

クロロホルムのラット及びマウスを用いた
吸入によるがん原性予備試験報告書

TABLES

T A B L E S

- TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS
IN THE INHALATION STUDIES OF CHLOROFORM
- TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT
(TWO-WEEK STUDY)
- TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT
(TWO-WEEK STUDY)
- TABLE 4 FOOD CONSUMPTION IN MALE RAT (TWO-WEEK STUDY)
- TABLE 5 FOOD CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDY)
- TABLE 6 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT
(THIRTEEN-WEEK STUDY)
- TABLE 7 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT
(THIRTEEN-WEEK STUDY)
- TABLE 8 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDY)
- TABLE 9 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDY)
- TABLE 10 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE
(TWO-WEEK STUDY)
- TABLE 11 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE
(TWO-WEEK STUDY)
- TABLE 12 FOOD CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDY)
- TABLE 13 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDY)

T A B L E S (CONTINUED)

TABLE 14 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE
(THIRTEEN-WEEK STUDY)

TABLE 15 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE
(THIRTEEN-WEEK STUDY)

TABLE 16 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDY)

TABLE 17 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDY)

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF CHLOROFORM

Two-week study	Thirteen-week Study
<Method of Administration> Inhalation	Inhalation
<Number of Group> Male 6, Female 6	Male 6, Female 6
<Size of Group> 10 males and 10 females of each group	10 males and 10 females of each groups
<Animals> Strain and Species F344/Ducrj(Fischer)rat Crj:BDF ₁ mouse Animal Source Charles River Japan, Inc. Quarantine and Acclimation 2 wk Age When Placed on Study 6 wk old Age When Killed 8 wk old	F344/Ducrj(Fischer)rat Crj:BDF ₁ mouse Charles River Japan, Inc. 2 wk 6 wk old 19 wk old
<Doses> Rat--0, 500, 1000, 2000, 4000,8000ppm Mouse--0, 500, 1000, 2000, 4000,8000ppm	Rat--0, 25, 50, 100, 200,400ppm Mouse--0, 12, 25, 50, 100,200ppm
<Duration of Dosing> 5d/wk for 2wk	5d/wk for 13wk
<Animal Maintenance> Feed CRF-1 (Oriental Yeast Co.,Ltd.) Sterilized by γ -ray Available <i>ad libitum</i> Water Sterilized by ultraviolet rays Automatic watering system Available <i>ad libitum</i> Animal per Cage Single (stainless steel wire) Animal Room Environment Barrier system Temperature:24 $\pm$ 2°C Humidity :55 $\pm$ 10% Fluorescent light 12h/d 15-17 room air changes /h Chamber Environment Temperature:22~26°C Humidity :45~70% Fluorescent light 12h/d 12 $\pm$ 1 room air changes /h	Same as two-week study Same as two-week study Same as two-week study
<Type and Frequency of Observation> Clinical sign Observed 1 / d Body weight Weighed 0-0, 1-1, 1-7, and 2-7 (wk-d) Food Consumption Weighed 1-7, 2-7 (wk-d)	Observed 1 / d Weighed 1 / wk for 13wk Weighed 1 / wk for 13wk

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF CHLOROFORM
(Continued)

Two-week Study	Thirteen-week Study
<Hematology> Red blood cell (RBC), Hemoglobin, Hematocrit, Mean corpuscular volume (MCV), Mean corpuscular hemoglobin (MCH), Mean corpuscular hemoglobin concentration (MCHC), Platelet, White blood cell (WBC), Differential WBC. <Biochemistry> Total protein, Albumin, T-bilirubin, Glucose, T-cholesterol, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Creatine phosphokinase (CPK), Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus. <Urinalysis> None <Necropsy> Necropsy performed on all animals. <Organ weight> None <Histopathologic Examination> Histopathologic examination performed on at least two animals per sex per groups. The following organs were examined: nasal cavity, trachea, lung, bone marrow, lymph node, thymus, spleen, heart, stomach, small intestine, large intestine, liver, pancreas, kidney, pituitary, adrenal, testis, ovary, brain, muscle.	Same as two-week study Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride, Phospholipid <rat only>, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), Leucine aminopeptidase (LAP) <rat only>,, γ-Glutamy transpeptidase (G-GTP) <rat only>, Creatine phosphokinase (CPK), Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus. pH, Protein, Glucose, Ketone body Bilirubin <rat only>, Occult blood Urobilinogen. Same as two-week studies. Organ weight measurement performed on scheduled sacrificed animals. The following organs were weighed: brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary, thymus. Histopathologic examination performed on all animals. The following organs were examined: skin, nasal cavity, trachea, lung, bone marrow, lymph node, thymus, spleen, heart, tongue, salivary gland, esophagus, stomach, small intestine, large intestine, liver, pancreas, kidney, urinary bladder, pituitary, thyroid, adrenal, testis, epididymis, seminal vesicle, prostate, ovary, uterus, vagina, mammary gland, brain, spinal cord, peripheral nerve, eye, Harderian gland, muscle, bone.

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm			
	Au.Wt.	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	
0-0	118 (10)	10/10	118 (10)	100	10/10	118 (10)	100	10/10	119 (10)	101	10/10	119 (10)	101	10/10	119 (10)	101	10/10	118 (10)	100	10/10	118 (10)	100	0/10	
1-1	122 (10)	10/10	113 (10)	93	10/10	112 (10)	92	10/10	105 (10)	86	10/10	103 (10)	84	8/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
1-3	128 (10)	10/10	121 (10)	95	10/10	118 (10)	92	10/10	92 (9)	72	0/10	90 (7)	70	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
1-7	140 (10)	10/10	124 (10)	89	10/10	118 (10)	84	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
2-3	150 (10)	10/10	139 (10)	93	10/10	132 (10)	88	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
2-7	165 (10)	10/10	141 (10)	85	10/10	131 (10)	79	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	

< >:No. of effective animals; () :No. of measured animals

Au.Wt.: g

< >: No. of effective animals, (): No. of measured animals; Au.Wt.: g

TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm			
	Au.Wt.	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	
0-0	98 (10)	10/10	98 (10)	100	10/10	98 (10)	100	10/10	98 (10)	100	10/10	98 (10)	100	10/10	98 (10)	100	10/10	98 (10)	100	10/10	98 (10)	100	10/10	
1-1	100 (10)	10/10	94 (10)	94	10/10	91 (10)	91	10/10	88 (10)	89	10/10	85 (10)	85	10/10	85 (10)	96	10/10	85 (10)	96	10/10	85 (10)	96	10/10	
1-3	103 (10)	10/10	93 (10)	95	10/10	94 (10)	91	10/10	75 (10)	73	0/10	75 (10)	73	0/10	- (-)	-	0/10	75 (10)	73	1/10	- (-)	-	0/10	
1-7	108 (10)	10/10	96 (10)	88	10/10	90 (10)	83	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
2-3	115 (10)	10/10	104 (10)	90	10/10	100 (10)	87	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
2-7	122 (10)	10/10	103 (10)	84	10/10	97 (10)	80	10/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	

< >:No. of effective animals,() :No. of measured animals

Au.Wt.: g

< >: No. of effective animals, (): No. of measured animals; Au.Wt.: g

TABLE 4 FOOD CONSUMPTION IN MALE RAT (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm			
	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>
1-7	13.2 (10)	10/10	8/1	10/10	11.1 (10)	10/10	10/10	77	10.2 (10)	10/10	10/10	92	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)
2-7	14.8 (10)	10/10	9/1	10/10	13.9 (10)	10/10	10/10	92	13.6 (10)	10/10	10/10	92	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)

< >:No.of effective animals,() :No.of measured animals
Au.F.C.: g

TABLE 5 FOOD CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm			
	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>	Au.F.C.	No.of Surviv.	No.of cont.	% of <10>
1-7	10.4 (10)	10/10	8/6	10/10	8.9 (10)	10/10	10/10	75	7.8 (10)	10/10	10/10	96	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)
2-7	11.3 (10)	10/10	10/9	10/10	10.9 (10)	10/10	10/10	96	10.9 (10)	10/10	10/10	96	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)	- (-)	0/10	- (-)	- (-)

< >:No.of effective animals,() :No.of measured animals
Au.F.C.: g

TABLE 6 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm				400 ppm					
	Au.Wt. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv. <10>			
0-0	126 (10)	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10	126 (10)	100	10/10
1-7	157 (10)	10/10	149 (10)	95	10/10	144 (10)	92	10/10	145 (10)	92	10/10	145 (10)	92	10/10	137 (10)	87	10/10	137 (10)	87	10/10	132 (10)	84	10/10	132 (10)	84	10/10
2-7	187 (10)	10/10	178 (10)	95	10/10	171 (10)	91	10/10	171 (10)	91	10/10	172 (10)	92	10/10	158 (10)	84	10/10	158 (10)	84	10/10	149 (10)	80	10/10	149 (10)	80	10/10
3-7	213 (10)	10/10	201 (10)	94	10/10	193 (10)	91	10/10	193 (10)	91	10/10	193 (10)	91	10/10	179 (10)	84	10/10	179 (10)	84	10/10	164 (10)	77	10/10	164 (10)	77	10/10
4-7	236 (10)	10/10	223 (10)	94	10/10	215 (10)	91	10/10	215 (10)	91	10/10	211 (10)	89	10/10	196 (10)	83	10/10	196 (10)	83	10/10	177 (10)	75	10/10	177 (10)	75	10/10
5-7	256 (10)	10/10	243 (10)	95	10/10	236 (10)	92	10/10	236 (10)	92	10/10	232 (10)	91	10/10	221 (10)	86	10/10	221 (10)	86	10/10	206 (10)	80	10/10	206 (10)	80	10/10
6-7	272 (10)	10/10	258 (10)	94	10/10	247 (10)	91	10/10	247 (10)	91	10/10	245 (10)	90	10/10	231 (10)	85	10/10	231 (10)	85	10/10	212 (10)	78	10/10	212 (10)	78	10/10
7-7	286 (10)	10/10	270 (10)	94	10/10	261 (10)	91	10/10	261 (10)	91	10/10	256 (10)	90	10/10	240 (10)	84	10/10	240 (10)	84	10/10	212 (10)	74	10/10	212 (10)	74	10/10
8-7	302 (10)	10/10	282 (10)	93	10/10	268 (10)	90	10/10	268 (10)	90	10/10	268 (10)	89	10/10	247 (10)	82	10/10	247 (10)	82	10/10	215 (10)	71	10/10	215 (10)	71	10/10
9-7	315 (10)	10/10	296 (10)	94	10/10	286 (10)	91	10/10	286 (10)	91	10/10	283 (10)	89	10/10	254 (10)	81	10/10	254 (10)	81	10/10	223 (10)	71	10/10	223 (10)	71	10/10
10-7	324 (10)	10/10	306 (10)	94	10/10	296 (10)	91	10/10	296 (10)	91	10/10	293 (10)	89	10/10	262 (10)	81	10/10	262 (10)	81	10/10	227 (10)	70	10/10	227 (10)	70	10/10
11-7	333 (10)	10/10	316 (10)	95	10/10	306 (10)	92	10/10	306 (10)	92	10/10	303 (10)	89	10/10	271 (10)	81	10/10	271 (10)	81	10/10	234 (10)	70	10/10	234 (10)	70	10/10
12-7	340 (10)	10/10	324 (10)	95	10/10	313 (10)	92	10/10	313 (10)	92	10/10	304 (10)	89	10/10	275 (10)	81	10/10	275 (10)	81	10/10	235 (10)	69	10/10	235 (10)	69	10/10
13-7	348 (10)	10/10	331 (10)	95	10/10	319 (10)	92	10/10	319 (10)	92	10/10	310 (10)	89	10/10	279 (10)	80	10/10	279 (10)	80	10/10	240 (10)	69	10/10	240 (10)	69	10/10

< >:No. of effective animals,() :No. of measured animals

Au.Wt.: g

< >: No. of effective animals, () : No. of measured animals Au.Wt.: g

TABLE 7 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm				400 ppm					
	Au.Wt.	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	
0-0	103 (10)	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10	103 (10)	100	10/10
1-7	117 (10)	10/10	112 (10)	96	10/10	111 (10)	95	10/10	108 (10)	92	10/10	108 (10)	92	10/10	103 (10)	88	10/10	103 (10)	88	10/10	99 (10)	85	10/10	99 (10)	85	10/10
2-7	131 (10)	10/10	123 (10)	94	10/10	120 (10)	92	10/10	120 (10)	92	10/10	120 (10)	92	10/10	109 (10)	83	10/10	109 (10)	83	10/10	105 (10)	80	10/10	105 (10)	80	10/10
3-7	144 (10)	10/10	134 (10)	93	10/10	129 (10)	90	10/10	130 (10)	90	10/10	130 (10)	90	10/10	120 (10)	83	10/10	120 (10)	83	10/10	115 (10)	80	10/10	115 (10)	80	10/10
4-7	153 (10)	10/10	143 (10)	93	10/10	137 (10)	90	10/10	140 (10)	92	10/10	140 (10)	92	10/10	129 (10)	84	10/10	129 (10)	84	10/10	121 (10)	79	10/10	121 (10)	79	10/10
5-7	164 (10)	10/10	155 (10)	95	10/10	149 (10)	91	10/10	150 (10)	91	10/10	150 (10)	91	10/10	146 (10)	89	10/10	146 (10)	89	10/10	138 (10)	84	10/10	138 (10)	84	10/10
6-7	170 (10)	10/10	158 (10)	93	10/10	153 (10)	90	10/10	156 (10)	92	10/10	156 (10)	92	10/10	148 (10)	87	10/10	148 (10)	87	10/10	135 (10)	79	10/10	135 (10)	79	10/10
7-7	176 (10)	10/10	165 (10)	94	10/10	158 (10)	90	10/10	161 (10)	91	10/10	161 (10)	91	10/10	154 (10)	88	10/10	154 (10)	88	10/10	140 (10)	80	10/10	140 (10)	80	10/10
8-7	180 (10)	10/10	170 (10)	94	10/10	162 (10)	90	10/10	167 (10)	93	10/10	167 (10)	93	10/10	158 (10)	88	10/10	158 (10)	88	10/10	143 (10)	79	10/10	143 (10)	79	10/10
9-7	186 (10)	10/10	176 (10)	95	10/10	168 (10)	90	10/10	172 (10)	92	10/10	172 (10)	92	10/10	162 (10)	87	10/10	162 (10)	87	10/10	145 (10)	78	10/10	145 (10)	78	10/10
10-7	190 (10)	10/10	183 (10)	96	10/10	170 (10)	89	10/10	174 (10)	92	10/10	174 (10)	92	10/10	165 (10)	87	10/10	165 (10)	87	10/10	148 (10)	78	10/10	148 (10)	78	10/10
11-7	195 (10)	10/10	185 (10)	95	10/10	173 (10)	89	10/10	178 (10)	91	10/10	178 (10)	91	10/10	169 (10)	87	10/10	169 (10)	87	10/10	152 (10)	78	10/10	152 (10)	78	10/10
12-7	200 (10)	10/10	190 (10)	95	10/10	175 (10)	88	10/10	180 (10)	90	10/10	180 (10)	90	10/10	173 (10)	87	10/10	173 (10)	87	10/10	155 (10)	78	10/10	155 (10)	78	10/10
13-7	202 (10)	10/10	192 (10)	95	10/10	176 (10)	87	10/10	183 (10)	91	10/10	183 (10)	91	10/10	176 (10)	87	10/10	176 (10)	87	10/10	155 (10)	77	10/10	155 (10)	77	10/10

<

>

No. of effective animals; { }

No. of measured animals

Au.Wt. : g

< >: No. of effective animals, () : No. of measured animals Au.Wt.: g

TABLE 8 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm				400 ppm			
	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv.	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.
1-7	15.2 (10)	10/10	89	10/10	13.6 (10)	89	10/10	10/10	12.9 (10)	85	10/10	10/10	12.6 (10)	83	10/10	10/10	12.1 (10)	80	10/10	10/10	11.9 (10)	78	10/10	
2-7	17.4 (10)	10/10	91	10/10	15.9 (10)	91	10/10	10/10	15.1 (10)	87	10/10	10/10	15.6 (10)	90	10/10	10/10	14.8 (10)	85	10/10	10/10	16.7 (10)	96	10/10	
3-7	18.1 (10)	10/10	92	10/10	16.5 (10)	92	10/10	10/10	16.1 (10)	89	10/10	10/10	16.2 (10)	90	10/10	10/10	16.7 (10)	92	10/10	10/10	19.2 (10)	108	10/10	
4-7	18.4 (10)	10/10	91	10/10	16.8 (10)	91	10/10	10/10	17.2 (10)	93	10/10	10/10	16.6 (10)	90	10/10	10/10	18.4 (10)	100	10/10	10/10	20.6 (8)	112	10/10	
5-7	18.3 (10)	10/10	97	10/10	17.8 (10)	97	10/10	10/10	18.3 (10)	100	10/10	10/10	17.8 (10)	97	10/10	10/10	18.0 (10)	98	10/10	10/10	20.2 (10)	110	10/10	
6-7	17.2 (9)	10/10	99	10/10	17.1 (10)	99	10/10	10/10	16.8 (10)	98	10/10	10/10	16.7 (10)	97	10/10	10/10	17.6 (10)	102	10/10	10/10	21.7 (10)	126	10/10	
7-7	17.6 (10)	10/10	97	10/10	17.0 (10)	97	10/10	10/10	16.8 (10)	95	10/10	10/10	16.4 (10)	93	10/10	10/10	18.6 (10)	106	10/10	10/10	25.1 (10)	143	10/10	
8-7	17.8 (10)	10/10	93	10/10	17.2 (10)	93	10/10	10/10	17.2 (10)	97	10/10	10/10	17.2 (10)	97	10/10	10/10	19.4 (9)	109	10/10	10/10	24.0 (10)	135	10/10	
9-7	17.4 (10)	10/10	101	10/10	17.5 (10)	101	10/10	10/10	17.5 (10)	101	10/10	10/10	17.4 (10)	100	10/10	10/10	19.9 (10)	114	10/10	10/10	24.6 (10)	141	10/10	
10-7	17.3 (10)	10/10	100	10/10	17.3 (10)	100	10/10	10/10	18.7 (10)	108	10/10	10/10	17.7 (10)	102	10/10	10/10	20.6 (10)	119	10/10	10/10	25.9 (9)	150	10/10	
11-7	16.6 (10)	10/10	102	10/10	16.9 (10)	102	10/10	10/10	17.5 (10)	105	10/10	10/10	17.3 (10)	104	10/10	10/10	20.8 (10)	125	10/10	10/10	23.7 (9)	143	10/10	
12-7	16.4 (10)	10/10	105	10/10	17.2 (10)	105	10/10	10/10	17.6 (10)	107	10/10	10/10	17.1 (10)	104	10/10	10/10	21.2 (10)	129	10/10	10/10	23.6 (10)	144	10/10	
13-7	16.7 (10)	10/10	103	10/10	17.2 (10)	103	10/10	10/10	18.3 (10)	110	10/10	10/10	17.7 (10)	106	10/10	10/10	21.3 (10)	128	10/10	10/10	24.0 (10)	144	10/10	

< >:No. of effective animals, () :No. of measured animals

Au.F.C. : g

< >:No. of effective animals, () :No. of measured animals

TABLE 9 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm				400 ppm			
	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv.	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.	Au.F.C.	No. of Surviv. <10>	% of cont. <10>	No. of Surviv.
1-7	12.2 (10)	10/10	89	10/10	10.8 (10)	89	10/10	10/10	10.1 (10)	83	10/10	10/10	10.0 (10)	82	10/10	10/10	9.7 (10)	80	10/10	10/10	9.1 (10)	75	10/10	
2-7	12.7 (10)	10/10	90	10/10	11.4 (10)	90	10/10	10/10	11.3 (10)	89	10/10	10/10	11.4 (10)	90	10/10	10/10	11.9 (10)	94	10/10	10/10	12.7 (10)	100	10/10	
3-7	12.3 (10)	10/10	93	10/10	11.4 (10)	93	10/10	10/10	11.0 (10)	89	10/10	10/10	11.6 (10)	94	10/10	10/10	12.8 (10)	104	10/10	10/10	14.8 (10)	120	10/10	
4-7	12.2 (10)	10/10	92	10/10	11.2 (10)	92	10/10	10/10	11.0 (10)	90	10/10	10/10	12.0 (10)	98	10/10	10/10	13.5 (10)	111	10/10	10/10	14.7 (10)	120	10/10	
5-7	12.3 (10)	10/10	100	10/10	12.3 (10)	100	10/10	10/10	12.0 (10)	98	10/10	10/10	12.2 (10)	99	10/10	10/10	13.6 (10)	111	10/10	10/10	13.9 (10)	113	10/10	
6-7	12.0 (10)	10/10	97	10/10	11.6 (10)	97	10/10	10/10	11.4 (10)	95	10/10	10/10	12.6 (10)	105	10/10	10/10	13.5 (10)	113	10/10	10/10	13.6 (10)	113	10/10	
7-7	11.9 (10)	10/10	96	10/10	11.4 (10)	96	10/10	10/10	11.1 (10)	93	10/10	10/10	13.1 (10)	110	10/10	10/10	15.2 (10)	128	10/10	10/10	16.0 (10)	134	10/10	
8-7	11.7 (10)	10/10	103	10/10	12.0 (10)	103	10/10	10/10	11.6 (10)	99	10/10	10/10	13.6 (10)	116	10/10	10/10	15.3 (10)	131	10/10	10/10	16.8 (10)	144	10/10	
9-7	12.0 (10)	10/10	103	10/10	12.3 (10)	103	10/10	10/10	12.2 (10)	102	10/10	10/10	14.1 (10)	118	10/10	10/10	16.3 (10)	136	10/10	10/10	18.1 (10)	151	10/10	
10-7	12.1 (10)	10/10	103	10/10	12.5 (9)	103	10/10	10/10	12.4 (10)	102	10/10	10/10	13.5 (9)	112	10/10	10/10	16.1 (10)	133	10/10	10/10	17.4 (10)	144	10/10	
11-7	11.5 (10)	10/10	100	10/10	11.5 (7)	100	10/10	10/10	11.7 (10)	102	10/10	10/10	13.8 (10)	120	10/10	10/10	14.8 (8)	129	10/10	10/10	16.5 (10)	143	10/10	
12-7	11.8 (10)	10/10	105	10/10	12.4 (9)	105	10/10	10/10	12.0 (10)	102	10/10	10/10	13.6 (10)	115	10/10	10/10	15.3 (9)	130	10/10	10/10	16.3 (10)	138	10/10	
13-7	11.6 (10)	10/10	109	10/10	12.7 (9)	109	10/10	10/10	12.7 (10)	109	10/10	10/10	13.9 (10)	120	10/10	10/10	16.1 (10)	139	10/10	10/10	15.6 (9)	134	10/10	

< >:No. of effective animals.() :No. of measured animals

Au.F.C.: g

< >:No. of effective animals, () :No. of measured animals

TABLE 10 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm					
	Au.Wt.	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	
0-0	22.5 (10)	10/10	22.4 (10)	100	10/10	22.4 (10)	100	10/10	22.5 (10)	100	10/10	22.5 (10)	100	10/10	22.5 (10)	100	10/10	22.5 (10)	100	10/10	22.5 (10)	100	10/10	22.5 (10)	100	0/10
1-1	22.0 (10)	10/10	21.9 (10)	100	10/10	21.6 (10)	98	10/10	20.3 (10)	92	10/10	20.1 (10)	91	10/10	20.1 (10)	91	10/10	20.1 (10)	91	10/10	20.1 (10)	91	10/10	20.1 (10)	91	0/10
1-4	22.9 (10)	10/10	19.3 (2)	84	1/10	18.2 (2)	79	1/10	- (-)	-	1/10	- (-)	-	1/10	- (-)	-	1/10	- (-)	-	1/10	- (-)	-	1/10	- (-)	-	0/10
1-7	23.2 (10)	10/10	18.6 (1)	80	1/10	17.7 (1)	76	1/10	17.7 (1)	76	1/10	17.7 (1)	76	1/10	17.7 (1)	76	1/10	17.7 (1)	76	1/10	17.7 (1)	76	1/10	17.7 (1)	76	0/10
2-4	23.8 (10)	10/10	20.2 (1)	85	1/10	15.5 (1)	65	1/10	15.5 (1)	65	1/10	15.5 (1)	65	1/10	15.5 (1)	65	1/10	15.5 (1)	65	1/10	15.5 (1)	65	1/10	15.5 (1)	65	0/10
2-7	24.4 (10)	10/10	20.6 (1)	84	1/10	17.1 (1)	70	1/10	17.1 (1)	70	1/10	17.1 (1)	70	1/10	17.1 (1)	70	1/10	17.1 (1)	70	1/10	17.1 (1)	70	1/10	17.1 (1)	70	0/10

< >:No. of effective animals.() :No. of measured animals

Au.Wt.: g

< >: No. of effective animals, (): No. of measured animals

Au.Wt.: g

TABLE 11 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	0 ppm				500 ppm				1000 ppm				2000 ppm				4000 ppm				8000 ppm			
	Au.Wt.	No. of Surviv. <10>	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	Au.Wt.	% of cont. <10>	No. of Surviv.	
0-0	18.3 (10)	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	18.3 (10)	100	10/10	
1-1	17.8 (10)	10/10	17.0 (10)	96	10/10	16.9 (10)	95	10/10	16.6 (10)	93	10/10	16.1 (10)	90	10/10	16.1 (10)	90	10/10	16.1 (10)	90	10/10	16.1 (10)	90	10/10	
1-4	18.6 (10)	10/10	17.6 (10)	95	10/10	14.2 (10)	76	10/10	14.1 (4)	76	4/10	15.1 (1)	81	4/10	15.1 (1)	81	4/10	15.1 (1)	81	4/10	15.1 (1)	81	4/10	
1-7	18.9 (10)	10/10	17.7 (10)	94	10/10	13.6 (3)	72	1/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	- (-)	-	0/10	
2-4	19.1 (10)	10/10	19.0 (10)	99	10/10	17.5 (1)	92	1/10	17.5 (1)	92	1/10	17.5 (1)	92	1/10	17.5 (1)	92	1/10	17.5 (1)	92	1/10	17.5 (1)	92	1/10	
2-7	19.8 (10)	10/10	19.0 (10)	96	10/10	18.9 (1)	95	1/10	18.9 (1)	95	1/10	18.9 (1)	95	1/10	18.9 (1)	95	1/10	18.9 (1)	95	1/10	18.9 (1)	95	1/10	
																		Au.Wt.: g						
																		< >:No. of effective animals,() :No. of measured animals						

< >: No. of effective animals, (): No. of measured animals

Au.Wt.: g

TABLE 12 FOOD CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	0 ppm		500 ppm		1000 ppm		2000 ppm		4000 ppm		8000 ppm		
	Au.F.C.	No. of Surviv. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>
1-7	3.5 (10)	10/10	2.0 (1)	57	1/10	3.1 (1)	89	1/10	- (-)	- (-)	0/10	- (-)	0/10
2-7	3.6 (10)	10/10	2.9 (1)	81	1/10	2.6 (1)	72	1/10	- (-)	- (-)	0/10	- (-)	0/10

< >:No. of effective animals, ():No. of measured animals Au.F.C.: g

TABLE 13 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	0 ppm		500 ppm		1000 ppm		2000 ppm		4000 ppm		8000 ppm		
	Au.F.C.	No. of Surviv. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>
1-7	3.0 (10)	10/10	2.3 (10)	77	10/10	0.7 (3)	23	1/10	- (-)	- (-)	0/10	- (-)	0/10
2-7	3.0 (10)	10/10	3.1 (10)	103	10/10	4.3 (1)	143	1/10	- (-)	- (-)	0/10	- (-)	0/10

< > :No. of effective animals, () :No. of measured animals Au.F.C. : g

TABLE 16 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm			
	Au.F.C.	No. of Surviv. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	% of cont. <10>
1-7	4.2 (10)	10/10	3.5 (8)	83	8/10	2.0 (1)	48	1/10	- (-)	-	0/10	1.7 (2)	40	2/10	- (-)	-	0/10	- (-)	0/10	-
2-7	3.9 (10)	10/10	4.6 (8)	118	8/10	6.5 (1)	167	1/10	- (-)	-	0/10	4.7 (2)	121	2/10	- (-)	-	0/10	- (-)	0/10	-
3-7	4.2 (10)	10/10	4.3 (8)	102	8/10	4.6 (1)	110	1/10	- (-)	-	0/10	4.9 (2)	117	2/10	- (-)	-	0/10	- (-)	0/10	-
4-7	4.2 (10)	10/10	4.7 (8)	112	8/10	4.2 (1)	100	1/10	- (-)	-	0/10	4.6 (2)	110	2/10	- (-)	-	0/10	- (-)	0/10	-
5-7	4.2 (10)	10/10	4.2 (8)	100	8/10	4.2 (1)	100	1/10	- (-)	-	0/10	3.9 (2)	93	2/10	- (-)	-	0/10	- (-)	0/10	-
6-7	4.3 (10)	10/10	4.3 (8)	100	8/10	4.2 (1)	99	1/10	- (-)	-	0/10	4.7 (2)	107	2/10	- (-)	-	0/10	- (-)	0/10	-
7-7	4.4 (10)	10/10	4.3 (8)	98	8/10	4.4 (1)	100	1/10	- (-)	-	0/10	4.7 (2)	109	2/10	- (-)	-	0/10	- (-)	0/10	-
8-7	4.5 (10)	10/10	4.2 (8)	93	8/10	4.2 (1)	93	1/10	- (-)	-	0/10	4.6 (2)	102	2/10	- (-)	-	0/10	- (-)	0/10	-
9-7	4.4 (10)	10/10	4.4 (8)	100	8/10	4.3 (1)	98	1/10	- (-)	-	0/10	4.4 (2)	100	2/10	- (-)	-	0/10	- (-)	0/10	-
10-7	4.4 (10)	10/10	4.3 (8)	98	8/10	4.3 (1)	98	1/10	- (-)	-	0/10	4.3 (2)	98	2/10	- (-)	-	0/10	- (-)	0/10	-
11-7	4.6 (10)	10/10	4.4 (8)	96	8/10	4.0 (1)	87	1/10	- (-)	-	0/10	4.7 (1)	102	2/10	- (-)	-	0/10	- (-)	0/10	-
12-7	4.7 (10)	10/10	4.5 (8)	96	8/10	4.4 (1)	94	1/10	- (-)	-	0/10	4.7 (2)	100	2/10	- (-)	-	0/10	- (-)	0/10	-
13-7	4.7 (10)	10/10	4.5 (8)	96	8/10	4.5 (1)	96	1/10	- (-)	-	0/10	4.7 (2)	100	2/10	- (-)	-	0/10	- (-)	0/10	-

< >: No. of effective animals, () : No. of measured animals

Au.F.C.: g

TABLE 17 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDY)

Week-Day on Study	0 ppm				25 ppm				50 ppm				100 ppm				200 ppm			
	Au.F.C.	No. of Surviv. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	No. of Surviv.	Au.F.C.	% of cont. <10>	Au.F.C.	% of cont. <10>	No. of Surviv.	% of cont. <10>
1-7	3.1 (10)	10/10	3.2 (10)	103	10/10	3.1 (10)	100	10/10	3.1 (10)	100	10/10	2.9 (10)	91	10/10	3.0 (10)	97	10/10	3.0 (10)	97	10/10
2-7	3.2 (10)	10/10	3.3 (10)	103	10/10	3.4 (10)	106	10/10	3.3 (10)	103	10/10	3.8 (10)	119	10/10	4.3 (10)	134	10/10	4.3 (10)	134	10/10
3-7	3.5 (10)	10/10	3.6 (10)	100	10/10	3.9 (10)	108	10/10	3.7 (10)	103	10/10	4.3 (10)	119	10/10	4.3 (10)	119	10/10	4.3 (10)	119	10/10
4-7	3.8 (10)	10/10	4.0 (10)	105	10/10	4.0 (10)	105	10/10	3.8 (10)	100	10/10	4.2 (10)	111	10/10	4.4 (10)	116	10/10	4.4 (10)	116	10/10
5-7	3.8 (10)	10/10	3.9 (10)	103	10/10	4.1 (10)	108	10/10	3.9 (10)	103	10/10	4.1 (10)	108	10/10	4.4 (10)	116	10/10	4.4 (10)	116	10/10
6-7	4.1 (10)	10/10	4.1 (10)	100	10/10	4.4 (10)	107	10/10	4.2 (10)	102	10/10	4.3 (10)	105	10/10	4.8 (10)	117	10/10	4.8 (10)	117	10/10
7-7	4.2 (10)	10/10	4.3 (10)	102	10/10	4.6 (10)	110	10/10	4.4 (10)	105	10/10	4.6 (10)	110	10/10	4.9 (10)	117	10/10	4.9 (10)	117	10/10
8-7	4.1 (10)	10/10	4.3 (10)	105	10/10	4.7 (10)	115	10/10	4.4 (10)	107	10/10	4.6 (10)	112	10/10	4.8 (10)	117	10/10	4.8 (10)	117	10/10
9-7	4.2 (10)	10/10	4.5 (10)	107	10/10	4.9 (10)	117	10/10	4.5 (10)	107	10/10	4.8 (10)	114	10/10	4.9 (10)	117	10/10	4.9 (10)	117	10/10
10-7	4.2 (10)	10/10	4.4 (10)	105	10/10	4.7 (10)	112	10/10	4.4 (10)	105	10/10	4.7 (10)	112	10/10	4.8 (10)	114	10/10	4.8 (10)	114	10/10
11-7	4.4 (10)	10/10	4.4 (10)	100	10/10	5.1 (10)	116	10/10	4.6 (10)	105	10/10	4.9 (10)	111	10/10	5.2 (10)	118	10/10	5.2 (10)	118	10/10
12-7	4.4 (10)	10/10	4.6 (10)	105	10/10	5.1 (10)	116	10/10	4.6 (10)	105	10/10	4.7 (10)	107	10/10	5.2 (10)	118	10/10	5.2 (10)	118	10/10
13-7	4.3 (10)	10/10	4.6 (10)	107	10/10	5.3 (10)	123	10/10	4.9 (10)	114	10/10	4.6 (10)	107	10/10	5.1 (10)	119	10/10	5.1 (10)	119	10/10

< >: No. of effective animals, () : No. of measured animals

Au.F.C.: g