual blood chemical findings in female rats on termination of recovery period

Control group		Total bilirubin	Urea nitrogen	Creatinine	Glucose	Total cholesterol	Triglyceride
Female No.		mg/dL	mg/dL	mg/dL	mg/dL	mg/dL	mg/dL
F01157		0.16	18.0	0.35	143.9	71.4	19.4
F01158		0.14	17.9	0.27	117.0	58.1	15.9
F01159		0.18	12.4	0.28	145.1	82.1	40.8
F01160		0.16	16.3	0.28	128.6	85.2	50.3
F01161		0.16	12.5	0.26	137.7	81.7	36.8
F01162		0.17	15.0	0.24	113.9	83.4	41.1
Number of females		6	6	6	6	6	6
Mean		0.16	15.4	0.28	131.0	77.0	34.1
S.D.		0.01	2.5	0.04	13.4	10.4	13.5

(Continued)

Appendix 28-1. (Continued) Individual blood chemical findings in female rats on termination of recovery period

Control group		Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
	Female No.					
F01157		140.9	3.62	109.6	9.3	4.2
F01158		141.3	3.94	110.3	9.5	5.3
F01159		140.9	3.81	108.2	9.4	5.1
F01160		141.7	3.67	108.8	10.3	5.0
F01161		142.3	3.88	109.7	9.8	5.4
F01162		144.2	3.87	108.8	10.0	6.0
Number of females		6	6	6	6	6
Mean		141.9	3.80	109.2	9.7	5.2
S.D.		1.3	0.13	0.8	0.4	0.6

Appendix 28-2. Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
F03357	65.9	19.2	178.8	0.36	6.25	3.45	1.23
F03358	73.8	21.1	310.7	0.58	6.05	3.41	1.29
F03359	88.1	24.1	277.1	1.26	5.76	2.95	1.05
F03360	63.7	17.8	211.5	0.67	6.30	3.46	1.22
F03361	83.8	21.8	231.8	0.86	6.11	3.42	1.27
F03362	89.6	27.9	236.2	0.89	6.24	3.63	1.39
Number of females	6	6	6	6	6	6	6
Mean	77.5	22.0	241.0	0.77	6.12	3.39	1.24
S.D.	11.3	3.6	46.9	0.31	0.20	0.23	0.11
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	STL	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 28-2. (Continued) Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg						
Female No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F03357	0.16	17.4	0.35	120.2	68.5	30.9
F03358	0.17	15.4	0.28	121.0	73.7	32.7
F03359	0.15	17.5	0.31	127.9	73.9	50.6
F03360	0.19	13.2	0.25	136.6	91.8	54.4
F03361	0.18	16.1	0.28	107.2	65.6	16.2
F03362	0.17	17.3	0.23	110.2	62.3	30.2
Number of females	6	6	6	6	6	6
Mean	0.17	16.2	0.28	120.5	72.6	35.8
S.D.	0.01	1.7	0.04	10.9	10.4	14.2
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 28-2. (Continued) Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg					
Female No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
F03357	141.4	3.57	107.9	9.8	4.4
F03358	143.7	3.66	110.9	9.9	5.1
F03359	141.3	4.12	110.0	9.6	5.2
F03360	142.3	3.66	108.3	9.9	4.5
F03361	142.8	4.07	109.7	9.7	5.6
F03362	143.3	4.19	108.1	9.9	6.2
Number of females	6	6	6	6	6
Mean	142.5	3.88	109.2	9.8	5.2
S.D.	1.0	0.28	1.2	0.1	0.7
Significance	NS	NS	NS	NS	---
Statistical method	DU	STL	DU	DU	UA

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Appendix 28-3. Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg							
Female No.	AST IU/L	ALT IU/L	ALP IU/L	γ -GTP IU/L	Total protein g/dL	Albumin g/dL	A/G
F04457	92.8	19.6	208.5	0.73	6.09	3.18	1.09
F04458	69.0	18.4	372.7	0.86	5.40	2.83	1.10
F04459	81.6	22.2	396.2	0.99	5.52	2.86	1.07
F04460	79.8	17.7	236.1	0.49	6.07	3.24	1.15
F04461	77.2	23.7	274.4	1.24	5.81	3.17	1.20
F04462	71.4	20.7	237.0	0.25	6.14	3.57	1.39
Number of females	6	6	6	6	6	6	6
Mean	78.6	20.4	287.5	0.76	5.84	3.14	1.17
S.D.	8.5	2.3	78.3	0.35	0.32	0.27	0.12
Significance	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	STL	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 28-3. (Continued) Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg						
Female No.	Total bilirubin mg/dL	Urea nitrogen mg/dL	Creatinine mg/dL	Glucose mg/dL	Total cholesterol mg/dL	Triglyceride mg/dL
F04457	0.15	15.6	0.30	128.6	74.9	34.0
F04458	0.13	15.7	0.27	126.6	43.2	14.1
F04459	0.18	17.2	0.33	112.3	42.2	11.2
F04460	0.15	15.8	0.25	110.8	47.9	19.2
F04461	0.13	17.1	0.26	128.2	52.4	27.7
F04462	0.14	15.9	0.24	114.4	54.0	35.8
Number of females	6	6	6	6	6	6
Mean	0.15	16.2	0.28	120.2	52.4	23.7
S.D.	0.02	0.7	0.03	8.5	12.0	10.4
Significance	NS	NS	NS	NS	**	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 28-3. (Continued) Individual blood chemical findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg					
Female No.	Na mEq/L	K mEq/L	Cl mEq/L	Ca mg/dL	Inorganic phosphate mg/dL
F04457	139.6	3.97	106.3	9.3	5.2
F04458	142.7	3.96	107.3	9.4	5.7
F04459	143.3	4.08	109.6	9.1	7.0
F04460	143.2	4.03	110.2	9.7	5.8
F04461	142.0	3.87	108.8	9.3	6.0
F04462	142.4	3.84	111.1	9.8	6.9
Number of females	6	6	6	6	6
Mean	142.2	3.96	108.9	9.4	6.1
S.D.	1.4	0.09	1.8	0.3	0.7
Significance	NS	NS	NS	NS	*
Statistical method	DU	STL	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 29-1. Individual necropsy findings in male rats on termination of administration period

Control group		
	Male No.	Findings
	M01101	All organs and tissues
	M01102	All organs and tissues
	M01103	All organs and tissues
	M01104	All organs and tissues
	M01105	All organs and tissues
	M01106	All organs and tissues

Appendix 29-2. Individual necropsy findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg		
Male No.	Findings	
M02201	All organs and tissues	Normal
M02202	All organs and tissues	Normal
M02203	All organs and tissues	Normal
M02204	All organs and tissues	Normal
M02205	All organs and tissues	Normal
M02206	All organs and tissues	Normal

Appendix 29-3. Individual necropsy findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg		
Male No.		Findings
M03301	All organs and tissues	Normal
M03302	All organs and tissues	Normal
M03303	All organs and tissues	Normal
M03304	Liver	Discoloration
	Other organs and tissues	Normal
M03305	All organs and tissues	Normal
M03306	All organs and tissues	Normal

Appendix 29-4. Individual necropsy findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Male No.		Findings
M04401	All organs and tissues	Normal
M04402	Stomach	Ulcer, glandular mucosa
	Liver	Discoloration
	Other organs and tissues	Normal
M04403	All organs and tissues	Normal
M04404	All organs and tissues	Normal
M04405	Liver	Discoloration
	Other organs and tissues	Normal
	Liver	Discoloration
M04406	Other organs and tissues	Normal

Appendix 30-1. Individual necropsy findings in female rats on termination of administration period

Control group		
Female No.		Findings
F01151	All organs and tissues	Normal
F01152	All organs and tissues	Normal
F01153	All organs and tissues	Normal
F01154	All organs and tissues	Normal
F01155	All organs and tissues	Normal
F01156	All organs and tissues	Normal

Appendix 30-2. Individual necropsy findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Female No.		Findings
F02251	All organs and tissues	Normal
F02252	All organs and tissues	Normal
F02253	All organs and tissues	Normal
F02254	All organs and tissues	Normal
F02255	All organs and tissues	Normal
F02256	All organs and tissues	Normal

Appendix 30-3. Individual necropsy findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Female No.		Findings
F03351	All organs and tissues	Normal
F03352	All organs and tissues	Normal
F03353	All organs and tissues	Normal
F03354	All organs and tissues	Normal
F03355	All organs and tissues	Normal
F03356	All organs and tissues	Normal

Appendix 30-4. Individual necropsy findings in female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Female No.		Findings
F04451	All organs and tissues	Normal
F04452	All organs and tissues	Normal
F04453	All organs and tissues	Normal
F04454	All organs and tissues	Normal
F04455	All organs and tissues	Normal
F04456	All organs and tissues	Normal

Appendix 31-1. Individual necropsy findings in male rats on termination of recovery period

Control group		Findings
Male No.		
M01107	All organs and tissues	Normal
M01108	All organs and tissues	Normal
M01109	All organs and tissues	Normal
M01110	All organs and tissues	Normal
M01111	All organs and tissues	Normal
M01112	All organs and tissues	Normal

Appendix 31-2. Individual necropsy findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Male No.	Findings
M03307	All organs and tissues
M03308	All organs and tissues
M03309	All organs and tissues
M03310	All organs and tissues
M03311	All organs and tissues
M03312	All organs and tissues

Appendix 31-3. Individual necropsy findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Male No.	Findings
M04407	All organs and tissues
M04408	All organs and tissues
M04409	All organs and tissues
M04410	All organs and tissues
M04411	All organs and tissues
M04412	All organs and tissues

Appendix 32-1. Individual necropsy findings in female rats on termination of recovery period

Control group		
Female No.		Findings
F01157	All organs and tissues	Normal
F01158	All organs and tissues	Normal
F01159	All organs and tissues	Normal
F01160	All organs and tissues	Normal
F01161	All organs and tissues	Normal
F01162	All organs and tissues	Normal

Appendix 32-2. Individual necropsy findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Female No.		Findings
F03357	All organs and tissues	Normal
F03358	All organs and tissues	Normal
F03359	All organs and tissues	Normal
F03360	All organs and tissues	Normal
F03361	All organs and tissues	Normal
F03362	All organs and tissues	Normal

Appendix 32-3. Individual necropsy findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Female No.	Findings
F04457	All organs and tissues
F04458	All organs and tissues
F04459	All organs and tissues
F04460	All organs and tissues
F04461	All organs and tissues
F04462	All organs and tissues

Appendix 33-1. Individual organ weights of male rats on termination of administration period

Control group																	
Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M01101	412	1.93	0.47	13.3	3.2	646	157	20.3	4.9	579	141	1.48	0.36	13.72	3.33	729	177
M01102	356	2.01	0.56	11.7	3.3	679	191	27.2	7.6	610	171	1.38	0.39	10.05	2.82	674	189
M01103	390	2.16	0.55	14.1	3.6	731	187	26.4	6.8	429	110	1.37	0.35	11.48	2.94	624	160
M01104	367	1.93	0.53	15.7	4.3	725	198	19.6	5.3	455	124	1.35	0.37	11.28	3.07	742	202
M01105	347	1.99	0.57	10.5	3.0	595	171	17.7	5.1	477	137	1.18	0.34	9.70	2.80	829	239
M01106	396	1.96	0.49	12.1	3.1	654	165	20.1	5.1	611	154	1.23	0.31	12.42	3.14	722	182
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	378	2.00	0.53	12.9	3.4	672	178	21.9	5.8	527	140	1.33	0.35	11.44	3.02	720	192
S.D.	25	0.09	0.04	1.9	0.5	52	16	3.9	1.1	82	22	0.11	0.03	1.49	0.20	69	27

(Continued)

Appendix 33-1. (Continued) Individual organ weights of male rats on termination of administration period

Control group Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M01101	2.77	0.67	52.6	12.8	3.23	0.78	730	177
M01102	2.69	0.76	51.6	14.5	3.48	0.98	977	274
M01103	3.45	0.88	49.5	12.7	3.79	0.97	1092	280
M01104	2.88	0.78	58.8	16.0	3.13	0.85	925	252
M01105	2.85	0.82	62.0	17.9	3.32	0.96	994	286
M01106	2.80	0.71	55.0	13.9	3.27	0.83	913	231
Number of males	6	6	6	6	6	6	6	6
Mean	2.91	0.77	54.9	14.6	3.37	0.90	939	250
S.D.	0.27	0.08	4.7	2.0	0.24	0.09	120	41

Appendix 33-2. Individual organ weights of male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M02201	390	2.00	0.51	14.9	3.8	627	161	20.1	5.2	559	143	1.16	0.30	11.51	2.95	722	185
M02202	379	2.05	0.54	13.9	3.7	570	150	20.7	5.5	580	153	1.47	0.39	12.34	3.26	636	168
M02203	408	1.94	0.48	12.5	3.1	668	164	18.3	4.5	729	179	1.42	0.35	14.05	3.44	821	201
M02204	326	1.91	0.59	10.1	3.1	501	154	17.3	5.3	367	113	1.30	0.40	8.99	2.76	603	185
M02205	324	2.04	0.63	12.9	4.0	572	177	20.1	6.2	480	148	1.25	0.39	9.71	3.00	566	175
M02206	332	1.99	0.60	11.6	3.5	644	194	19.8	6.0	332	100	1.04	0.31	9.51	2.86	620	187
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	360	1.99	0.56	12.7	3.5	597	167	19.4	5.5	508	139	1.27	0.36	11.02	3.05	661	184
S.D.	37	0.05	0.06	1.7	0.4	61	16	1.3	0.6	147	29	0.16	0.04	1.96	0.26	94	11
Significance	NS	NS	NS	NS	NS	*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 33-2. (Continued) Individual organ weights of male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M02201	2.62	0.67	52.3	13.4	3.43	0.88	882	226
M02202	3.10	0.82	59.7	15.8	2.92	0.77	896	236
M02203	3.18	0.78	55.2	13.5	2.99	0.73	891	218
M02204	2.63	0.81	56.2	17.2	3.50	1.07	974	299
M02205	2.59	0.80	43.5	13.4	3.28	1.01	865	267
M02206	2.40	0.72	54.5	16.4	3.09	0.93	776	234
Number of males	6	6	6	6	6	6	6	6
Mean	2.75	0.77	53.6	15.0	3.20	0.90	881	247
S.D.	0.31	0.06	5.5	1.7	0.24	0.13	64	31
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 33-3. Individual organ weights of male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M03301	373	1.78	0.48	12.4	3.3	523	140	15.7	4.2	731	196	1.38	0.37	13.25	3.55	676	181
M03302	380	1.95	0.51	14.6	3.8	570	150	19.3	5.1	574	151	1.33	0.35	12.82	3.37	642	169
M03303	387	2.14	0.55	13.4	3.5	636	164	19.7	5.1	517	134	1.25	0.32	12.93	3.34	743	192
M03304	386	2.06	0.53	14.9	3.9	621	161	22.4	5.8	690	179	1.16	0.30	12.85	3.33	797	206
M03305	339	2.02	0.60	12.0	3.5	563	166	21.0	6.2	453	134	1.09	0.32	11.59	3.42	644	190
M03306	369	2.01	0.54	14.8	4.0	644	175	15.6	4.2	472	128	1.22	0.33	12.87	3.49	697	189
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	372	1.99	0.54	13.7	3.7	593	159	19.0	5.1	573	154	1.24	0.33	12.72	3.42	700	188
S.D.	18	0.12	0.04	1.3	0.3	48	12	2.8	0.8	115	28	0.11	0.02	0.57	0.09	61	12
Significance	NS	NS	NS	NS	NS	*	NS	NS	NS	NS	NS	NS	NS	NS	*	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 33-3. (Continued) Individual organ weights of male rats on termination of administration period

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M03301	2.79	0.75	48.9	13.1	3.23	0.87	798	214
M03302	3.07	0.81	63.2	16.6	3.11	0.82	809	213
M03303	2.88	0.74	63.1	16.3	3.36	0.87	888	229
M03304	3.01	0.78	53.0	13.7	3.20	0.83	967	251
M03305	2.62	0.77	47.6	14.0	3.28	0.97	889	262
M03306	3.16	0.86	54.4	14.7	3.30	0.89	917	249
Number of males	6	6	6	6	6	6	6	6
Mean	2.92	0.79	55.0	14.7	3.25	0.88	878	236
S.D.	0.20	0.04	6.8	1.4	0.09	0.05	65	21
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 33-4. Individual organ weights of male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M04401	330	1.92	0.58	11.5	3.5	560	170	21.5	6.5	450	136	1.12	0.34	10.63	3.22	494	150
M04402	367	2.09	0.57	12.7	3.5	571	156	19.7	5.4	386	105	1.34	0.37	13.67	3.72	534	146
M04403	365	2.01	0.55	13.9	3.8	628	172	19.1	5.2	470	129	1.17	0.32	12.97	3.55	587	161
M04404	341	2.05	0.60	12.7	3.7	559	164	21.9	6.4	557	163	1.08	0.32	12.91	3.79	704	206
M04405	431	2.04	0.47	13.4	3.1	650	151	22.3	5.2	888	206	1.52	0.35	16.40	3.81	660	153
M04406	393	2.02	0.51	12.6	3.2	625	159	22.8	5.8	743	189	1.31	0.33	16.16	4.11	783	199
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	371	2.02	0.55	12.8	3.5	599	162	21.2	5.8	582	155	1.26	0.34	13.79	3.70	627	169
S.D.	37	0.06	0.05	0.8	0.3	40	8	1.5	0.6	194	38	0.17	0.02	2.19	0.30	109	26
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 33-4. (Continued) Individual organ weights of male rats on termination of administration period

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M04401	2.45	0.74	46.2	14.0	3.24	0.98	959	291
M04402	3.09	0.84	48.0	13.1	2.93	0.80	746	203
M04403	2.78	0.76	68.6	18.8	3.24	0.89	916	251
M04404	2.68	0.79	50.7	14.9	3.10	0.91	831	244
M04405	3.36	0.78	55.0	12.8	3.22	0.75	948	220
M04406	3.11	0.79	48.0	12.2	3.06	0.78	881	224
Number of males	6	6	6	6	6	6	6	6
Mean	2.91	0.78	52.8	14.3	3.13	0.85	880	239
S.D.	0.33	0.03	8.3	2.4	0.12	0.09	81	31
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 34-1. Individual organ weights of female rats on termination of administration period

Control group																	
Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F01151	265	1.90	0.72	16.9	6.4	468	177	13.7	5.2	566	214	0.92	0.35	8.55	3.23	671	253
F01152	237	1.84	0.78	14.9	6.3	447	189	13.7	5.8	344	145	0.89	0.38	6.87	2.90	482	203
F01153	239	2.03	0.85	15.7	6.6	364	152	15.8	6.6	375	157	0.79	0.33	7.16	3.00	453	190
F01154	233	1.87	0.80	13.6	5.8	435	187	19.9	8.5	621	267	0.82	0.35	7.59	3.26	558	239
F01155	221	1.98	0.90	15.4	7.0	404	183	10.1	4.6	351	159	0.78	0.35	6.70	3.03	426	193
F01156	219	1.92	0.88	11.4	5.2	378	173	11.5	5.3	404	184	0.79	0.36	6.40	2.92	431	197
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	236	1.92	0.82	14.7	6.2	416	177	14.1	6.0	444	188	0.83	0.35	7.21	3.06	504	213
S.D.	17	0.07	0.07	1.9	0.6	41	14	3.5	1.4	119	46	0.06	0.02	0.77	0.15	95	27

(Continued)

Appendix 34-1. (Continued) Individual organ weights of female rats on termination of administration period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F01151	1.86	0.70	71.1	26.8	74.4	28.1
F01152	1.78	0.75	60.3	25.4	88.6	37.4
F01153	1.68	0.70	54.6	22.8	87.1	36.4
F01154	1.72	0.74	62.3	26.7	71.9	30.9
F01155	1.61	0.73	59.7	27.0	74.5	33.7
F01156	1.75	0.80	76.2	34.8	69.8	31.9
Number of females	6	6	6	6	6	6
Mean	1.73	0.74	64.0	27.3	77.7	33.1
S.D.	0.09	0.04	8.0	4.0	8.1	3.5

Appendix 34-2. Individual organ weights of female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F02251	261	1.84	0.70	16.7	6.4	441	169	16.8	6.4	619	237	0.95	0.36	7.52	2.88	524	201
F02252	230	1.95	0.85	15.0	6.5	404	176	13.1	5.7	430	187	0.83	0.36	6.81	2.96	537	233
F02253	208	1.92	0.92	14.6	7.0	418	201	13.0	6.3	436	210	0.81	0.39	6.40	3.08	466	224
F02254	255	1.92	0.75	15.1	5.9	421	165	17.2	6.7	470	184	0.93	0.36	7.85	3.08	534	209
F02255	252	1.90	0.75	14.1	5.6	368	146	23.3	9.2	502	199	0.99	0.39	8.38	3.33	539	214
F02256	239	1.90	0.79	15.6	6.5	457	191	11.9	5.0	405	169	0.81	0.34	7.16	3.00	475	199
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	241	1.91	0.79	15.2	6.3	418	175	15.9	6.6	477	198	0.89	0.37	7.35	3.06	513	213
S.D.	20	0.04	0.08	0.9	0.5	31	20	4.2	1.4	77	24	0.08	0.02	0.72	0.15	33	13
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

(Continued)

Appendix 34-2. (Continued) Individual organ weights of female rats on termination of administration period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F02251	1.92	0.74	48.1	18.4	68.3	26.2
F02252	1.70	0.74	53.9	23.4	88.3	38.4
F02253	1.71	0.82	67.8	32.6	82.7	39.8
F02254	1.88	0.74	60.3	23.6	88.2	34.6
F02255	2.00	0.79	68.3	27.1	72.4	28.7
F02256	1.67	0.70	49.6	20.8	90.5	37.9
Number of females	6	6	6	6	6	6
Mean	1.81	0.76	58.0	24.3	81.7	34.3
S.D.	0.14	0.04	8.9	5.0	9.3	5.6
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 34-3. Individual organ weights of female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F03351	266	1.92	0.72	17.2	6.5	453	170	22.0	8.3	534	201	0.86	0.32	8.45	3.18	504	189
F03352	260	2.11	0.81	14.8	5.7	423	163	16.1	6.2	664	255	0.98	0.38	8.59	3.30	600	231
F03353	241	1.96	0.81	12.6	5.2	378	157	13.1	5.4	448	186	0.90	0.37	7.41	3.07	482	200
F03354	273	1.96	0.72	17.8	6.5	424	155	15.8	5.8	607	222	0.95	0.35	8.92	3.27	557	204
F03355	228	1.76	0.77	12.9	5.7	390	171	15.7	6.9	312	137	0.84	0.37	7.36	3.23	443	194
F03356	236	1.94	0.82	16.1	6.8	373	158	10.2	4.3	643	272	0.79	0.33	6.97	2.95	587	249
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	251	1.94	0.78	15.2	6.1	407	162	15.5	6.2	535	212	0.89	0.35	7.95	3.17	529	211
S.D.	18	0.11	0.05	2.2	0.6	31	7	3.9	1.4	135	49	0.07	0.02	0.80	0.13	62	24
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

(Continued)

DU: Analysis by Dunnett's test.

Appendix 34-3. (Continued) Individual organ weights of female rats on termination of administration period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F03351	1.80	0.68	74.2	27.9	106.7	40.1
F03352	2.07	0.80	68.3	26.3	99.0	38.1
F03353	1.78	0.74	63.2	26.2	95.7	39.7
F03354	2.00	0.73	72.2	26.4	89.0	32.6
F03355	1.75	0.77	65.1	28.6	80.7	35.4
F03356	1.83	0.78	49.6	21.0	93.0	39.4
Number of females	6	6	6	6	6	6
Mean	1.87	0.75	65.4	26.1	94.0	37.6
S.D.	0.13	0.04	8.8	2.7	8.9	3.0
Significance	NS	NS	NS	NS	**	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 34-4. Individual organ weights of female rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg

Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F04451	227	1.86	0.82	13.9	6.1	407	179	18.2	8.0	520	229	0.79	0.35	8.74	3.85	527	232
F04452	215	1.82	0.85	11.6	5.4	360	167	17.3	8.0	402	187	0.79	0.37	8.38	3.90	466	217
F04453	271	1.94	0.72	16.2	6.0	396	146	17.5	6.5	615	227	0.99	0.37	9.98	3.68	537	198
F04454	254	1.76	0.69	14.7	5.8	369	145	15.4	6.1	537	211	0.91	0.36	9.00	3.54	552	217
F04455	250	1.92	0.77	17.9	7.2	409	164	26.6	10.6	425	170	0.91	0.36	9.27	3.71	483	193
F04456	251	1.88	0.75	14.9	5.9	445	177	20.3	8.1	476	190	0.94	0.37	9.16	3.65	536	214
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	245	1.86	0.77	14.9	6.1	398	163	19.2	7.9	496	202	0.89	0.36	9.09	3.72	517	212
S.D.	20	0.07	0.06	2.1	0.6	31	15	3.9	1.6	78	24	0.08	0.01	0.54	0.13	34	14
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**	**	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (**: p<0.01 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 34-4. (Continued) Individual organ weights of female rats on termination of administration period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F04451	1.94	0.85	50.6	22.3	90.4	39.8
F04452	1.84	0.86	57.7	26.8	88.8	41.3
F04453	2.30	0.85	58.4	21.5	85.3	31.5
F04454	2.13	0.84	62.4	24.6	91.1	35.9
F04455	2.15	0.86	70.2	28.1	82.9	33.2
F04456	2.00	0.80	56.4	22.5	101.2	40.3
Number of females	6	6	6	6	6	6
Mean	2.06	0.84	59.3	24.3	90.0	37.0
S.D.	0.17	0.02	6.6	2.7	6.3	4.1
Significance	**	**	NS	NS	*	NS
Statistical method	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05, **: p<0.01 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 35-1. Individual organ weights of male rats on termination of recovery period

Control group																	
Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M01107	419	2.06	0.49	16.3	3.9	659	157	34.3	8.2	615	147	1.44	0.34	11.51	2.75	889	212
M01108	440	2.01	0.46	16.5	3.8	726	165	19.1	4.3	481	109	1.40	0.32	12.31	2.80	784	178
M01109	448	1.95	0.44	17.7	4.0	661	148	28.0	6.3	621	139	1.44	0.32	13.07	2.92	733	164
M01110	418	1.92	0.46	12.9	3.1	670	160	31.5	7.5	395	94	1.37	0.33	12.84	3.07	742	178
M01111	395	1.93	0.49	11.7	3.0	663	168	24.0	6.1	581	147	1.18	0.30	12.25	3.10	712	180
M01112	476	2.27	0.48	18.8	3.9	760	160	24.9	5.2	581	122	1.67	0.35	13.12	2.76	851	179
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	433	2.02	0.47	15.7	3.6	690	160	27.0	6.3	546	126	1.42	0.33	12.52	2.90	785	182
S.D.	28	0.13	0.02	2.8	0.4	43	7	5.5	1.4	89	22	0.16	0.02	0.62	0.16	71	16

(Continued)

Appendix 35-1. (Continued) Individual organ weights of male rats on termination of recovery period

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M01107	2.78	0.66	65.6	15.7	2.96	0.71	1184	283
M01108	3.24	0.74	47.3	10.8	3.51	0.80	1271	289
M01109	3.28	0.73	66.9	14.9	3.09	0.69	1130	252
M01110	2.68	0.64	48.2	11.5	3.32	0.79	1150	275
M01111	2.79	0.71	59.6	15.1	3.27	0.83	1102	279
M01112	4.12	0.87	56.2	11.8	3.73	0.78	1232	259
Number of males	6	6	6	6	6	6	6	6
Mean	3.15	0.73	57.3	13.3	3.31	0.77	1178	273
S.D.	0.54	0.08	8.4	2.2	0.28	0.05	64	14

Appendix 35-2. Individual organ weights of male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M03307	431	2.07	0.48	14.8	3.4	716	166	24.1	5.6	573	133	1.43	0.33	13.21	3.06	730	169
M03308	431	2.03	0.47	17.8	4.1	700	162	19.8	4.6	607	141	1.38	0.32	12.54	2.91	701	163
M03309	434	2.00	0.46	13.6	3.1	703	162	26.5	6.1	432	100	1.42	0.33	12.09	2.79	837	193
M03310	453	2.10	0.46	11.6	2.6	605	134	30.7	6.8	433	96	1.67	0.37	13.61	3.00	843	186
M03311	462	2.02	0.44	16.6	3.6	641	139	38.7	8.4	513	111	1.36	0.29	13.16	2.85	653	141
M03312	456	2.14	0.47	17.8	3.9	659	145	29.0	6.4	554	121	1.45	0.32	13.42	2.94	827	181
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	445	2.06	0.46	15.4	3.5	671	151	28.1	6.3	519	117	1.45	0.33	13.01	2.93	765	172
S.D.	14	0.05	0.01	2.5	0.5	43	14	6.4	1.3	73	18	0.11	0.03	0.58	0.10	81	19
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	---	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	UA	DU	DU	DU	DU

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

UA: Unable to be analyzed because the value in the treated group was the same as the value in the control group.

Appendix 35-2. (Continued) Individual organ weights of male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M03307	3.09	0.72	52.9	12.3	3.60	0.84	1047	243
M03308	2.95	0.68	45.7	10.6	3.26	0.76	1239	287
M03309	3.07	0.71	54.4	12.5	3.51	0.81	1086	250
M03310	3.15	0.70	46.4	10.2	3.13	0.69	1066	235
M03311	2.72	0.59	47.4	10.3	3.69	0.80	1127	244
M03312	3.30	0.72	54.0	11.8	3.31	0.73	1189	261
Number of males	6	6	6	6	6	6	6	6
Mean	3.05	0.69	50.1	11.3	3.42	0.77	1126	253
S.D.	0.20	0.05	4.0	1.0	0.22	0.06	75	19
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 35-3. Individual organ weights of male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Male No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
M04407	478	2.19	0.46	16.2	3.4	674	141	25.7	5.4	399	83	1.66	0.35	13.44	2.81	689	144
M04408	456	2.04	0.45	17.4	3.8	546	120	23.6	5.2	433	95	1.44	0.32	13.99	3.07	553	121
M04409	432	2.06	0.48	20.8	4.8	730	169	24.8	5.7	576	133	1.61	0.37	11.95	2.77	717	166
M04410	423	1.95	0.46	13.0	3.1	621	147	21.5	5.1	349	83	1.41	0.33	13.45	3.18	671	159
M04411	412	2.21	0.54	15.4	3.7	627	152	27.1	6.6	376	91	1.36	0.33	12.03	2.92	762	185
M04412	429	2.11	0.49	15.2	3.5	793	185	22.1	5.2	559	130	1.40	0.33	12.10	2.82	609	142
Number of males	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	438	2.09	0.48	16.3	3.7	665	152	24.1	5.5	449	103	1.48	0.34	12.83	2.93	667	153
S.D.	24	0.10	0.03	2.6	0.6	87	23	2.1	0.6	96	23	0.12	0.02	0.90	0.16	75	22
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	*
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 35-3. (Continued) Individual organ weights of male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Male No.	Kidneys		Adrenals		Testes		Epididymides	
	(g)	(g%)	(mg)	(mg%)	(g)	(g%)	(mg)	(mg%)
M04407	3.07	0.64	58.0	12.1	3.66	0.77	1209	253
M04408	2.64	0.58	60.2	13.2	3.36	0.74	1092	239
M04409	3.18	0.74	51.8	12.0	2.98	0.69	1091	253
M04410	3.16	0.75	67.0	15.8	2.93	0.69	1022	242
M04411	3.31	0.80	58.8	14.3	3.65	0.89	1125	273
M04412	2.93	0.68	67.2	15.7	3.80	0.89	1186	276
Number of males	6	6	6	6	6	6	6	6
Mean	3.05	0.70	60.5	13.9	3.40	0.78	1121	256
S.D.	0.24	0.08	5.9	1.7	0.37	0.09	69	15
Significance	NS	NS	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

Appendix 36-1. Individual organ weights of female rats on termination of recovery period

Control group																	
Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F01157	256	1.85	0.72	17.5	6.8	412	161	14.0	5.5	441	172	0.89	0.35	6.98	2.73	528	206
F01158	221	1.93	0.87	14.5	6.6	392	177	16.5	7.5	373	169	0.87	0.39	6.12	2.77	451	204
F01159	285	1.91	0.67	21.0	7.4	465	163	19.1	6.7	494	173	1.09	0.38	8.63	3.03	500	175
F01160	229	1.84	0.80	22.8	10.0	421	184	20.2	8.8	339	148	0.81	0.35	7.24	3.16	424	185
F01161	260	1.86	0.72	18.3	7.0	471	181	17.1	6.6	382	147	0.89	0.34	7.11	2.73	528	203
F01162	277	1.95	0.70	15.0	5.4	430	155	22.3	8.1	480	173	0.95	0.34	8.12	2.93	630	227
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	255	1.89	0.75	18.2	7.2	432	170	18.2	7.2	418	164	0.92	0.36	7.37	2.89	510	200
S.D.	25	0.05	0.07	3.3	1.5	31	12	2.9	1.2	63	13	0.10	0.02	0.89	0.18	72	18

(Continued)

Appendix 36-1. (Continued) Individual organ weights of female rats on termination of recovery period

Control group Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F01157	1.91	0.75	72.5	28.3	77.8	30.4
F01158	1.93	0.87	66.9	30.3	81.4	36.8
F01159	2.17	0.76	79.4	27.9	88.8	31.2
F01160	1.89	0.83	56.5	24.7	43.1	18.8
F01161	1.88	0.72	79.9	30.7	85.4	32.8
F01162	2.23	0.81	67.3	24.3	75.7	27.3
Number of females	6	6	6	6	6	6
Mean	2.00	0.79	70.4	27.7	75.4	29.6
S.D.	0.16	0.06	8.8	2.7	16.5	6.1

Appendix 36-2. Individual organ weights of female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg

Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F03357	263	1.92	0.73	19.5	7.4	433	165	17.4	6.6	438	167	0.84	0.32	7.00	2.66	587	223
F03358	264	1.87	0.71	16.6	6.3	390	148	16.5	6.3	474	180	0.88	0.33	6.98	2.64	504	191
F03359	250	1.95	0.78	14.7	5.9	408	163	19.8	7.9	475	190	0.96	0.38	7.30	2.92	785	314
F03360	284	1.79	0.63	18.8	6.6	397	140	23.2	8.2	461	162	0.93	0.33	8.06	2.84	721	254
F03361	264	1.96	0.74	19.5	7.4	475	180	23.1	8.8	394	149	0.91	0.34	7.14	2.70	526	199
F03362	263	1.88	0.71	15.7	6.0	350	133	20.3	7.7	468	178	0.93	0.35	6.90	2.62	618	235
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	265	1.90	0.72	17.5	6.6	409	155	20.1	7.6	452	171	0.91	0.34	7.23	2.73	624	236
S.D.	11	0.06	0.05	2.1	0.7	42	18	2.8	1.0	31	15	0.04	0.02	0.43	0.12	110	45
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 36-2. (Continued) Individual organ weights of female rats on termination of recovery period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F03357	1.74	0.66	65.6	24.9	77.0	29.3
F03358	1.84	0.70	81.6	30.9	88.5	33.5
F03359	1.95	0.78	53.4	21.4	74.9	30.0
F03360	1.99	0.70	76.8	27.0	100.8	35.5
F03361	1.87	0.71	57.9	21.9	80.4	30.5
F03362	2.00	0.76	59.4	22.6	105.6	40.2
Number of females	6	6	6	6	6	6
Mean	1.90	0.72	65.8	24.8	87.9	33.2
S.D.	0.10	0.04	11.2	3.7	12.8	4.2
Significance	NS	*	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 36-3. Individual organ weights of female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg

Female No.	Body weight (g)	Brain		Pituitary		Salivary glands		Thyroids		Thymus		Heart		Liver		Spleen	
		(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(mg)	(mg%)	(g)	(g%)	(g)	(g%)	(mg)	(mg%)
F04457	258	1.77	0.69	16.4	6.4	382	148	19.7	7.6	422	164	0.82	0.32	7.24	2.81	518	201
F04458	271	1.90	0.70	21.2	7.8	369	136	26.1	9.6	456	168	0.87	0.32	6.76	2.49	505	186
F04459	217	1.90	0.88	15.2	7.0	336	155	15.4	7.1	292	135	0.81	0.37	5.47	2.52	469	216
F04460	256	1.87	0.73	19.7	7.7	431	168	24.7	9.6	370	145	0.80	0.31	7.04	2.75	576	225
F04461	259	1.90	0.73	15.7	6.1	480	185	18.6	7.2	436	168	0.87	0.34	6.63	2.56	534	206
F04462	239	1.90	0.79	18.1	7.6	409	171	27.7	11.6	240	100	0.75	0.31	6.58	2.75	548	229
Number of females	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Mean	250	1.87	0.75	17.7	7.1	401	161	22.0	8.8	369	147	0.82	0.33	6.62	2.65	525	211
S.D.	19	0.05	0.07	2.4	0.7	51	18	4.8	1.8	87	27	0.05	0.02	0.62	0.14	37	16
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	NS	NS	*	NS	NS
Statistical method	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	STL

Significantly different from the control group (*: p<0.05 by Dunnett's test).

(Continued)

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 36-3. (Continued) Individual organ weights of female rats on termination of recovery period

Female No.	Kidneys		Adrenals		Ovaries	
	(g)	(g%)	(mg)	(mg%)	(mg)	(mg%)
F04457	1.75	0.68	64.6	25.0	91.8	35.6
F04458	1.89	0.70	58.5	21.6	85.6	31.6
F04459	1.67	0.77	67.3	31.0	74.5	34.3
F04460	2.05	0.80	68.9	26.9	87.5	34.2
F04461	1.82	0.70	72.0	27.8	87.9	33.9
F04462	1.78	0.74	68.5	28.7	87.6	36.7
Number of females	6	6	6	6	6	6
Mean	1.83	0.73	66.6	26.8	85.8	34.4
S.D.	0.13	0.05	4.7	3.2	5.9	1.7
Significance	NS	NS	NS	NS	NS	NS
Statistical method	DU	DU	DU	DU	DU	STL

NS: Not significantly different from the control group.

DU: Analysis by Dunnett's test.

STL: Analysis by Steel's test.

Appendix 37-1. Individual histopathological findings in male rats on termination of administration period

Control group		
Male No.	Organ/Tissue	Findings
M01101	Heart	Cellular infiltration: ±
	Other organs and tissues	No abnormality detected
M01102	All organs and tissues	No abnormality detected
M01103	All organs and tissues	No abnormality detected
M01104	Liver	Microgranuloma: ±
	Other organs and tissues	No abnormality detected
M01105	All organs and tissues	No abnormality detected
M01106	Spleen	Hematopoiesis, extramedullary: ±
	Kidney	Cyst, right: ±
	Other organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the heart, lung, trachea, liver, pancreas, sublingual gland, submandibular gland, esophagus, stomach, duodenum, jejunum, ileum, cecum, colon, rectum, thymus, spleen, mandibular lymph node, mesenteric lymph node, kidney, urinary bladder, testis, epididymis, seminal vesicle, prostate, pituitary, adrenal, thyroid, parathyroid, cerebrum, cerebellum, medulla oblongata, spinal cord, sciatic nerve, eyeball, Harderian gland, bone marrow (sternum and femur), bone (sternum and femur), and femur muscle.

Appendix 37-2. Individual histopathological findings in male rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Male No.	Organ/Tissue	Findings
M02201	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
M02202	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
M02203	Pancreas	Decreased, zymogen granules: ±
	Liver	Swelling, hepatocyte, periportal: ±
M02204	Pancreas	Decreased, zymogen granules: ±
	Liver	Swelling, hepatocyte, periportal: ±
M02205	Pancreas	Decreased, zymogen granules: +
	Liver	Swelling, hepatocyte, periportal: ±
M02206	Pancreas	Decreased, zymogen granules: ±
	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: ±

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 37-3. Individual histopathological findings in male rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg		
Male No.	Organ/Tissue	Findings
M03301	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: +
M03302	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: ±
M03303	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: +
M03304	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: +
M03305	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
	Liver	Swelling, hepatocyte, periportal: +
M03306	Pancreas	Decreased, zymogen granules: +
M03306	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 37-4. Individual histopathological findings in male rats on termination of administration period

1,10-dibromodecane group at 200 mg/kg		
Male No.	Organ/Tissue	Findings
M04401	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
	Other organs and tissues	No abnormality detected
M04402	Stomach	Erosion, glandular stomach: +
	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
M04403	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
M04404	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: +
M04405	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected
M04406	Heart	Cellular infiltration: ±
	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the heart, lung, trachea, liver, pancreas, sublingual gland, submandibular gland, esophagus, stomach, duodenum, jejunum, ileum, cecum, colon, rectum, thymus, spleen, mandibular lymph node, mesenteric lymph node, kidney, urinary bladder, testis, epididymis, seminal vesicle, prostate, pituitary, adrenal, thyroid, parathyroid, cerebrum, cerebellum, medulla oblongata, spinal cord, sciatic nerve, eyeball, Harderian gland, bone marrow (sternum and femur), bone (sternum and femur), and femur muscle.

Appendix 38-1. Individual histopathological findings in female rats on termination of administration period

Control group	Female No.	Organ/Tissue	Findings
	F01151	Thyroid	Ultimobranchial remnant: ±
		Other organs and tissues	No abnormality detected
	F01152	Lung	Mineralization, vascular wall, right: ±
		Other organs and tissues	No abnormality detected
F01153	All organs and tissues		No abnormality detected
	F01154	Lung	Mineralization, vascular wall, left: ±
		Other organs and tissues	No abnormality detected
F01155	All organs and tissues		No abnormality detected
F01156	All organs and tissues		No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the heart, lung, trachea, liver, pancreas, sublingual gland, submandibular gland, esophagus, stomach, duodenum, jejunum, ileum, cecum, colon, rectum, thymus, spleen, mandibular lymph node, mesenteric lymph node, kidney, urinary bladder, ovary, uterus, vagina, pituitary, adrenal, thyroid, parathyroid, cerebrum, cerebellum, medulla oblongata, spinal cord, sciatic nerve, eyeball, Harderian gland, bone marrow (sternum and femur), bone (sternum and femur), femur muscle, and mammary gland.

Appendix 38-2. Individual histopathological findings in female rats on termination of administration period

1,10-dibromodecane group at 8 mg/kg

Female No.	Organ/Tissue	Findings
F02251	Liver	Swelling, hepatocyte, periportal: ±
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: ±
F02252	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
F02253	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
F02254	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
F02255	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
F02256	Liver	Swelling, hepatocyte, periportal: ±
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: +

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 38-3. Individual histopathological findings in female rats on termination of administration period

1,10-dibromodecane group at 40 mg/kg

Female No.	Organ/Tissue	Findings
F03351	Liver	Swelling, hepatocyte, periportal: ±
	Liver	Microgranuloma: ±
	Pancreas	Decreased, zymogen granules: +
F03352	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: +
F03353	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: +
F03354	Liver	Swelling, hepatocyte, periportal: ±
	Other organs and tissues	No abnormality detected
F03355	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
F03356	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 38-4. Individual histopathological findings in female rats on termination of administration period

394

1,10-dibromodecane group at 200 mg/kg		
Female No.	Organ/Tissue	Findings
F04451	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
	Thyroid	Ultimobranchial remnant: ±
	Other organs and tissues	No abnormality detected
F04452	Liver	Swelling, hepatocyte, periportal: ±
	Pancreas	Decreased, zymogen granules: ±
	Thyroid	Ultimobranchial remnant: ±
	Other organs and tissues	No abnormality detected
F04453	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: +
F04454	Pancreas	Decreased, zymogen granules: ±
	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: ±
F04455	Other organs and tissues	No abnormality detected
	Lung	Accumulation, foam cell, left: ±
	Liver	Swelling, hepatocyte, periportal: +
	Liver	Microgranuloma: ±
F04456	Pancreas	Decreased, zymogen granules: +
	Other organs and tissues	No abnormality detected
	Heart	Cellular infiltration: ±
	Lung	Mineralization, vascular wall, left: ±
	Liver	Swelling, hepatocyte, periportal: +
	Pancreas	Decreased, zymogen granules: +
	Other organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight; +: mild; 2+: moderate; 3+: marked.

Examined the heart, lung, trachea, liver, pancreas, sublingual gland, submandibular gland, esophagus, stomach, duodenum, jejunum, ileum, cecum, colon, rectum, thymus, spleen, mandibular lymph node, mesenteric lymph node, kidney, urinary bladder, ovary, uterus, vagina, pituitary, adrenal, thyroid, parathyroid, cerebrum, cerebellum, medulla oblongata, spinal cord, sciatic nerve, eyeball, Harderian gland, bone marrow (sternum and femur), bone (sternum and femur), femur muscle, and mammary gland.

Appendix 39-1. Individual histopathological findings in male rats on termination of recovery period

Control group	Male No.	Organ/Tissue	Findings
	M01107	Liver	Microgranuloma: ±
		Other organs and tissues	No abnormality detected
M01108		All organs and tissues	No abnormality detected
M01109		All organs and tissues	No abnormality detected
M01110		All organs and tissues	No abnormality detected
M01111		All organs and tissues	No abnormality detected
M01112		All organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 39-2. Individual histopathological findings in male rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg		
Male No.	Organ/Tissue	Findings
M03307	All organs and tissues	No abnormality detected
M03308	All organs and tissues	No abnormality detected
M03309	All organs and tissues	No abnormality detected
M03310	Liver Other organs and tissues	Swelling, hepatocyte, periportal: ± No abnormality detected
M03311	Liver Liver Other organs and tissues	Swelling, hepatocyte, periportal: ± Microgranuloma: ± No abnormality detected
M03312	All organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 39-3. Individual histopathological findings in male rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg		
Male No.	Organ/Tissue	Findings
M04407	All organs and tissues	No abnormality detected
M04408	Liver	Swelling, hepatocyte, periportal: ±
	Other organs and tissues	No abnormality detected
M04409	All organs and tissues	No abnormality detected
M04410	Liver	Swelling, hepatocyte, periportal: ±
	Other organs and tissues	No abnormality detected
M04411	All organs and tissues	No abnormality detected
M04412	Liver	Swelling, hepatocyte, periportal: ±
	Other organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Appendix 40-1. Individual histopathological findings in female rats on termination of recovery period

Control group		
Female No.	Organ/Tissue	Findings
F01157	All organs and tissues	No abnormality detected
F01158	All organs and tissues	No abnormality detected
F01159	All organs and tissues	No abnormality detected
F01160	All organs and tissues	No abnormality detected
F01161	All organs and tissues	No abnormality detected
F01162	All organs and tissues	No abnormality detected

Examined the liver, and pancreas.

Appendix 40-2. Individual histopathological findings in female rats on termination of recovery period

1,10-dibromodecane group at 40 mg/kg		
Female No.	Organ/Tissue	Findings
F03357	All organs and tissues	No abnormality detected
F03358	All organs and tissues	No abnormality detected
F03359	All organs and tissues	No abnormality detected
F03360	All organs and tissues	No abnormality detected
F03361	All organs and tissues	No abnormality detected
F03362	All organs and tissues	No abnormality detected

Examined the liver, and pancreas.

Appendix 40-3. Individual histopathological findings in female rats on termination of recovery period

1,10-dibromodecane group at 200 mg/kg		
Female No.	Organ/Tissue	Findings
F04457	Liver	Swelling, hepatocyte, periportal: ±
	Other organs and tissues	No abnormality detected
F04458	All organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: ±
F04459	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: ±
F04460	Other organs and tissues	No abnormality detected
	Liver	Swelling, hepatocyte, periportal: ±
F04461	Other organs and tissues	No abnormality detected
	All organs and tissues	No abnormality detected
F04462	All organs and tissues	No abnormality detected

Grade of histopathological findings: ±: slight, +: mild, 2+: moderate, 3+: marked.

Examined the liver, and pancreas.

Stability of 1,10-dibromodecane in test preparations (Study No. 095027)

Test article (Lot No.) : 1,10-dibromodecane (Lot No. VQHMG)
 Vehicle : Corn oil
 Form : Solution
 Method : GC
 Date of analysis : September 3, 2008 and September 11, 2008
 Testing facility : Hashima Laboratory, Nihon Bioresearch Inc.

Results

Concentration of analyte (mg/mL)	Storage period	Measured concentrations (mg/mL)			Mean concentration (mg/mL)	Recovery rate ²⁾ (%)	Stability ³⁾ (%)
		1st	2nd	3rd			
1	Initial	0.9485	0.9941	0.9847	0.9758	97.6	-
	8 days after preparation ¹⁾	0.9814	0.9804	0.9518	0.9712	97.1	99.5
20	Initial	19.78	19.71	19.82	19.77	98.9	-
	8 days after preparation ¹⁾	19.30	19.28	19.32	19.30	96.5	97.6
200	Initial	196.9	195.9	196.0	196.3	98.2	-
	8 days after preparation ¹⁾	195.6	196.2	197.6	196.5	98.3	100.1

1) Stored at room temperature (set at 23 °C; values by actual measurement: 22.7 – 23.2°C), under lightproof and airtight conditions for 6 hours after being stored under refrigerated (set at 4 °C; values by actual measurement: 3.4 – 5.6°C), under lightproof and airtight conditions for 8 days.

2) Acceptable range: within ±10% of the prescribed concentrations.

3) Acceptable range: not less than 90%.

GLP:

This study was conducted in compliance with the OECD Guidelines for Safety Studies on Chemicals (OECD GLP Standards) and the Standards for Testing Facilities for Implementation of Studies of Novel Chemical Substances.

Concentrations of 1,10-dibromodecane
in dosing preparations at the start of administration in male rats

Test article (Lot No.): 1,10-dibromodecane (Lot No. VQHMG)
Vehicle: Corn oil
Date of preparation: November 7, 2008
Form: Solution
Method: GC
Date of analysis: November 7, 2008
Testing facility: Hashima Laboratory, Nihon Bioresearch Inc.

Results

Concentration of 1,10-dibromodecane (mg/mL)	Measured concentrations (mg/mL)				Recovery rate (%)
	1st	2nd	3rd	Mean	
1.6	1.496	1.500	1.500	1.499	93.7
8	7.938	7.992	8.062	7.997	100.0
40	38.77	39.06	39.07	38.97	97.4

The concentration of each preparation was within the acceptable range ($100 \pm 10\%$).

GLP:

This study was conducted in compliance with the OECD Guidelines for Safety Studies on Chemicals (OECD GLP Standards) and the Standards for Testing Facilities for Implementation of Studies of Novel Chemical Substances.

Concentrations of 1,10-dibromodecane
in dosing preparations at the end of administration in female rats

Test article (Lot No.): 1,10-dibromodecane (Lot No. VQHMG)
Vehicle: Corn oil
Date of preparation: December 3, 2008
Form: Solution
Method: GC
Date of analysis: December 4, 2008
Testing facility: Hashima Laboratory, Nihon Bioresearch Inc.

Results

Concentration of 1,10-dibromodecane (mg/mL)	Measured concentrations (mg/mL)				Recovery rate (%)
	1st	2nd	3rd	Mean	
1.6	1.529	1.509	1.525	1.521	95.1
8	7.918	7.943	8.066	7.976	99.7
40	41.17	42.08	42.05	41.77	104.4

The concentration of each preparation was within the acceptable range ($100 \pm 10\%$).

GLP:

This study was conducted in compliance with the OECD Guidelines for Safety Studies on Chemicals (OECD GLP Standards) and the Standards for Testing Facilities for Implementation of Studies of Novel Chemical Substances.

Attachment 4-1. General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
M00001	M04401	N	N	N	N	N	N
M00002	M01112	N	N	N	N	N	N
M00003	M04412	N	N	N	N	N	N
M00004	M04409	N	N	N	N	N	N
M00005	M01110	N	N	N	N	N	N
M00006	M03312	N	N	N	N	N	N
M00007	M03305	N	N	N	N	N	N
M00008	M01103	N	N	N	N	N	N
M00009	M03306	N	N	N	N	N	N
M00010	M01108	N	N	N	N	N	N
M00011	M03302	N	N	N	N	N	N
M00012	EG,MA	N	N	N	N	N	N
M00013	EG,MA	N	N	N	N	N	N
M00014	M02201	N	N	N	N	N	N
M00015	M03311	N	N	N	N	N	N
M00016	M01111	N	N	N	N	N	N
M00017	M04406	N	N	N	N	N	N
M00018	EG	N	N	N	N	N	N
M00019	M03301	N	N	N	N	N	N
M00020	M01106	N	N	N	N	N	N
M00021	M02205	N	N	N	N	N	N
M00022	M04404	N	N	N	N	N	N
M00023	M04402	N	N	N	N	N	N
M00024	EG	N	N	N	N	N	N
M00025	M04411	N	N	N	N	N	N

EG: Excluded from grouping because body weight was extremely different from the mean.

(Continued)

MA: Monitor animal.

N: Normal.

Attachment 4-1. (Continued) General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Acclimatization period						
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7 #
M00001	M04401	N	N	N	N	N	N	N
M00002	M01112	N	N	N	N	N	N	N
M00003	M04412	N	N	N	N	N	N	N
M00004	M04409	N	N	N	N	N	N	N
M00005	M01110	N	N	N	N	N	N	N
M00006	M03312	N	N	N	N	N	N	N
M00007	M03305	N	N	N	N	N	N	N
M00008	M01103	N	N	N	N	N	N	N
M00009	M03306	N	N	N	N	N	N	N
M00010	M01108	N	N	N	N	N	N	N
M00011	M03302	N	N	N	N	N	N	N
M00012	EG,MA	N	N	N	N	N	N	N
M00013	EG,MA	N	N	N	N	N	N	N
M00014	M02201	N	N	N	N	N	N	N
M00015	M03311	N	N	N	N	N	N	N
M00016	M01111	N	N	N	N	N	N	N
M00017	M04406	N	N	N	N	N	N	N
M00018	EG	N	N	N	N	N	N	N *
M00019	M03301	N	N	N	N	N	N	N
M00020	M01106	N	N	N	N	N	N	N
M00021	M02205	N	N	N	N	N	N	N
M00022	M04404	N	N	N	N	N	N	N
M00023	M04402	N	N	N	N	N	N	N
M00024	EG	N	N	N	N	N	N	N *
M00025	M04411	N	N	N	N	N	N	N

#: Day of grouping.

*: Euthanized.

EG: Excluded from grouping because body weight was extremely different from the mean.

MA: Monitor animal.

N: Normal.

Attachment 4-2. General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
M00026	M01107	N	N	N	N	N	N
M00027	M03304	N	N	N	N	N	N
M00028	M01105	N	N	N	N	N	N
M00029	M02206	N	N	N	N	N	N
M00030	M04410	N	N	N	N	N	N
M00031	M03310	N	N	N	N	N	N
M00032	M04403	N	N	N	N	N	N
M00033	M01109	N	N	N	N	N	N
M00034	M01104	N	N	N	N	N	N
M00035	M03308	N	N	N	N	N	N
M00036	EG	N	N	N	N	N	N
M00037	M01102	N	N	N	N	N	N
M00038	M02204	N	N	N	N	N	N
M00039	M04408	N	N	N	N	N	N
M00040	M01101	N	N	N	N	N	N
M00041	EG	N	N	N	N	N	N
M00042	M04405	N	N	N	N	N	N
M00043	M04407	N	N	N	N	N	N
M00044	M03309	N	N	N	N	N	N
M00045	EG	N	N	N	N	N	N
M00046	EG	N	N	N	N	N	N
M00047	EG	N	N	N	N	N	N
M00048	M02202	N	N	N	N	N	N
M00049	M02203	N	N	N	N	N	N
M00050	EG	N	N	N	N	N	N

EG: Excluded from grouping because body weight was extremely different from the mean.

(Continued)

N: Normal.

Attachment 4-2. (Continued) General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Acclimatization period						
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7 #
M00026	M01107	N	N	N	N	N	N	N
M00027	M03304	N	N	N	N	N	N	N
M00028	M01105	N	N	N	N	N	N	N
M00029	M02206	N	N	N	N	N	N	N
M00030	M04410	N	N	N	N	N	N	N
M00031	M03310	N	N	N	N	N	N	N
M00032	M04403	N	N	N	N	N	N	N
M00033	M01109	N	N	N	N	N	N	N
M00034	M01104	N	N	N	N	N	N	N
M00035	M03308	N	N	N	N	N	N	N
M00036	EG	N	N	N	N	N	N	N *
M00037	M01102	N	N	N	N	N	N	N
M00038	M02204	N	N	N	N	N	N	N
M00039	M04408	N	N	N	N	N	N	N
M00040	M01101	N	N	N	N	N	N	N
M00041	EG	N	N	N	N	N	N	N *
M00042	M04405	N	N	N	N	N	N	N
M00043	M04407	N	N	N	N	N	N	N
M00044	M03309	N	N	N	N	N	N	N
M00045	EG	N	N	N	N	N	N	N *
M00046	EG	N	N	N	N	N	N	N *
M00047	EG	N	N	N	N	N	N	N *
M00048	M02202	N	N	N	N	N	N	N
M00049	M02203	N	N	N	N	N	N	N
M00050	EG	N	N	N	N	N	N	N *

#: Day of grouping.

*: Euthanized.

EG: Excluded from grouping because body weight was extremely different from the mean.

N: Normal.

Attachment 4-3. General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
M00051	M03303	N	N	N	N	N	N
M00052	M03307	N	N	N	N	N	N
Number of males		52	52	52	52	52	52
N		52	52	52	52	52	52

N: Normal.

(Continued)

Attachment 4-3. (Continued) General signs in male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Acclimatization period						
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7 #
M00051	M03303	N	N	N	N	N	N	N
M00052	M03307	N	N	N	N	N	N	N
Number of males		52	52	52	52	52	52	52
N		52	52	52	52	52	52	52

#. Day of grouping.

N: Normal.

Attachment 5-1. General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
F00001	F02254	N	N	N	N	N	N
F00002	F04459	N	N	N	N	N	N
F00003	EG	N	N	N	N	N	N
F00004	F04454	N	N	N	N	N	N
F00005	F03360	N	N	N	N	N	N
F00006	EG	N	N	N	N	N	N
F00007	F03357	N	N	N	N	N	N
F00008	F04457	N	N	N	N	N	N
F00009	F02253	N	N	N	N	N	N
F00010	F01160	N	N	N	N	N	N
F00011	F01156	N	N	N	N	N	N
F00012	F02255	N	N	N	N	N	N
F00013	F04453	N	N	N	N	N	N
F00014	EG	N	N	N	N	N	N
F00015	EG	N	N	N	N	N	N
F00016	F03361	N	N	N	N	N	N
F00017	F02251	N	N	N	N	N	N
F00018	F01161	N	N	N	N	N	N
F00019	F04452	N	N	N	N	N	N
F00020	EG	N	N	N	N	N	N
F00021	F02252	N	N	N	N	N	N
F00022	F04456	N	N	N	N	N	N
F00023	F03354	N	N	N	N	N	N
F00024	EG	N	N	N	N	N	N
F00025	F01151	N	N	N	N	N	N

EG: Excluded from grouping because body weight was extremely different from the mean.

(Continued)

N: Normal.

Attachment 5-1. (Continued) General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Acclimatization period								
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7	11-Nov-08 Day 8	12-Nov-08 Day 9 #
F00001	F02254	N	N	N	N	N	N	N	N	N
F00002	F04459	N	N	N	N	N	N	N	N	N
F00003	EG	N	N	N	N	N	N	N	N	N *
F00004	F04454	N	N	N	N	N	N	N	N	N
F00005	F03360	N	N	N	N	N	N	N	N	N
F00006	EG	N	N	N	N	N	N	N	N	N *
F00007	F03357	N	N	N	N	N	N	N	N	N
F00008	F04457	N	N	N	N	N	N	N	N	N
F00009	F02253	N	N	N	N	N	N	N	N	N
F00010	F01160	N	N	N	N	N	N	N	N	N
F00011	F01156	N	N	N	N	N	N	N	N	N
F00012	F02255	N	N	N	N	N	N	N	N	N
F00013	F04453	N	N	N	N	N	N	N	N	N
F00014	EG	N	N	N	N	N	N	N	N	N *
F00015	EG	N	N	N	N	N	N	N	N	N *
F00016	F03361	N	N	N	N	N	N	N	N	N
F00017	F02251	N	N	N	N	N	N	N	N	N
F00018	F01161	N	N	N	N	N	N	N	N	N
F00019	F04452	N	N	N	N	N	N	N	N	N
F00020	EG	N	N	N	N	N	N	N	N	N *
F00021	F02252	N	N	N	N	N	N	N	N	N
F00022	F04456	N	N	N	N	N	N	N	N	N
F00023	F03354	N	N	N	N	N	N	N	N	N
F00024	EG	N	N	N	N	N	N	N	N	N *
F00025	F01151	N	N	N	N	N	N	N	N	N

#: Day of grouping.

*: Euthanized.

EG: Excluded from grouping because body weight was extremely different from the mean.

N: Normal.

Attachment 5-2. General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
F00026	EG	N	N	N	N	N	N
F00027	EG	N	N	N	N	N	N
F00028	F04462	N	N	N	N	N	N
F00029	F03355	N	N	N	N	N	N
F00030	F03356	N	N	N	N	N	N
F00031	F01155	N	N	N	N	N	N
F00032	F01158	N	N	N	N	N	N
F00033	F03351	N	N	N	N	N	N
F00034	F02256	N	N	N	N	N	N
F00035	F03352	N	N	N	N	N	N
F00036	F03358	N	N	N	N	N	N
F00037	F04451	N	N	N	N	N	N
F00038	F01154	N	N	N	N	N	N
F00039	F03362	N	N	N	N	N	N
F00040	F04460	N	N	N	N	N	N
F00041	F01162	N	N	N	N	N	N
F00042	EG	N	N	N	N	N	N
F00043	F01152	N	N	N	N	N	N
F00044	F03353	N	N	N	N	N	N
F00045	F04458	N	N	N	N	N	N
F00046	F03359	N	N	N	N	N	N
F00047	F04455	N	N	N	N	N	N
F00048	EG	N	N	N	N	N	N
F00049	F01157	N	N	N	N	N	N
F00050	F01159	N	N	N	N	N	N

EG: Excluded from grouping because body weight was extremely different from the mean.

(Continued)

N: Normal.

Attachment 5-2. (Continued) General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Acclimatization period									
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7	11-Nov-08 Day 8	12-Nov-08 Day 9	#
F00026	EG	N	N	N	N	N	N	N	N	N	N *
F00027	EG	N	N	N	N	N	N	N	N	N	N *
F00028	F04462	N	N	N	N	N	N	N	N	N	N
F00029	F03355	N	N	N	N	N	N	N	N	N	N
F00030	F03356	N	N	N	N	N	N	N	N	N	N
F00031	F01155	N	N	N	N	N	N	N	N	N	N
F00032	F01158	N	N	N	N	N	N	N	N	N	N
F00033	F03351	N	N	N	N	N	N	N	N	N	N
F00034	F02256	N	N	N	N	N	N	N	N	N	N
F00035	F03352	N	N	N	N	N	N	N	N	N	N
F00036	F03358	N	N	N	N	N	N	N	N	N	N
F00037	F04451	N	N	N	N	N	N	N	N	N	N
F00038	F01154	N	N	N	N	N	N	N	N	N	N
F00039	F03362	N	N	N	N	N	N	N	N	N	N
F00040	F04460	N	N	N	N	N	N	N	N	N	N
F00041	F01162	N	N	N	N	N	N	N	N	N	N
F00042	EG	N	N	N	N	N	N	N	N	N	N *
F00043	F01152	N	N	N	N	N	N	N	N	N	N
F00044	F03353	N	N	N	N	N	N	N	N	N	N
F00045	F04458	N	N	N	N	N	N	N	N	N	N
F00046	F03359	N	N	N	N	N	N	N	N	N	N
F00047	F04455	N	N	N	N	N	N	N	N	N	N
F00048	EG	N	N	N	N	N	N	N	N	N	N *
F00049	F01157	N	N	N	N	N	N	N	N	N	N
F00050	F01159	N	N	N	N	N	N	N	N	N	N

#: Day of grouping.

*: Euthanized.

EG: Excluded from grouping because body weight was extremely different from the mean.

N: Normal.

Attachment 5-3. General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period					
		29-Oct-08 Day 0	30-Oct-08 Day 1	31-Oct-08 Day 2	01-Nov-08 Day 3	02-Nov-08 Day 4	03-Nov-08 Day 5
F00051	F01153	N	N	N	N	N	N
F00052	F04461	N	N	N	N	N	N
Number of females		52	52	52	52	52	52
N		52	52	52	52	52	52

N: Normal.

(Continued)

Attachment 5-3. (Continued) General signs in female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Acclimatization period								
		04-Nov-08 Day 1	05-Nov-08 Day 2	06-Nov-08 Day 3	07-Nov-08 Day 4	08-Nov-08 Day 5	09-Nov-08 Day 6	10-Nov-08 Day 7	11-Nov-08 Day 8	12-Nov-08 Day 9 #
F00051	F01153	N	N	N	N	N	N	N	N	N
F00052	F04461	N	N	N	N	N	N	N	N	N
Number of females		52	52	52	52	52	52	52	52	52
N		52	52	52	52	52	52	52	52	52

#: Day of grouping.

N: Normal.

Attachment 6-1. Body weights (g) of male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period		Acclimatization period
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7 #
M00001	M04401	98	137	207
M00002	M01112	100	141	213
M00003	M04412	97	130	192
M00004	M04409	103	137	196
M00005	M01110	101	138	195
M00006	M03312	103	143	216
M00007	M03305	101	136	201
M00008	M01103	101	144	216
M00009	M03306	100	133	211
M00010	M01108	100	133	201
M00011	M03302	96	142	204
M00012	EG,MA	98	132	183 L
M00013	EG,MA	105	143	219
M00014	M02201	97	137	204
M00015	M03311	98	138	208
M00016	M01111	104	140	193
M00017	M04406	100	139	208
M00018	EG	94	126 L	187
M00019	M03301	104	142	194
M00020	M01106	99	140	211
M00021	M02205	98	137	198
M00022	M04404	100	142	207
M00023	M04402	100	138	205
M00024	EG	98	131	184
M00025	M04411	102	135	194

#: Day of grouping.

EG: Excluded from grouping because body weight was extremely different from the mean.

MA: Monitor animal.

L: Minimum body weight.

Attachment 6-2. Body weights (g) of male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period		Acclimatization period
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7 #
M00026	M01107	103	142	209
M00027	M03304	99	140	213
M00028	M01105	98	135	205
M00029	M02206	100	135	196
M00030	M04410	98	133	205
M00031	M03310	103	140	202
M00032	M04403	100	137	208
M00033	M01109	101	140	201
M00034	M01104	98	136	205
M00035	M03308	100	135	196
M00036	EG	106 H	146 H	223 H
M00037	M01102	98	135	197
M00038	M02204	102	141	210
M00039	M04408	90	141	210
M00040	M01101	88 L	138	199
M00041	EG	104	144	222
M00042	M04405	106 H	146 H	218
M00043	M04407	103	141	214
M00044	M03309	99	135	193
M00045	EG	101	134	189
M00046	EG	103	145	220
M00047	EG	102	132	188
M00048	M02202	98	138	203
M00049	M02203	101	142	216
M00050	EG	99	136	188

#: Day of grouping.

EG: Excluded from grouping because body weight was extremely different from the mean.

L: Minimum body weight.

H: Maximum body weight.

Attachment 6-3. Body weights (g) of male rats during quarantine and acclimatization

Quarantine/ acclimatization male No.	Male No.	Quarantine period		Acclimatization period
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7 #
M00051	M03303	99	134	208
M00052	M03307	104	143	207
Number of males		52	52	52
Mean		100	138	204
S.D.		3	4	10

#: Day of grouping.

Attachment 7-1. Body weights (g) of female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period		Acclimatization period	
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7	12-Nov-08 Day 9 #
F00001	F02254	89	116	165	170
F00002	F04459	86	115	151	162
F00003	EG	86	112 L	143	149
F00004	F04454	89	116	155	169
F00005	F03360	91	121	168	174
F00006	EG	86	112 L	150	152
F00007	F03357	91	118	159	156
F00008	F04457	89	115	150	167
F00009	F02253	92	116	145	157
F00010	F01160	87	115	146	155
F00011	F01156	90	116	155	156
F00012	F02255	78 L	121	165	171
F00013	F04453	91	125	165	180
F00014	EG	86	116	151	151
F00015	EG	90	122	177	185
F00016	F03361	89	117	156	159
F00017	F02251	95 H	126	174	179
F00018	F01161	88	117	164	167
F00019	F04452	88	114	151	157
F00020	EG	93	127	176	185
F00021	F02252	93	116	154	160
F00022	F04456	89	119	156	169
F00023	F03354	93	122	163	172
F00024	EG	94	129 H	170	183
F00025	F01151	93	123	168	176

#: Day of grouping.

EG: Excluded from grouping because body weight was extremely different from the mean.

L: Minimum body weight.

H: Maximum body weight.

Attachment 7-2. Body weights (g) of female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period		Acclimatization period	
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7	12-Nov-08 Day 9 #
F00026	EG	88	115	168	183
F00027	EG	91	123	179	194
F00028	F04462	90	117	149	160
F00029	F03355	93	120	159	166
F00030	F03356	93	120	160	171
F00031	F01155	89	116	157	162
F00032	F01158	89	120	161	169
F00033	F03351	94	126	167	180
F00034	F02256	93	119	157	164
F00035	F03352	91	123	164	175
F00036	F03358	91	118	161	160
F00037	F04451	91	118	154	164
F00038	F01154	93	123	155	168
F00039	F03362	92	121	161	167
F00040	F04460	89	114	163	164
F00041	F01162	92	123	165	176
F00042	EG	93	125	189 H	197 H
F00043	F01152	89	114	150	159
F00044	F03353	89	116	158	157
F00045	F04458	92	122	169	176
F00046	F03359	87	117	161	167
F00047	F04455	92	123	170	178
F00048	EG	88	114	139 L	147 L
F00049	F01157	94	123	166	173
F00050	F01159	88	115	168	178

#: Day of grouping.

EG: Excluded from grouping because body weight was extremely different from the mean.

L: Minimum body weight.

H: Maximum body weight.

Attachment 7-3. Body weights (g) of female rats during quarantine and acclimatization

Quarantine/ acclimatization female No.	Female No.	Quarantine period		Acclimatization period	
		30-Oct-08 Day 1	03-Nov-08 Day 5	10-Nov-08 Day 7	12-Nov-08 Day 9 #
F00051	F01153	95 H	124	155	169
F00052	F04461	91	117	161	166
Number of females		52	52	52	52
Mean		90	119	160	168
S.D.		3	4	10	11

#: Day of grouping.

H: Maximum body weight.

Background Data

Hematological findings			Crl:CD (SD) Female Rats 10 weeks			
Exam.item	Unit	N	Value			
			Mean ± S.D.	Min.	Max.	Range of 2S.D.
RBC	$10^4/\mu\text{L}$	29	767 ± 36	682	832	695 - 839
HGB	g/dL	29	14.7 ± 0.5	13.7	15.6	13.7 - 15.7
HCT	%	29	42.5 ± 1.2	39.9	44.7	40.1 - 44.9
MCV	fL	29	55.5 ± 1.7	51.4	60.0	52.1 - 58.9
MCH	pg	29	19.2 ± 0.6	18.1	20.4	18.0 - 20.4
MCHC	g/dL	29	34.5 ± 0.4	33.7	35.5	33.7 - 35.3
PLT	$10^4/\mu\text{L}$	29	115.6 ± 11.3	91.7	138.2	93.0 - 138.2
RET	%	29	2.92 ± 0.71	1.65	4.32	1.50 - 4.34
PT	sec	29	15.1 ± 0.7	13.7	16.2	13.7 - 16.5
APTT	sec	29	17.1 ± 0.5	16.0	18.2	16.1 - 18.1
Fbg	mg/dL	29	185.6 ± 12.6	164.3	212.4	160.4 - 210.8
WBC	$10^2/\mu\text{L}$	29	47.1 ± 14.3	24.8	88.5	18.5 - 75.7
Differential leukocyte (%)						
LYMPH	%	29	78.5 ± 7.1	65.2	87.8	
NEUT	%	29	17.6 ± 6.8	8.9	30.0	
EO	%	29	1.6 ± 0.5	0.6	2.6	
BASO	%	29	0.0 ± 0.1	0.0	0.3	
MONO	%	29	2.3 ± 0.7	1.2	4.0	

N: Number of animals.

Hashima Laboratory, Nihon Bioresearch Inc.

Prepared: 2007.08

Background Data

Blood chemical findings			Crl:CD (SD) Male Rats 10 weeks				
Exam.item	Unit	N	Value				
			Mean	± S.D.	Min.	Max.	Range of 2S.D.
AST	IU/ L	30	83.7	± 14.2	58.2	130.0	55.3 - 112.1
ALT	IU/ L	30	28.3	± 8.3	16.9	56.9	11.7 - 44.9
ALP	IU/ L	30	612.8	± 123.7	380.4	904.0	365.4 - 860.2
T-Chol	mg/dL	30	56.6	± 13.0	31.4	81.2	30.6 - 82.6
TG	mg/dL	30	37.3	± 14.6	16.7	68.2	8.1 - 66.5
T-Bil	mg/dL	30	0.11	± 0.01	0.09	0.15	0.09 - 0.13
UN	mg/dL	30	15.4	± 1.8	12.4	20.6	11.8 - 19.0
CRE	mg/dL	30	0.23	± 0.03	0.18	0.29	0.17 - 0.29
IP	mg/dL	30	8.3	± 0.7	6.5	9.5	6.9 - 9.7
Ca	mg/dL	30	9.7	± 0.3	9.1	10.2	9.1 - 10.3
Glu	mg/dL	30	120.3	± 11.0	93.8	138.6	98.3 - 142.3
Na	mEq/L	30	143.0	± 1.1	140.6	144.9	140.8 - 145.2
K	mEq/L	30	4.21	± 0.26	3.77	4.80	3.69 - 4.73
Cl	mEq/L	30	104.8	± 1.1	101.6	106.7	102.6 - 107.0
TP	g/dL	30	5.54	± 0.22	5.05	5.95	5.10 - 5.98
A/G		30	1.09	± 0.09	0.89	1.21	0.91 - 1.27
alb	%	30	52.1	± 2.0	47.2	54.8	48.1 - 56.1
α_1 -glob	%	30	21.0	± 1.9	16.0	23.7	17.2 - 24.8
α_2 -glob	%	30	7.3	± 0.7	6.3	8.7	5.9 - 8.7
β -glob	%	30	15.2	± 1.2	12.7	18.0	12.8 - 17.6
γ -glob	%	30	4.5	± 0.9	3.2	6.8	2.7 - 6.3
Alb	g/dL	30	2.88	± 0.13	2.65	3.20	2.62 - 3.14

N: Number of animals.

Hashima Laboratory, Nihon Bioresearch Inc.

Prepared: 2007.08

Background Data

Blood chemical findings Crl:CD (SD) Female Rats 10 weeks

Exam.item	Unit	N	Value		Min.	Max.	Range of 2S.D.
			Mean	± S.D.			
AST	IU/L	29	77.9	± 10.6	56.5	100.8	56.7 - 99.1
ALT	IU/L	29	20.9	± 2.4	15.6	25.1	16.1 - 25.7
ALP	IU/L	29	343.8	± 65.8	248.0	454.0	212.2 - 475.4
T-Cho	mg/dL	29	73.0	± 15.3	51.4	119.2	42.4 - 103.6
TG	mg/dL	29	23.7	± 11.5	8.1	50.2	0.7 - 46.7
T-Bil	mg/dL	29	0.13	± 0.02	0.10	0.16	0.09 - 0.17
UN	mg/dL	29	17.0	± 2.3	12.9	21.4	12.4 - 21.6
CRE	mg/dL	29	0.27	± 0.03	0.21	0.36	0.21 - 0.33
IP	mg/dL	29	6.8	± 1.0	4.8	8.6	4.8 - 8.8
Ca	mg/dL	29	10.0	± 0.4	9.4	10.7	9.2 - 10.8
Glu	mg/dL	29	107.5	± 13.0	81.6	134.4	81.5 - 133.5
Na	mEq/L	29	142.8	± 1.3	140.7	144.7	140.2 - 145.4
K	mEq/L	29	4.09	± 0.20	3.78	4.53	3.69 - 4.49
Cl	mEq/L	29	106.3	± 1.6	103.3	110.4	103.1 - 109.5
TP	g/dL	29	5.98	± 0.29	5.38	6.66	5.40 - 6.56
A/G		29	1.25	± 0.11	1.03	1.45	1.03 - 1.47
alb	%	29	55.4	± 2.1	50.8	59.2	51.2 - 59.6
α_1 -glob	%	29	18.9	± 1.6	13.8	22.5	15.7 - 22.1
α_2 -glob	%	29	6.4	± 0.8	5.3	9.3	4.8 - 8.0
β -glob	%	29	14.6	± 1.3	12.4	17.7	12.0 - 17.2
γ -glob	%	29	4.8	± 1.0	3.1	7.6	2.8 - 6.8
Alb	g/dL	29	3.31	± 0.25	2.90	3.94	2.81 - 3.81

N: Number of animals.

Hashima Laboratory, Nihon Bioresearch Inc.

Prepared: 2007.08

信頼性保証陳述書

試験番号 : 502327

表題 : 1,10-ジブロムデカンのラットを用いる28日間反復経口投与毒性試験
及び14日間回復試験

当試験が新規化学物質等に係る試験を実施する試験施設に関する基準について（平成15年11月21日，薬食発第1121003号，平成15・11・17製局第3号，環保企発第031121004号，平成20年7月4日最終改正）及びOECD PRINCIPLES OF GOOD LABORATORY PRACTICE (OECD 化学物質の安全性試験の実施に関する基準，1997年11月26日)に従って実施され，この最終報告書には試験の方法が正確に記載され，かつ生データが正確に反映されていることを保証する。

(調査の状況は，別紙1～2のとおりである。)

2011年9月13日

株式会社日本バイオリサーチセンター 羽島研究所

信頼性保証部門責任者

別紙 1

調査項目	調査実施日	運営管理者及び試験責任者への報告日	
1. 試験計画書	2008年 10月 29日	2008年 10月 29日	
2. 動物の受け入れ	2008年 10月 29日	2008年 10月 29日	
3. コンピュータプロトコール	2008年 10月 29日	2008年 10月 29日	
4. 被験物質の管理	2008年 11月 7日	2008年 11月 11日	
5. 検体の調製	2008年 11月 7日	2008年 11月 11日	
6. 群分け及び個体識別	2008年 11月 10日	2008年 11月 11日	
7. 試験計画書変更書 (No.1)	2008年 11月 11日	2008年 11月 11日	
8. 投与	2008年 11月 11日	2008年 11月 11日	
9. 動物飼育管理	2008年 11月 11日	2008年 11月 11日	
10. 体重測定・摂餌量測定・摂水量測定	2008年 11月 14日	2008年 11月 14日	
11. 一般状態観察	2008年 11月 14日	2008年 11月 14日	
12. 投与	2008年 11月 14日	2008年 11月 14日	
13. 行動機能 (FOB) 観察 (投与7日, 雌)	2008年 11月 19日	2008年 11月 19日	
14. 尿検査 (投与期間終了前, 雄)	2008年 12月 3日 ～ 12月 4日	2008年 12月 4日	
15. 自発運動量測定	2008年 12月 8日	2008年 12月 9日	
16. 感覚反応検査	2008年 12月 9日	2008年 12月 9日	
17. 握力測定	2008年 12月 9日	2008年 12月 9日	
18. 剥検・採血・器官重量測定 (投与期間終了時, 雄)	2008年 12月 9日	2008年 12月 9日	
19. 血液学検査 (血漿分取・測定) [投与期間終了時, 雄]	2008年 12月 9日	2008年 12月 9日	
20. 血液生化学検査 (血清分取・測定 ・保存用血清の保管) [投与期間終了時, 雄]	2008年 12月 9日	2008年 12月 9日	
21. 剥検・採血・器官重量測定 (投与期間終了時, 雌)	2008年 12月 11日	2008年 12月 15日	
22. 体重測定・摂餌量測定・摂水量測定	2008年 12月 12日	2008年 12月 15日	
23. 一般状態観察	2008年 12月 12日	2008年 12月 15日	
24. 動物飼育管理	2008年 12月 12日	2008年 12月 15日	

別紙 2

調査項目	調査実施日	運営管理者及び試験責任者への報告日
25. 血清中塩素濃度測定 (投与期間終了時)	2008年 12月 12日	2008年 12月 15日
26. 尿検査 (回復期間終了前, 雄)	2008年 12月 17日 ～ 12月 18日	2008年 12月 18日
27. 標本作製 (病理 : 切り出し)	2008年 12月 19日	2008年 12月 19日
28. 剖検・採血・器官重量測定 (回復期間終了時, 雄)	2008年 12月 23日	2008年 12月 27日
29. 剖検・採血・器官重量測定 (回復期間終了時, 雌)	2008年 12月 25日	2008年 12月 27日
30. 血液学検査 (血漿分取・測定) [回復期間終了時, 雌]	2008年 12月 25日	2008年 12月 27日
31. 血液生化学検査 (血清分取・測定 ・保存用血清の保管) [回復期間終了時, 雌]	2008年 12月 25日	2008年 12月 27日
32. 血清中塩素濃度測定 (回復期間終了時)	2008年 12月 26日	2008年 12月 27日
33. 標本作製 (病理 : 薄切)	2009年 1月 22日	2009年 1月 22日
34. 生データ	2009年 3月 9日 ～ 3月 12日	2009年 3月 23日
35. 標本	2009年 3月 13日	2009年 3月 23日
36. 最終報告書 (一次案)	2009年 3月 16日 ～ 3月 21日	2009年 3月 23日
37. 生データ (再調査)	2009年 3月 30日	2009年 3月 30日
38. 最終報告書 (一次案) (再調査)	2009年 3月 30日	2009年 3月 30日
39. 最終報告書	2011年 9月 13日	2011年 9月 13日