2-アミノ-4-クロロフェノールのマウスを用いた
経口投与による 13 週間毒性試験（混餌試験）報告書

試験番号：0550

TABLES

TABLES

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TABLE 1 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Week on Study	Control		512 ppm			1280 ppm			3200 ppm			8000 ppm			20000 ppm		
	Av. Wt.	No. of Surviv. <10>	Av. Wt.	% of cont.	No. of Surviv. <10>	Av. Wt.	% of cont.	No. of Surviv. <10>	Av. Wt.	% of cont.	No. of Surviv. <10>	Av. Wt.	% of cont.	No. of Surviv. <10>	Av. Wt.	% of cont.	No. of Surviv. <10>
0	23.8 (10)	10 / 10	23.7 (10)	100	10 / 10	23.8 (10)	100	10 / 10	23.8 (10)	100	10 / 10	23.8 (10)	100	10 / 10	23.7 (10)	100	10 / 10
1	25.1 (10)	10 / 10	24.8 (10)	99	10 / 10	25.0 (10)	100	10 / 10	24.6 (10)	98	10 / 10	24.5 (10)	98	10 / 10	22.3 (10)	89	10 / 10
2	26.4 (10)	10 / 10	26.0 (10)	98	10 / 10	26.2 (10)	99	10 / 10	26.0 (10)	98	10 / 10	25.7 (10)	97	10 / 10	24.2 (10)	92	10 / 10
3	26.7 (10)	10 / 10	26.1 (10)	98	10 / 10	26.3 (9)	99	9 / 10	26.1 (10)	98	10 / 10	26.1 (10)	98	10 / 10	24.6 (10)	92	10 / 10
4	27.2 (10)	10 / 10	28.0 (9)	103	9 / 10	26.8 (9)	99	9 / 10	26.6 (10)	98	10 / 10	26.8 (10)	99	10 / 10	24.8 (10)	91	10 / 10
5	28.5 (10)	10 / 10	29.1 (9)	102	9 / 10	28.0 (9)	98	9 / 10	28.0 (10)	98	10 / 10	27.6 (10)	97	10 / 10	24.9 (10)	87	10 / 10
6	28.2 (10)	10 / 10	28.6 (9)	101	9 / 10	27.6 (9)	98	9 / 10	27.4 (10)	97	10 / 10	27.4 (10)	97	10 / 10	25.5 (9)	90	9 / 10
7	29.1 (10)	10 / 10	30.3 (9)	104	9 / 10	29.4 (9)	101	9 / 10	29.2 (10)	100	10 / 10	28.4 (10)	98	10 / 10	25.7 (9)	88	9 / 10
8	29.8 (10)	10 / 10	31.0 (9)	104	9 / 10	29.7 (9)	100	9 / 10	29.7 (10)	100	10 / 10	28.8 (10)	97	10 / 10	27.4 (9)	92	9 / 10
9	30.4 (10)	10 / 10	31.1 (9)	102	9 / 10	30.6 (9)	101	9 / 10	30.3 (10)	100	10 / 10	29.5 (10)	97	10 / 10	27.3 (9)	90	9 / 10
10	31.9 (10)	10 / 10	32.1 (9)	101	9 / 10	31.5 (9)	99	9 / 10	31.1 (10)	97	10 / 10	30.4 (10)	95	10 / 10	25.2 (9)	79	9 / 10
11	31.8 (10)	10 / 10	32.3 (9)	102	9 / 10	31.5 (9)	99	9 / 10	31.5 (10)	99	10 / 10	29.7 (10)	93	10 / 10	27.1 (9)	85	9 / 10
12	32.3 (10)	10 / 10	32.9 (9)	102	9 / 10	31.2 (9)	97	9 / 10	31.5 (10)	98	10 / 10	30.8 (10)	95	10 / 10	27.8 (9)	86	9 / 10
13	32.9 (10)	10 / 10	33.2 (9)	101	9 / 10	32.4 (9)	98	9 / 10	31.5 (10)	96	10 / 10	30.8 (10)	94	10 / 10	28.1 (9)	85	9 / 10

< > : No. of effective animals, ( ) : No. of measured animals, Av. Wt. : Averaged body weight (Unit : g).

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Week on Study	Control		512 ppm			1280 ppm			3200 ppm			8000 ppm			20000 ppm		
	Av. Wt.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.
	<10>		<10>			<10>			<10>			<10>			<10>		
0	18.8 (10)	10 / 10	18.8 (10)	100	10 / 10	18.8 (10)	100	10 / 10	18.8 (10)	100	10 / 10	18.8 (10)	100	10 / 10	18.8 (10)	100	10 / 10
1	20.2 (10)	10 / 10	20.2 (10)	100	10 / 10	19.4 (10)	96	10 / 10	20.0 (10)	99	10 / 10	19.9 (10)	99	10 / 10	18.6 (10)	92	10 / 10
2	21.0 (10)	10 / 10	20.7 (10)	99	10 / 10	20.5 (10)	98	10 / 10	21.2 (10)	101	10 / 10	20.5 (10)	98	10 / 10	20.2 (10)	96	10 / 10
3	21.3 (10)	10 / 10	20.5 (10)	96	10 / 10	20.7 (10)	97	10 / 10	20.5 (10)	96	10 / 10	20.9 (10)	98	10 / 10	19.8 (10)	93	10 / 10
4	21.3 (10)	10 / 10	21.9 (10)	103	10 / 10	21.4 (10)	100	10 / 10	21.3 (10)	100	10 / 10	21.0 (10)	99	10 / 10	20.2 (10)	95	10 / 10
5	22.0 (10)	10 / 10	22.3 (10)	101	10 / 10	22.4 (10)	102	10 / 10	22.0 (10)	100	10 / 10	21.8 (10)	99	10 / 10	20.1 (10)	91	10 / 10
6	20.8 (10)	10 / 10	21.6 (10)	104	10 / 10	21.1 (10)	101	10 / 10	21.2 (10)	102	10 / 10	20.7 (10)	100	10 / 10	19.1 (8)	92	8 / 10
7	22.1 (10)	10 / 10	22.6 (10)	102	10 / 10	22.3 (10)	101	10 / 10	22.5 (10)	102	10 / 10	21.8 (10)	99	10 / 10	20.8 (7)	94	7 / 10
8	21.7 (10)	10 / 10	21.8 (10)	100	10 / 10	22.0 (10)	101	10 / 10	22.8 (10)	105	10 / 10	21.4 (10)	99	10 / 10	21.8 (7)	100	7 / 10
9	22.5 (10)	10 / 10	22.3 (10)	99	10 / 10	22.9 (10)	102	10 / 10	22.9 (10)	102	10 / 10	22.7 (10)	101	10 / 10	22.8 (7)	101	7 / 10
10	22.5 (10)	10 / 10	22.5 (10)	100	10 / 10	22.7 (10)	101	10 / 10	22.8 (10)	101	10 / 10	21.5 (10)	96	10 / 10	20.2 (7)	90	7 / 10
11	23.2 (10)	10 / 10	23.8 (10)	103	10 / 10	23.4 (10)	101	10 / 10	23.2 (10)	100	10 / 10	22.6 (10)	97	10 / 10	22.9 (7)	99	7 / 10
12	23.6 (10)	10 / 10	23.5 (10)	100	10 / 10	23.1 (10)	98	10 / 10	24.0 (10)	102	10 / 10	22.7 (10)	96	10 / 10	23.0 (7)	97	7 / 10
13	23.7 (10)	10 / 10	23.8 (10)	100	10 / 10	23.9 (10)	101	10 / 10	24.2 (10)	102	10 / 10	22.5 (10)	95	10 / 10	22.9 (7)	97	7 / 10

< > : No. of effective animals, ( ) : No. of measured animals, Av. Wt. : Averaged body weight (Unit : g).

TABLE 3 FOOD CONSUMPTION CHANGES OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Week on Study	Control		512 ppm			1280 ppm			3200 ppm			8000 ppm			20000 ppm		
	Av. Fc.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>
1	4.0 (10)	10 / 10	3.9 (10)	98	10 / 10	4.0 (10)	100	10 / 10	3.9 (10)	98	10 / 10	4.0 (10)	100	10 / 10	3.8 (10)	95	10 / 10
2	3.6 (10)	10 / 10	3.9 (10)	108	10 / 10	3.9 (10)	108	10 / 10	4.2 (10)	117	10 / 10	3.9 (10)	108	10 / 10	3.8 (10)	106	10 / 10
3	3.5 (10)	10 / 10	3.6 (10)	103	10 / 10	3.6 (9)	103	9 / 10	3.7 (10)	106	10 / 10	3.8 (10)	109	10 / 10	3.5 (10)	100	10 / 10
4	3.6 (10)	10 / 10	4.0 (9)	111	9 / 10	3.7 (9)	103	9 / 10	3.8 (10)	106	10 / 10	3.9 (10)	108	10 / 10	3.6 (10)	100	10 / 10
5	3.7 (10)	10 / 10	4.2 (9)	114	9 / 10	3.8 (9)	103	9 / 10	4.1 (10)	111	10 / 10	3.9 (10)	105	10 / 10	3.6 (10)	97	10 / 10
6	3.9 (10)	10 / 10	3.8 (9)	97	9 / 10	3.7 (9)	95	9 / 10	3.9 (10)	100	10 / 10	4.1 (10)	105	10 / 10	3.9 (9)	100	9 / 10
7	4.3 (10)	10 / 10	4.3 (9)	100	9 / 10	4.3 (9)	100	9 / 10	4.3 (10)	100	10 / 10	4.0 (10)	93	10 / 10	3.3 (9)	77	9 / 10
8	4.1 (10)	10 / 10	4.3 (9)	105	9 / 10	4.1 (9)	100	9 / 10	4.4 (10)	107	10 / 10	4.1 (10)	100	10 / 10	4.8 (9)	117	9 / 10
9	3.5 (10)	10 / 10	3.9 (9)	111	9 / 10	4.1 (9)	117	9 / 10	4.2 (10)	120	10 / 10	4.1 (10)	117	10 / 10	4.4 (9)	126	9 / 10
10	4.1 (10)	10 / 10	4.1 (9)	100	9 / 10	4.1 (9)	100	9 / 10	4.1 (10)	100	10 / 10	4.3 (10)	105	10 / 10	3.3 (9)	80	9 / 10
11	3.7 (10)	10 / 10	4.1 (9)	111	9 / 10	3.9 (9)	105	9 / 10	4.4 (10)	119	10 / 10	3.7 (10)	100	10 / 10	4.1 (9)	111	9 / 10
12	3.9 (10)	10 / 10	4.1 (9)	105	9 / 10	3.8 (9)	97	9 / 10	3.8 (10)	97	10 / 10	4.2 (10)	108	10 / 10	4.1 (9)	105	9 / 10
13	3.9 (10)	10 / 10	4.1 (9)	105	9 / 10	4.0 (9)	103	9 / 10	3.8 (10)	97	10 / 10	3.9 (10)	100	10 / 10	3.6 (9)	92	9 / 10

< > : No. of effective animals, ( ) : No. of measured animals, Av. Fc. : Averaged food consumption (Unit : g).

TABLE 4 FOOD CONSUMPTION CHANGES OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Week on Study	Control		512 ppm			1280 ppm			3200 ppm			8000 ppm			20000 ppm		
	Av. Fc. <10>	No. of Surviv.	Av. Fc. <10>	% of cont.	No. of Surviv.	Av. Fc. <10>	% of cont.	No. of Surviv.	Av. Fc. <10>	% of cont.	No. of Surviv.	Av. Fc. <10>	% of cont.	No. of Surviv.	Av. Fc. <10>	% of cont.	No. of Surviv.
1	3.8 (10)	10 / 10	3.7 (7)	97	10 / 10	3.2 (10)	84	10 / 10	3.5 (10)	92	10 / 10	3.5 (10)	92	10 / 10	3.5 (10)	92	10 / 10
2	3.6 (10)	10 / 10	3.3 (10)	92	10 / 10	3.1 (10)	86	10 / 10	3.5 (10)	97	10 / 10	3.2 (10)	89	10 / 10	3.2 (10)	89	10 / 10
3	3.4 (10)	10 / 10	3.4 (10)	100	10 / 10	3.3 (10)	97	10 / 10	3.1 (10)	91	10 / 10	3.4 (10)	100	10 / 10	3.1 (10)	91	10 / 10
4	3.3 (10)	10 / 10	3.6 (10)	109	10 / 10	3.2 (10)	97	10 / 10	3.4 (10)	103	10 / 10	3.2 (10)	97	10 / 10	3.3 (10)	100	10 / 10
5	3.6 (10)	10 / 10	3.7 (10)	103	10 / 10	3.6 (10)	100	10 / 10	3.5 (10)	97	10 / 10	3.5 (10)	97	10 / 10	3.4 (9)	94	10 / 10
6	3.4 (10)	10 / 10	3.8 (10)	112	10 / 10	3.5 (10)	103	10 / 10	3.4 (8)	100	10 / 10	3.4 (10)	100	10 / 10	3.5 (8)	103	8 / 10
7	3.7 (10)	10 / 10	4.1 (10)	111	10 / 10	3.5 (10)	95	10 / 10	3.9 (10)	105	10 / 10	3.6 (10)	97	10 / 10	3.3 (7)	89	7 / 10
8	3.8 (10)	10 / 10	3.8 (10)	100	10 / 10	3.7 (10)	97	10 / 10	4.0 (10)	105	10 / 10	3.7 (10)	97	10 / 10	4.3 (7)	113	7 / 10
9	3.7 (10)	10 / 10	4.0 (10)	108	10 / 10	3.9 (10)	105	10 / 10	3.8 (10)	103	10 / 10	4.0 (10)	108	10 / 10	4.2 (7)	114	7 / 10
10	3.6 (10)	10 / 10	3.8 (10)	106	10 / 10	3.7 (10)	103	10 / 10	3.7 (10)	103	10 / 10	3.4 (10)	94	10 / 10	3.1 (7)	86	7 / 10
11	4.0 (10)	10 / 10	4.1 (10)	103	10 / 10	3.9 (10)	98	10 / 10	3.7 (10)	93	10 / 10	3.5 (10)	88	10 / 10	3.9 (7)	98	7 / 10
12	3.9 (10)	10 / 10	3.9 (10)	100	10 / 10	3.7 (10)	95	10 / 10	3.8 (10)	97	10 / 10	3.6 (10)	92	10 / 10	3.5 (7)	90	7 / 10
13	3.8 (10)	10 / 10	3.8 (10)	100	10 / 10	3.7 (10)	97	10 / 10	3.9 (10)	103	10 / 10	3.4 (10)	89	10 / 10	3.4 (7)	89	7 / 10

< > : No. of effective animals, ( ) : No. of measured animals, Av. Fc. : Averaged food consumption (Unit : g).

TABLE 5　HEMATOLOGY OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm
No. of examined animals	9	9	9	10	10	9
RED BLOOD CELL ($10^6/\mu$ L)	10.52 ± 0.32	10.66 ± 0.20	10.48 ± 0.38	10.20 ± 0.29	9.78 ± 0.26 **	9.21 ± 0.25 **
HEMOGLOBIN (g/dL)	15.8 ± 0.5	16.0 ± 0.3	15.6 ± 0.6	15.5 ± 0.6	15.2 ± 0.4 *	16.1 ± 0.3
HEMATOCRIT (%)	47.6 ± 1.7	48.0 ± 0.6	46.5 ± 1.4	46.3 ± 1.4	44.6 ± 1.0 *	41.2 ± 0.4 **
MCH (pg)	15.1 ± 0.1	15.1 ± 0.2	14.9 ± 0.3	15.1 ± 0.3	15.5 ± 0.2 **	17.5 ± 0.3 **
MCHC (g/dL)	33.3 ± 0.7	33.5 ± 0.3	33.5 ± 0.7	33.4 ± 0.3	34.0 ± 0.4 *	39.2 ± 0.7 **
PLATELET ($10^3/\mu$ L)	1415 ± 71	1381 ± 83	1383 ± 51	1310 ± 94 *	1401 ± 105	1451 ± 105
RETICULOCYTE (%)	2.1 ± 0.3	2.0 ± 0.3	2.3 ± 0.3	2.6 ± 0.5	3.7 ± 0.7 **	6.1 ± 1.4 **
Differential WBC (%)						
EOSINO	2 ± 1	1 ± 1	2 ± 1	1 ± 1	1 ± 1 *	0 ± 1 *

Mean ± S.D.

Significant difference: * : p≦0.05 ** : p≦0.01 Test of Dunnett

TABLE 6　HEMATOLOGY OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm
No. of examined animals	10	10	10	8	10	7
RED BLOOD CELL ($10^6/\mu$ L)	10.80 ± 0.29	10.74 ± 0.34	10.67 ± 0.28	10.61 ± 0.21	10.12 ± 0.30 **	9.68 ± 0.49 **
HEMOGLOBIN (g/dL)	16.5 ± 0.4	16.3 ± 0.5	16.3 ± 0.5	16.1 ± 0.3	15.7 ± 0.5 **	16.8 ± 1.1
HEMATOCRIT (%)	49.0 ± 1.1	48.3 ± 1.2	47.8 ± 1.3	48.1 ± 1.1	46.5 ± 1.2 **	44.6 ± 2.5 **
MCH (pg)	15.3 ± 0.1	15.2 ± 0.1	15.3 ± 0.2	15.2 ± 0.1	15.5 ± 0.2	17.3 ± 0.6 **
MCHC (g/dL)	33.8 ± 0.5	33.8 ± 0.3	34.1 ± 0.3	33.5 ± 0.4	33.7 ± 0.4	37.6 ± 0.8 **
RETICULOCYTE (%)	2.2 ± 0.6	2.2 ± 0.5	1.9 ± 0.4	2.5 ± 0.8	4.1 ± 1.2 **	7.3 ± 1.4 **
Differential WBC (%)						
MONO	3 ± 1	2 ± 1	2 ± 1	2 ± 1	1 ± 1 **	1 ± 1 **

Mean ± S.D.

Significant difference: * : p≦0.05 ** : p≦0.01 Test of Dunnett

TABLE 7　BIOCHEMISTRY OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm	
No. of examined animals	10	9	9	10	10	9	
T-BILIRUBIN (mg/dL)	0.13 ± 0.02	0.14 ± 0.01	0.14 ± 0.03	0.13 ± 0.02	0.15 ± 0.03	0.16 ± 0.02	*

Mean ± S.D.

Significant difference:　* : p≦0.05　** : p≦0.01　Test of Dunnett

TABLE 8　BIOCHEMISTRY OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm	
No. of examined animals	10	9	10	8	10	7	
T-BILIRUBIN (mg/dL)	0.14 ± 0.02	0.15 ± 0.06	0.13 ± 0.01	0.13 ± 0.01	0.14 ± 0.04	0.18 ± 0.05	
GLUCOSE (mg/dL)	131 ± 23	140 ± 25	136 ± 20	153 ± 31	142 ± 23	180 ± 22	**
T-CHOLESTEROL (mg/dL)	72 ± 6	72 ± 10	70 ± 7	76 ± 15	81 ± 12	93 ± 13	**
PHOSPHOLIPID (mg/dL)	143 ± 9	144 ± 14	138 ± 12	148 ± 25	157 ± 19	171 ± 18	**
UREA NITOROGEN (mg/dL)	19.0 ± 2.4	19.2 ± 2.0	19.0 ± 3.3	19.5 ± 2.0	20.2 ± 2.3	27.4 ± 8.0	*

Mean ± S.D.

Significant difference:　* : p≦0.05　** : p≦0.01　Test of Dunnett

TABLE 9 URINALYSIS OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name		Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm
No. of examined animals		10	9	9	10	10	9
	Grade						
pH	5.0	0	0	0	0	0	0
	6.0	0	0	0	1	4	2
	6.5	0	0	2	1	0	5
	7.0	3	5	3	2	1	1
	7.5	4	3	1	3	2	1
	8.0	2	1	1	3	2	0
	8.5	1	0	2	0	1	0
	Chi square test						*
Protein	−	0	0	0	0	0	0
	±	0	0	1	0	4	8
	+	7	9	8	10	6	1
	2+	3	0	0	0	0	0
	3+	0	0	0	0	0	0
	4+	0	0	0	0	0	0
	Chi square test					*	**
Ketone body	−	1	2	3	5	6	6
	±	2	2	4	3	3	3
	+	7	5	2	2	1	0
	2+	0	0	0	0	0	0
	3+	0	0	0	0	0	0
	4+	0	0	0	0	0	0
	Chi square test					*	**

Significant difference: * : $p \leqq 0.05$ ** : $p \leqq 0.01$

TABLE 10 ORGAN WEIGHTS OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm
No. of examined animal	10	9	9	10	10	9
Body weight (g)	30.6 ± 2.4	30.8 ± 2.6	30.1 ± 2.4	29.6 ± 3.1	28.7 ± 2.5	25.8 ± 1.0 **
Lungs (g)	0.146 ± 0.010	0.149 ± 0.007	0.143 ± 0.011	0.145 ± 0.009	0.153 ± 0.016	0.147 ± 0.012
Lungs (%)	0.479 ± 0.031	0.487 ± 0.045	0.476 ± 0.039	0.495 ± 0.054	0.532 ± 0.029 *	0.572 ± 0.061 **
Kidneys (g)	0.419 ± 0.033	0.447 ± 0.067	0.744 ± 0.733	0.407 ± 0.029	0.409 ± 0.028	0.450 ± 0.031 *
Kidneys (%)	1.376 ± 0.135	1.464 ± 0.299	2.583 ± 2.767	1.381 ± 0.070	1.427 ± 0.065	1.744 ± 0.136 **
Spleen (g)	0.050 ± 0.005	0.054 ± 0.008	0.054 ± 0.011	0.053 ± 0.008	0.067 ± 0.005 **	0.145 ± 0.023 **
Spleen (%)	0.162 ± 0.016	0.177 ± 0.033	0.182 ± 0.047	0.178 ± 0.016	0.233 ± 0.014 **	0.562 ± 0.091 **
Liver (g)	1.094 ± 0.073	1.126 ± 0.071	1.077 ± 0.101	1.088 ± 0.127	1.116 ± 0.108	1.214 ± 0.068 *
Liver (%)	3.583 ± 0.193	3.662 ± 0.230	3.579 ± 0.184	3.673 ± 0.144	3.891 ± 0.204 **	4.702 ± 0.207 **
Brain (g)	0.437 ± 0.009	0.447 ± 0.013	0.448 ± 0.018	0.441 ± 0.010	0.441 ± 0.014	0.432 ± 0.014
Brain (%)	1.438 ± 0.128	1.458 ± 0.137	1.495 ± 0.103	1.505 ± 0.152	1.545 ± 0.125	1.674 ± 0.103 **

Mean ± S.D.
Significant difference: * : p≦0.05 ** : p≦0.01 Test of Dunnett

TABLE 11 ORGAN WEIGHTS OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL

Group Name	Control	512 ppm	1280 ppm	3200 ppm	8000 ppm	20000 ppm
No. of examined animal	10	10	10	10	10	7
Body weight (g)	21.2 ± 1.3	21.1 ± 1.2	21.0 ± 1.4	21.9 ± 1.6	20.5 ± 0.8	20.5 ± 0.7
Kidneys (g)	0.293 ± 0.014	0.298 ± 0.012	0.284 ± 0.018	0.308 ± 0.020	0.292 ± 0.010	0.315 ± 0.020 *
Kidneys (%)	1.386 ± 0.045	1.412 ± 0.092	1.356 ± 0.060	1.408 ± 0.081	1.426 ± 0.044	1.538 ± 0.130 *
Spleen (g)	0.054 ± 0.005	0.057 ± 0.004	0.052 ± 0.006	0.056 ± 0.007	0.071 ± 0.013 *	0.153 ± 0.015 **
Spleen (%)	0.254 ± 0.019	0.268 ± 0.020	0.250 ± 0.019	0.257 ± 0.029	0.344 ± 0.053 **	0.744 ± 0.069 **
Liver (g)	0.877 ± 0.027	0.880 ± 0.047	0.857 ± 0.091	0.916 ± 0.090	0.895 ± 0.071	1.036 ± 0.067 **
Liver (%)	4.148 ± 0.141	4.166 ± 0.175	4.085 ± 0.248	4.179 ± 0.229	4.368 ± 0.231	5.043 ± 0.240 **

Mean ± S.D.
Significant difference: * : p≦0.05 ** : p≦0.01 Test of Dunnett

TABLE 12 INCIDENCES OF SELECTED LESIONS OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL (DEAD AND MORIBUND ANIMALS)

Group Name	Control				512 ppm				1280 ppm				3200 ppm				8000 ppm				20000 ppm			
Number of examined animals	0				1				1				0				0				1			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
thymus							<1>				<1>												<1>	
atrophy			—		1	0	0	0	0	0	1	0			—				—		0	0	1	0
spleen							<1>				<1>												<1>	
deposit of hemosiderin			—		0	0	0	0	0	0	0	0			—				—		0	0	1	0
extramedullary hematopoiesis			—		0	0	0	0	0	0	0	0			—				—		0	0	1	0
heart							<1>				<1>												<1>	
myocardial necrosis			—		0	0	0	0	0	1	0	0			—				—		0	0	0	0
myocarditis			—		0	1	0	0	0	0	0	0			—				—		0	0	0	0
stomach							<1>				<1>												<1>	
hyperplasia:forestomach			—		0	0	0	0	0	0	0	0			—				—		0	1	0	0
kidney							<1>				<1>												<1>	
hydronephrosis			—		0	0	1	0	0	0	1	0			—				—		1	0	0	0
mineralization:cortex			—		0	0	0	0	1	0	0	0			—				—		0	0	0	0

Grade 1: Slight 2 : Moderate 3 : Marked 4 :Severe
< > : Number of animals examined at the site
— : All animals survived at the terminal necropsy

TABLE 13 INCIDENCES OF SELECTED LESIONS OF MALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL (SACRIFICED ANIMALS)

Group Name	Control				512 ppm				1280 ppm				3200 ppm				8000 ppm				20000 ppm			
Number of examined animals	10				9				9				10				10				9			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
spleen	<10>				<9>				<9>				<10>				<10>				<9>			
deposit of hemosiderin	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0 **	10	0	0	0 **	0	9	0	0 **
extramedullary hematopoiesis	1	0	0	0	2	0	0	0	5	0	0	0	10	0	0	0 **	2	8	0	0 **	0	0	9	0 **
stomach	<10>				<9>				<9>				<10>				<10>				<9>			
erosion:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
ulcer:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
hyperplasia:forestomach	0	0	0	0	0	0	0	0	1	0	0	0	7	1	0	0 **	4	4	0	0 **	0	0	9	0 **
liver	<10>				<9>				<9>				<10>				<10>				<9>			
deposit of hemosiderin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0 **
swelling:central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0 *	7	0	0	0 **
kidney	<10>				<9>				<9>				<10>				<10>				<9>			
hydronephrosis	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
inflammatory polyp	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
urinary bladder	<10>				<9>				<9>				<10>				<10>				<9>			
hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	8	0	0	0 **
swelling:transitional epithelium	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0 *	5	4	0	0 **	1	8	0	0 **

Grade 1: Slight 2 : Moderate 3 : Marked 4 :Severe
< > : Number of animals examined at the site
Significant difference ; * : p ≦ 0.05 ** : p ≦ 0.01 Test of Chi Square

TABLE 14 INCIDENCES OF SELECTED LESIONS OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL (DEAD AND MORIBUND ANIMALS)

Group Name	Control				512 ppm				1280 ppm				3200 ppm				8000 ppm				20000 ppm			
Number of examined animals	0				0				0				0				0				3			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
thymus																							<3>	
atrophy			—				—				—				—				—		0	0	3	0
spleen																							<3>	
deposit of hemosiderin			—				—				—				—				—		0	3	0	0
extramedullary hematopoiesis			—				—				—				—				—		0	2	1	0
tongue																							<3>	
inflammation			—				—				—				—				—		1	0	0	0
stomach																							<3>	
erosion:forestomach			—				—				—				—				—		2	0	0	0
ulcer:forestomach			—				—				—				—				—		2	0	0	0
hyperplasia:forestomach			—				—				—				—				—		0	0	3	0
urinary bladder																							<3>	
necrosis:transitional epithelium			—				—				—				—				—		0	2	0	0

Grade 1: Slight 2 : Moderate 3 : Marked 4 :Severe
< > : Number of animals examined at the site
— : All animals survived at the terminal necropsy

TABLE 15 INCIDENCES OF SELECTED LESIONS OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF 2-AMINO-4-CHLOROPHENOL (SACRIFICED ANIMALS)

Group Name	Control				512 ppm				1280 ppm				3200 ppm				8000 ppm				20000 ppm			
Number of examined animals	10				10				10				10				10				7			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
spleen	<10>				<10>				<10>				<10>				<10>				<7>			
deposit of hemosiderin	0	0	0	0	0	0	0	0	5	0	0	0 *	10	0	0	0 **	3	7	0	0 **	0	7	0	0 **
extramedullary hematopoiesis	1	0	0	0	2	0	0	0	9	0	0	0 **	8	2	0	0 **	4	5	1	0 **	0	0	7	0 **
stomach	<10>				<10>				<10>				<10>				<10>				<7>			
erosion:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
ulcer:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0 *
hyperplasia:forestomach	0	0	0	0	0	0	0	0	2	0	0	0	3	3	0	0 *	5	3	2	0 **	0	0	7	0 **
liver	<10>				<10>				<10>				<10>				<10>				<7>			
deposit of hemosiderin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0 **
urinary bladder	<10>				<10>				<10>				<10>				<10>				<7>			
hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0 *
necrosis:transitional epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
swelling:transitional epithelium	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0 **	10	0	0	0 **	0	7	0	0 **

Grade 1: Slight 2 : Moderate 3 : Marked 4 :Severe
< > : Number of animals examined at the site
Significant difference ; * : $p \leqq 0.05$ ** : $p \leqq 0.01$ Test of Chi Square