

アクロレインのラットを用いた吸入による13週間毒性試験報告書

試験番号：0782

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TABLE A

**CONCENTRATIONS OF ACROLEIN IN THE INHALATION
CHAMBER OF THE 13-WEEK INHALATION STUDY**

CONCENTRATIONS OF ACROLEIN IN THE INHALATION
CHAMBER OF THE 13-WEEK INHALATION STUDY

Group Name	Concentration(ppm) Mean \pm S.D.
Control	0.00 \pm 0.00
0.1 ppm	0.10 \pm 0.00
0.3 ppm	0.30 \pm 0.00
1 ppm	1.01 \pm 0.01
2 ppm	2.01 \pm 0.02
3 ppm	3.01 \pm 0.02

TABLE B1

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrj]
 REPORT TYPE : A1 13
 SEX : MALE

SURVIVAL ANIMAL NUMBERS

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
0.1ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
0.3ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
1ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
2ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
3ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
		Number of survival/ Number of effective animals Survival rate (%)													

TABLE B2

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrj]
 REPORT TYPE : A1 13
 SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
0.1ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
0.3ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
1ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
2ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
3ppm	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
		Number of survival/ Number of effective animals Survival rate (%)													

TABLE C1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day												
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
PILOERECTON	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.3ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	2ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	3ppm	0	0	1	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.3ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	2ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	3ppm	1	6	5	1	2	2	7	4	2	3	2	1	2

TABLE C2

CLINICAL OBSERVATION : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
 REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day												
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.3ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	2ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	3ppm	1	4	4	1	2	3	6	4	3	6	1	1	1

(HAN190)

TABLE D1

**BODY WEIGHT CHANGES AND SURVIVAL ANIMAL
NUMBERS : MALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrIj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

Week-Day on Study	Control		0.1ppm		0.3ppm		1ppm		2ppm		3ppm						
	Av. Wt.	No. of Surviv. <10>	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.			
0-0	117 (10)	10/10	117 (10)	100	10/10	117 (10)	100	10/10	117 (10)	100	10/10	117 (10)	100	10/10	117 (10)	100	10/10
1-7	143 (10)	10/10	144 (10)	101	10/10	142 (10)	99	10/10	141 (10)	99	10/10	131 (10)	92	10/10	116 (10)	81	10/10
2-7	172 (10)	10/10	172 (10)	100	10/10	170 (10)	99	10/10	171 (10)	99	10/10	155 (10)	90	10/10	128 (10)	74	10/10
3-7	197 (10)	10/10	196 (10)	99	10/10	195 (10)	99	10/10	193 (10)	98	10/10	177 (10)	90	10/10	130 (10)	66	10/10
4-7	218 (10)	10/10	217 (10)	100	10/10	217 (10)	100	10/10	214 (10)	98	10/10	198 (10)	91	10/10	148 (10)	68	10/10
5-7	236 (10)	10/10	234 (10)	99	10/10	233 (10)	99	10/10	232 (10)	98	10/10	211 (10)	89	10/10	154 (10)	65	10/10
6-7	250 (10)	10/10	248 (10)	99	10/10	246 (10)	98	10/10	244 (10)	98	10/10	222 (10)	89	10/10	165 (10)	66	10/10
7-7	262 (10)	10/10	260 (10)	99	10/10	259 (10)	99	10/10	257 (10)	98	10/10	236 (10)	90	10/10	179 (10)	68	10/10
8-7	275 (10)	10/10	269 (10)	98	10/10	269 (10)	98	10/10	267 (10)	97	10/10	245 (10)	89	10/10	190 (10)	69	10/10
9-7	286 (10)	10/10	280 (10)	98	10/10	280 (10)	98	10/10	276 (10)	97	10/10	251 (10)	88	10/10	195 (10)	68	10/10
10-7	294 (10)	10/10	287 (10)	98	10/10	287 (10)	98	10/10	283 (10)	96	10/10	256 (10)	87	10/10	199 (10)	68	10/10
11-7	302 (10)	10/10	294 (10)	97	10/10	295 (10)	98	10/10	294 (10)	97	10/10	264 (10)	87	10/10	207 (10)	69	10/10
12-7	310 (10)	10/10	300 (10)	97	10/10	302 (10)	97	10/10	299 (10)	96	10/10	271 (10)	87	10/10	211 (10)	68	10/10
13-7	314 (10)	10/10	306 (10)	97	10/10	308 (10)	98	10/10	307 (10)	98	10/10	277 (10)	88	10/10	214 (10)	68	10/10

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

TABLE D2

**BODY WEIGHT CHANGES AND SURVIVAL ANIMAL
NUMBERS : FEMALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

Week-Day on Study	Control		0.1ppm			0.3ppm			1ppm			2ppm			3ppm		
	Av. Wt.	No. of Surviv. <10>	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.
0-0	97 (10)	10/10	97 (10)	100	10/10	97 (10)	100	10/10	96 (10)	99	10/10	97 (10)	100	10/10	96 (10)	99	10/10
1-7	110 (10)	10/10	110 (10)	100	10/10	110 (10)	100	10/10	108 (10)	98	10/10	103 (10)	94	10/10	97 (10)	88	10/10
2-7	124 (10)	10/10	125 (10)	101	10/10	124 (10)	100	10/10	123 (10)	99	10/10	116 (10)	94	10/10	104 (10)	84	10/10
3-7	133 (10)	10/10	134 (10)	101	10/10	132 (10)	99	10/10	133 (10)	100	10/10	124 (10)	93	10/10	110 (10)	83	10/10
4-7	141 (10)	10/10	141 (10)	100	10/10	140 (10)	99	10/10	140 (10)	99	10/10	132 (10)	94	10/10	123 (10)	87	10/10
5-7	147 (10)	10/10	148 (10)	101	10/10	146 (10)	99	10/10	147 (10)	100	10/10	137 (10)	93	10/10	124 (10)	84	10/10
6-7	154 (10)	10/10	153 (10)	99	10/10	154 (10)	100	10/10	152 (10)	99	10/10	142 (10)	92	10/10	130 (10)	84	10/10
7-7	159 (10)	10/10	160 (10)	101	10/10	157 (10)	99	10/10	159 (10)	100	10/10	148 (10)	93	10/10	136 (10)	86	10/10
8-7	163 (10)	10/10	161 (10)	99	10/10	163 (10)	100	10/10	163 (10)	100	10/10	152 (10)	93	10/10	141 (10)	87	10/10
9-7	168 (10)	10/10	167 (10)	99	10/10	167 (10)	99	10/10	165 (10)	98	10/10	156 (10)	93	10/10	145 (10)	86	10/10
10-7	172 (10)	10/10	170 (10)	99	10/10	170 (10)	99	10/10	169 (10)	98	10/10	158 (10)	92	10/10	147 (10)	85	10/10
11-7	176 (10)	10/10	174 (10)	99	10/10	177 (10)	101	10/10	174 (10)	99	10/10	162 (10)	92	10/10	151 (10)	86	10/10
12-7	178 (10)	10/10	179 (10)	101	10/10	180 (10)	101	10/10	178 (10)	100	10/10	165 (10)	93	10/10	153 (10)	86	10/10
13-7	178 (10)	10/10	179 (10)	101	10/10	183 (10)	103	10/10	178 (10)	100	10/10	166 (10)	93	10/10	155 (10)	87	10/10

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

TABLE D3

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrIj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration		week-day						
	0-0		1-7	2-7	3-7	4-7	5-7	6-7	
Control	117±	4	143± 8	172± 10	197± 11	218± 12	236± 13	250± 13	
0.1ppm	117±	4	144± 7	172± 8	196± 10	217± 11	234± 12	248± 12	
0.3ppm	117±	4	142± 6	170± 8	195± 8	217± 9	233± 10	246± 11	
1ppm	117±	4	141± 5	171± 9	193± 10	214± 9	232± 11	244± 12	
2ppm	117±	4	131± 4**	155± 6**	177± 8**	198± 7**	211± 7**	222± 8**	
3ppm	117±	4	116± 4**	128± 5**	130± 13**	148± 12**	154± 7**	165± 8**	

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

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STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration		week-day						
	7-7	8-7	9-7	10-7	11-7	12-7	13-7		
Control	262± 15	275± 17	286± 16	294± 16	302± 18	310± 17	314± 18		
0.1ppm	260± 13	269± 14	280± 14	287± 14	294± 12	300± 13	306± 14		
0.3ppm	259± 11	269± 13	280± 13	287± 15	295± 16	302± 16	308± 20		
1ppm	257± 14	267± 15	276± 15	283± 17	294± 16	299± 17	307± 19		
2ppm	236± 9**	245± 9**	251± 10**	256± 11**	264± 10**	271± 9**	277± 8**		
3ppm	179± 8**	190± 6**	195± 7**	199± 6**	207± 7**	211± 9**	214± 10**		

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

TABLE D4

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration		week-day		1-7		2-7		3-7		4-7		5-7		6-7	
	0-0															
Control	97±	3	110±	4	124±	4	133±	4	141±	5	147±	6	154±	7		
0.1ppm	97±	3	110±	3	125±	4	134±	5	141±	4	148±	6	153±	5		
0.3ppm	97±	3	110±	3	124±	4	132±	5	140±	4	146±	4	154±	5		
1ppm	96±	3	108±	3	123±	3	133±	5	140±	5	147±	6	152±	6		
2ppm	97±	3	103±	5**	116±	5**	124±	5**	132±	6**	137±	6**	142±	7**		
3ppm	96±	3	97±	4**	104±	4**	110±	5**	123±	5**	124±	5**	130±	5**		

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration week-day		7-7		8-7		9-7		10-7		11-7		12-7		13-7	
Control	159±	6	163±	7	168±	8	172±	8	176±	10	178±	9	178±	10		
0.1ppm	160±	7	161±	5	167±	5	170±	5	174±	5	179±	7	179±	7		
0.3ppm	157±	7	163±	8	167±	8	170±	9	177±	10	180±	9	183±	11		
1ppm	159±	5	163±	6	165±	5	169±	7	174±	7	178±	8	178±	8		
2ppm	148±	9**	152±	8**	156±	8**	158±	8**	162±	9**	165±	9**	166±	9**		
3ppm	136±	5**	141±	4**	145±	4**	147±	4**	151±	4**	153±	5**	155±	4**		

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

TABLE E1

**FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS : MALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

MEAN FOOD CONSUMPTION (FC) AND SURVIVAL

Week-Day on Study	Control		0.1ppm		0.3ppm		1ppm		2ppm		3ppm						
	Av. FC.	No. of Surviv. <10>	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.			
1-7	13.8 (10)	10/10	14.1 (10)	102	10/10	13.7 (10)	99	10/10	13.6 (10)	99	10/10	10.5 (10)	76	10/10	8.3 (10)	60	10/10
2-7	15.4 (10)	10/10	15.4 (10)	100	10/10	15.2 (10)	99	10/10	14.9 (10)	97	10/10	13.6 (10)	88	10/10	10.5 (10)	68	10/10
3-7	15.8 (10)	10/10	15.6 (10)	99	10/10	15.9 (10)	101	10/10	15.7 (10)	99	10/10	14.0 (10)	89	10/10	9.5 (10)	60	10/10
4-7	16.2 (10)	10/10	16.0 (10)	99	10/10	15.9 (10)	98	10/10	16.0 (10)	99	10/10	15.4 (10)	95	10/10	11.1 (10)	69	10/10
5-7	16.5 (10)	10/10	16.3 (10)	99	10/10	16.0 (10)	97	10/10	16.0 (10)	97	10/10	14.3 (10)	87	10/10	11.8 (10)	72	10/10
6-7	16.1 (10)	10/10	15.6 (10)	97	10/10	15.7 (10)	98	10/10	16.1 (10)	100	10/10	14.5 (10)	90	10/10	11.9 (10)	74	10/10
7-7	16.1 (10)	10/10	15.3 (10)	95	10/10	15.6 (10)	97	10/10	15.7 (10)	98	10/10	14.9 (10)	93	10/10	12.8 (10)	80	10/10
8-7	15.7 (10)	10/10	15.2 (10)	97	10/10	15.5 (10)	99	10/10	15.7 (10)	100	10/10	14.9 (10)	95	10/10	13.1 (10)	83	10/10
9-7	16.1 (10)	10/10	15.5 (10)	96	10/10	15.9 (10)	99	10/10	15.8 (10)	98	10/10	14.4 (10)	89	10/10	12.7 (10)	79	10/10
10-7	16.2 (10)	10/10	15.7 (10)	97	10/10	15.6 (10)	96	10/10	16.0 (10)	99	10/10	15.1 (10)	93	10/10	13.3 (10)	82	10/10
11-7	16.5 (10)	10/10	15.5 (10)	94	10/10	16.2 (10)	98	10/10	16.3 (10)	99	10/10	15.5 (10)	94	10/10	13.5 (10)	82	10/10
12-7	16.1 (10)	10/10	15.4 (10)	96	10/10	15.9 (10)	99	10/10	15.9 (10)	99	10/10	15.0 (10)	93	10/10	12.9 (10)	80	10/10
13-7	16.1 (10)	10/10	15.3 (10)	95	10/10	16.0 (10)	99	10/10	16.1 (10)	100	10/10	15.0 (10)	93	10/10	12.9 (10)	80	10/10

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

TABLE E2

**FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS : FEMALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIj [F344/DuCrIj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

MEAN FOOD CONSUMPTION (FC) AND SURVIVAL

Week-Day on Study	Control		0.1ppm		0.3ppm		1ppm		2ppm		3ppm						
	Av. FC.	No. of Surviv. <10>	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.			
1-7	10.3 (10)	10/10	10.4 (10)	101	10/10	10.2 (10)	99	10/10	10.2 (10)	99	10/10	9.1 (10)	88	10/10	7.6 (10)	74	10/10
2-7	11.3 (10)	10/10	11.0 (10)	97	10/10	10.8 (10)	96	10/10	11.1 (10)	98	10/10	10.2 (10)	90	10/10	9.1 (10)	81	10/10
3-7	10.9 (10)	10/10	10.9 (10)	100	10/10	10.5 (10)	96	10/10	11.1 (10)	102	10/10	10.3 (10)	94	10/10	9.0 (10)	83	10/10
4-7	11.3 (10)	10/10	10.8 (10)	96	10/10	10.6 (10)	94	10/10	11.2 (10)	99	10/10	10.3 (10)	91	10/10	10.0 (10)	88	10/10
5-7	11.0 (10)	10/10	10.6 (10)	96	10/10	10.4 (10)	95	10/10	10.9 (10)	99	10/10	9.8 (10)	89	10/10	9.2 (10)	84	10/10
6-7	10.8 (10)	10/10	10.8 (10)	100	10/10	10.6 (10)	98	10/10	10.7 (10)	99	10/10	10.5 (10)	97	10/10	9.7 (10)	90	10/10
7-7	10.7 (10)	10/10	10.5 (10)	98	10/10	10.3 (10)	96	10/10	11.0 (10)	103	10/10	10.2 (10)	95	10/10	9.9 (10)	93	10/10
8-7	10.4 (10)	10/10	10.2 (10)	98	10/10	10.5 (10)	101	10/10	10.7 (10)	103	10/10	10.5 (10)	101	10/10	9.9 (10)	95	10/10
9-7	10.7 (10)	10/10	10.4 (10)	97	10/10	10.4 (10)	97	10/10	10.4 (10)	97	10/10	10.2 (10)	95	10/10	9.8 (10)	92	10/10
10-7	10.7 (10)	10/10	10.6 (10)	99	10/10	10.9 (10)	102	10/10	10.6 (10)	99	10/10	10.5 (10)	98	10/10	10.1 (10)	94	10/10
11-7	11.4 (10)	10/10	11.1 (10)	97	10/10	11.0 (10)	96	10/10	11.3 (10)	99	10/10	11.2 (10)	98	10/10	10.5 (10)	92	10/10
12-7	10.7 (10)	10/10	11.1 (10)	104	10/10	11.2 (10)	105	10/10	11.2 (10)	105	10/10	11.0 (10)	103	10/10	10.1 (10)	94	10/10
13-7	10.7 (10)	10/10	10.7 (10)	100	10/10	10.7 (10)	100	10/10	10.9 (10)	102	10/10	10.8 (10)	101	10/10	10.0 (10)	93	10/10

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

TABLE E3

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration week-day (effective)						
	1-7 (7)	2-7 (7)	3-7 (7)	4-7 (7)	5-7 (7)	6-7 (7)	7-7 (7)
Control	13.8 ± 0.8	15.4 ± 0.8	15.8 ± 0.9	16.2 ± 1.3	16.5 ± 1.5	16.1 ± 1.5	16.1 ± 1.7
0.1ppm	14.1 ± 1.0	15.4 ± 1.2	15.6 ± 0.7	16.0 ± 0.8	16.3 ± 0.8	15.6 ± 1.0	15.3 ± 1.0
0.3ppm	13.7 ± 1.0	15.2 ± 1.1	15.9 ± 1.2	15.9 ± 0.9	16.0 ± 1.1	15.7 ± 0.8	15.6 ± 0.8
1ppm	13.6 ± 0.7	14.9 ± 0.9	15.7 ± 1.0	16.0 ± 0.8	16.0 ± 0.8	16.1 ± 0.9	15.7 ± 1.2
2ppm	10.5 ± 0.3**	13.6 ± 0.8**	14.0 ± 1.1**	15.4 ± 1.0	14.3 ± 0.6**	14.5 ± 1.0**	14.9 ± 0.7*
3ppm	8.3 ± 0.4**	10.5 ± 0.6**	9.5 ± 1.9**	11.1 ± 1.7**	11.8 ± 1.7**	11.9 ± 1.0**	12.8 ± 0.7**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration week-day (effective)					
	8-7 (7)	9-7 (7)	10-7 (7)	11-7 (7)	12-7 (7)	13-7 (7)
Control	15.7± 1.5	16.1± 1.3	16.2± 1.0	16.5± 0.9	16.1± 0.8	16.1± 1.1
0.1ppm	15.2± 0.8	15.5± 0.9	15.7± 0.4	15.5± 0.4*	15.4± 0.7	15.3± 0.6
0.3ppm	15.5± 1.0	15.9± 1.3	15.6± 1.2	16.2± 1.3	15.9± 1.2	16.0± 1.1
1ppm	15.7± 1.4	15.8± 1.2	16.0± 1.2	16.3± 0.7	15.9± 0.9	16.1± 0.8
2ppm	14.9± 0.8	14.4± 0.5**	15.1± 0.6*	15.5± 0.8	15.0± 0.9*	15.0± 0.7*
3ppm	13.1± 0.6**	12.7± 0.7**	13.3± 0.8**	13.5± 0.9**	12.9± 1.0**	12.9± 0.8**

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE E4

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrIj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration week-day (effective)						
	1-7 (7)	2-7 (7)	3-7 (7)	4-7 (7)	5-7 (7)	6-7 (7)	7-7 (7)
Control	10.3 ± 0.5	11.3 ± 0.6	10.9 ± 0.4	11.3 ± 0.6	11.0 ± 0.8	10.8 ± 0.7	10.7 ± 0.7
0.1ppm	10.4 ± 0.5	11.0 ± 0.6	10.9 ± 0.8	10.8 ± 0.6	10.6 ± 0.5	10.8 ± 0.7	10.5 ± 0.8
0.3ppm	10.2 ± 0.4	10.8 ± 0.5	10.5 ± 0.6	10.6 ± 0.6*	10.4 ± 0.4	10.6 ± 0.5	10.3 ± 0.6
1ppm	10.2 ± 0.4	11.1 ± 0.4	11.1 ± 0.6	11.2 ± 0.5	10.9 ± 0.7	10.7 ± 0.4	11.0 ± 0.6
2ppm	9.1 ± 0.5**	10.2 ± 0.6**	10.3 ± 0.6	10.3 ± 0.6**	9.8 ± 0.4**	10.5 ± 0.6	10.2 ± 0.8
3ppm	7.6 ± 0.5**	9.1 ± 0.6**	9.0 ± 0.7**	10.0 ± 0.4**	9.2 ± 0.5**	9.7 ± 0.5**	9.9 ± 0.6

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrICrIj [F344/DuCrIj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

Group Name	Administration week-day (effective)					
	8-7 (7)	9-7 (7)	10-7 (7)	11-7 (7)	12-7 (7)	13-7 (7)
Control	10.4 ± 0.5	10.7 ± 0.8	10.7 ± 0.6	11.4 ± 0.9	10.7 ± 0.9	10.7 ± 0.6
0.1ppm	10.2 ± 0.3	10.4 ± 0.4	10.6 ± 0.5	11.1 ± 0.3	11.1 ± 0.8	10.7 ± 0.4
0.3ppm	10.5 ± 0.6	10.4 ± 0.6	10.9 ± 0.9	11.0 ± 0.8	11.2 ± 0.7	10.7 ± 0.7
1ppm	10.7 ± 0.3	10.4 ± 0.3	10.6 ± 0.5	11.3 ± 0.6	11.2 ± 0.7	10.9 ± 0.6
2ppm	10.5 ± 1.2	10.2 ± 0.7	10.5 ± 0.7	11.2 ± 1.1	11.0 ± 1.1	10.8 ± 0.9
3ppm	9.9 ± 0.5	9.8 ± 0.5**	10.1 ± 0.3	10.5 ± 0.4*	10.1 ± 0.6	10.0 ± 0.4*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE F1

HEMATOLOGY : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ⁹ /μl	
Control	10	9.57±	0.24	15.7±	0.3	46.2±	1.1	48.2±	0.3	16.4±	0.2	33.9±	0.3	752±	41
0.1ppm	10	9.61±	0.15	15.6±	0.2	46.3±	0.7	48.2±	0.3	16.3±	0.2	33.8±	0.2	777±	40
0.3ppm	10	9.52±	0.18	15.5±	0.3	45.8±	0.9	48.2±	0.3	16.3±	0.1	33.8±	0.3	771±	50
1ppm	10	9.57±	0.15	15.7±	0.2	46.1±	0.7	48.2±	0.3	16.4±	0.1	34.0±	0.2	753±	43
2ppm	10	9.58±	0.19	15.9±	0.3	46.7±	1.0	48.8±	0.4**	16.6±	0.2**	34.0±	0.3	778±	39
3ppm	10	9.83±	0.14*	16.9±	0.3**	49.2±	1.1**	50.0±	0.5**	17.1±	0.2**	34.2±	0.2*	706±	50

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

REPORT TYPE : A1

PAGE : 2

Group Name	No. of Animals	RETICULOCYTE %		PROTHROMBIN TIME sec		APTT sec	
Control	10	1.8±	0.2	12.3±	0.9	23.1±	1.2
0.1ppm	10	1.9±	0.1	13.3±	1.2*	24.3±	1.2
0.3ppm	10	1.9±	0.2	12.8±	0.5	23.8±	0.8
1ppm	10	1.9±	0.2	12.8±	1.2	23.8±	1.5
2ppm	10	1.8±	0.2	12.2±	0.8	21.6±	1.6*
3ppm	10	1.6±	0.2	12.2±	0.4	21.9±	1.3

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrIj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC		Differential		WBC (%)		MONO	EOSINO	BASO	OTHER				
		10 ⁹ /μl		NEUTRO		LYMPHO									
Control	10	5.74±	1.08	25±	5	72±	5	2±	0	1±	0	0±	0	1±	0
0.1ppm	10	5.21±	1.46	25±	6	72±	6	2±	0	1±	0	0±	0	1±	1
0.3ppm	10	5.22±	1.03	24±	5	72±	5	2±	1	1±	0	0±	0	1±	0
1ppm	10	5.23±	1.15	23±	5	73±	5	2±	1	1±	0	0±	0	1±	0
2ppm	10	5.30±	1.37	26±	3	70±	3	2±	0	1±	1	0±	0	1±	0
3ppm	10	4.43±	0.85	35±	5**	62±	5**	1±	1	2±	1	0±	0	0±	1

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Dunnett

TABLE F2

HEMATOLOGY : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrICrIj [F344/DuCrIj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH Pg		MCHC g/dl		PLATELET 10 ³ /μl	
Control	10	8.83±	0.24	15.8±	0.4	45.3±	1.2	51.3±	0.3	17.9±	0.2	34.9±	0.2	798±	32
0.1ppm	10	8.87±	0.30	15.8±	0.4	45.5±	1.4	51.4±	0.4	17.8±	0.2	34.8±	0.3	780±	52
0.3ppm	10	8.83±	0.24	15.8±	0.4	45.4±	1.1	51.4±	0.3	17.8±	0.2	34.7±	0.3	808±	38
1ppm	10	8.82±	0.19	15.7±	0.3	45.1±	1.0	51.1±	0.4	17.8±	0.2	34.8±	0.3	781±	51
2ppm	10	9.00±	0.23	16.0±	0.4	45.9±	1.1	50.9±	0.2	17.8±	0.1	34.9±	0.3	790±	59
3ppm	10	9.18±	0.25*	16.3±	0.4*	46.5±	1.3	50.7±	0.4**	17.8±	0.1	35.1±	0.4	725±	58**

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	No. of Animals	RETICULOCYTE %		PROTHROMBIN TIME sec		APTT sec	
Control	10	1.8±	0.2	11.4±	0.3	17.9±	0.8
0.1ppm	10	1.7±	0.2	11.3±	0.3	17.8±	0.6
0.3ppm	10	1.8±	0.2	11.6±	0.3	17.6±	0.8
1ppm	10	1.7±	0.2	11.5±	0.4	17.5±	1.2
2ppm	10	1.7±	0.2	11.7±	0.3	17.7±	0.9
3ppm	10	1.6±	0.2	11.7±	0.2	17.9±	0.7

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1J [F344/DuCr1J]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC		Differential		WBC (%)		MONO	EOSINO	BASO	OTHER				
		10 ⁹ /μl		NEUTRO		LYMPHO									
Control	10	3.52±	0.72	24±	6	72±	7	2±	0	1±	0	0±	0	1±	0
0.1ppm	10	3.40±	0.83	22±	3	75±	3	2±	1	1±	0	0±	0	1±	0
0.3ppm	10	3.40±	1.04	22±	6	74±	6	2±	0	1±	1	0±	0	0±	1
1ppm	10	3.48±	0.99	23±	5	72±	5	2±	0	2±	1	0±	0	1±	0
2ppm	10	3.94±	1.07	22±	4	74±	4	2±	0	2±	1	0±	0	1±	1
3ppm	10	3.84±	0.93	25±	4	72±	4	2±	1	2±	1	0±	0	1±	0

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Dunnett

TABLE G1

BIOCHEMISTRY : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	10	6.4±	0.2	3.4±	0.1	1.1±	0.1	0.09±	0.01	192±	9	65±	5	53±	25
0.1ppm	10	6.4±	0.2	3.4±	0.1	1.1±	0.0	0.09±	0.01	187±	15	58±	4*	38±	10
0.3ppm	10	6.4±	0.2	3.4±	0.1	1.1±	0.0	0.09±	0.01	189±	5	60±	5	43±	13
1ppm	10	6.4±	0.2	3.4±	0.1	1.1±	0.1	0.08±	0.01	186±	17	61±	6	36±	6
2ppm	10	6.3±	0.3	3.4±	0.1	1.1±	0.1	0.08±	0.01	187±	8	55±	5**	34±	13*
3ppm	10	6.1±	0.2**	3.3±	0.1	1.2±	0.1*	0.09±	0.01	168±	14**	52±	4**	15±	4**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
 MEASURE TIME : 1
 SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ		AST U/L		ALT U/L		LDH U/L		ALP U/L		G-GTP U/L		CK U/L	
Control	10	121±	10	89±	13	48±	7	104±	21	385±	33	1±	0	98±	16
0.1ppm	10	111±	5*	94±	15	50±	7	108±	27	394±	38	1±	0	103±	16
0.3ppm	10	112±	9*	85±	22	46±	7	110±	43	400±	37	1±	0	103±	19
1ppm	10	110±	8*	92±	29	48±	11	110±	47	395±	24	1±	0	111±	17
2ppm	10	106±	7**	72±	9*	39±	5**	88±	32	400±	38	1±	0	109±	22
3ppm	10	100±	7**	79±	8	41±	3	97±	38	463±	40**	1±	0	120±	22

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIj [F344/DuCrj]
 MEASURE TIME : 1
 SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	UREA NITROGEN mg/dℓ		CREATININE mg/dℓ		SODIUM mEq/ℓ		POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	10	19.8±	1.1	0.7±	0.1	143±	2	3.4±	0.2	106±	1	10.2±	0.3	5.8±	0.7
0.1ppm	10	18.4±	1.0	0.6±	0.1	143±	1	3.4±	0.3	106±	1	10.1±	0.2	5.5±	1.0
0.3ppm	10	18.4±	0.9	0.6±	0.0	143±	1	3.5±	0.2	106±	1	10.1±	0.1	5.8±	1.0
1ppm	10	18.9±	1.4	0.6±	0.0	143±	1	3.4±	0.3	106±	1	10.1±	0.2	5.7±	0.9
2ppm	10	18.9±	1.3	0.7±	0.1	142±	1	3.5±	0.3	106±	1	10.0±	0.3	5.9±	1.0
3ppm	10	19.2±	1.8	0.6±	0.1	142±	1	3.7±	0.2	107±	1	9.7±	0.3**	5.6±	0.9

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE G2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	No. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	10	6.3±	0.2	3.3±	0.1	1.1±	0.0	0.09±	0.01	152±	16	77±	5	11±	2
0.1ppm	10	6.4±	0.2	3.4±	0.1	1.1±	0.0	0.09±	0.01	142±	14	72±	7	9±	2
0.3ppm	10	6.3±	0.2	3.3±	0.1	1.1±	0.1	0.09±	0.01	145±	9	74±	8	9±	3
1ppm	10	6.3±	0.1	3.3±	0.1	1.1±	0.0	0.10±	0.01	149±	17	67±	3**	9±	2
2ppm	10	6.0±	0.1*	3.3±	0.0	1.2±	0.1	0.09±	0.01	147±	18	67±	10**	10±	2
3ppm	10	5.9±	0.1**	3.2±	0.1**	1.1±	0.0	0.10±	0.01	136±	13	66±	8**	10±	2

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST U/L		ALT U/L		LDH U/L		ALP U/L		G-GTP U/L		CK U/L	
Control	10	146±	9	76±	10	40±	9	86±	33	303±	26	1±	0	93±	19
0.1ppm	10	136±	13	76±	10	35±	7	84±	24	308±	21	1±	0	87±	11
0.3ppm	10	138±	10	70±	5	33±	4	97±	44	309±	29	1±	0	99±	26
1ppm	10	128±	4**	78±	7	43±	8	100±	36	336±	42	1±	1	101±	17
2ppm	10	130±	14*	67±	5*	32±	3*	87±	30	328±	29	1±	0	109±	17
3ppm	10	129±	11**	74±	4	36±	4	96±	28	382±	37**	1±	0	106±	16

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
 MEASURE TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	10	19.5±	2.1	0.7±	0.1	142±	1	3.3±	0.2	107±	2	9.8±	0.2	4.6±	1.3
0.1ppm	10	17.9±	1.9	0.7±	0.1	143±	1	3.3±	0.3	107±	2	9.9±	0.2	4.8±	1.2
0.3ppm	10	19.5±	2.3	0.7±	0.1	142±	1	3.4±	0.3	108±	2	9.8±	0.2	4.8±	1.4
1ppm	10	19.8±	1.7	0.7±	0.0	142±	1	3.3±	0.2	107±	1	9.8±	0.2	5.1±	1.0
2ppm	10	20.0±	2.4	0.6±	0.0	142±	1	3.5±	0.2	108±	2	9.7±	0.2	5.4±	0.9
3ppm	10	19.4±	1.2	0.6±	0.0	141±	1*	3.7±	0.2**	107±	1	9.6±	0.2	5.2±	1.0

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

TABLE H1

URINALYSIS : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
 MEASURE TIME : 1
 SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-	
Control	10	0	0	0	0	0	1	9	0	3	6	1	0	0	10	0	0	0	0	0	1	5	3	1	0	0	10	0	0	0		
0.1ppm	10	0	0	0	0	0	4	6	1	4	5	0	0	0	10	0	0	0	0	0	6	3	1	0	0	10	0	0	0			
0.3ppm	10	0	0	0	0	0	3	7	0	4	3	3	0	0	10	0	0	0	0	0	6	1	0	3	0	10	0	0	0	*		
1ppm	10	0	0	0	0	1	2	7	0	5	4	1	0	0	10	0	0	0	0	0	4	5	1	0	0	10	0	0	0			
2ppm	10	0	0	0	0	0	4	6	1	8	1	0	0	0	10	0	0	0	0	0	6	4	0	0	0	10	0	0	0	*		
3ppm	10	0	0	0	0	0	3	7	1	5	4	0	0	0	10	0	0	0	0	0	10	0	0	0	0	10	0	0	0	**		

Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01

Test of CHI SQUARE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrIj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Occult blood					Urobilinogen						
		-	±	+	2+	3+	CHI	±	+	2+	3+	4+	CHI
Control	10	10	0	0	0	0	0	10	0	0	0	0	0
0.1ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
0.3ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
1ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
2ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
3ppm	10	10	0	0	0	0	0	10	0	0	0	0	0

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of CHI SQUARE

TABLE H2

URINALYSIS : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				CHI		
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		+	2+
Control	10	0	0	0	0	0	1	9		7	3	0	0	0	0		10	0	0	0	0	0		8	2	0	0	0	0		10	0	0	0
0.1ppm	10	0	0	0	1	0	1	8		8	2	0	0	0	0		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0
0.3ppm	10	0	0	0	1	1	4	4		8	2	0	0	0	0		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0
1ppm	10	0	0	0	0	1	3	6		7	2	1	0	0	0		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0
2ppm	10	0	0	0	0	0	0	10		9	1	0	0	0	0		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0
3ppm	10	0	0	0	0	1	2	7		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0	0	0		10	0	0	0

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of CHI SQUARE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrjCrj [F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Occult blood					Urobilinogen						
		-	±	+	2+	3+	CHI	±	+	2+	3+	4+	CHI
Control	10	10	0	0	0	0	0	10	0	0	0	0	0
0.1ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
0.3ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
1ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
2ppm	10	10	0	0	0	0	0	10	0	0	0	0	0
3ppm	10	10	0	0	0	0	0	10	0	0	0	0	0

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of CHI SQUARE

TABLE I 1

GROSS FINDINGS : MALE

STUDY NO. : 0782
ANIMAL : RAT F344/DuCrIj [F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 14W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		0.1ppm		0.3ppm		1ppm	
			10	(%)	10	(%)	10	(%)	10	(%)
liver	herniation		0	(0)	0	(0)	1	(10)	1	(10)

(HPT080)

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STUDY NO. : 0782
ANIMAL : RAT F344/DuCrI CrIj [F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	2ppm		3ppm	
			10	(%)	10	(%)
liver	herniation		0	(0)	0	(0)

TABLE I 2

GROSS FINDINGS : FEMALE

STUDY NO. : 0782
ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	Control		0.1ppm		0.3ppm		1ppm	
			10	(%)	10	(%)	10	(%)	10	(%)
liver	herniation		0	(0)	1	(10)	0	(0)	0	(0)
ovary	cyst		0	(0)	0	(0)	1	(10)	0	(0)

STUDY NO. : 0782
ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	2ppm		3ppm	
			10	(%)	10	(%)
liver	herniation		0	(0)	0	(0)
ovary	cyst		0	(0)	0	(0)

TABLE J1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (14W)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	293± 16	0.251± 0.028	0.050± 0.003	3.077± 0.089	0.889± 0.050	0.958± 0.066
0.1ppm	10	284± 11	0.237± 0.029	0.052± 0.003	3.007± 0.141	0.904± 0.038	0.933± 0.031
0.3ppm	10	288± 16	0.238± 0.036	0.053± 0.004	3.044± 0.072	0.899± 0.046	0.943± 0.052
1ppm	10	284± 17	0.231± 0.035	0.052± 0.003	3.059± 0.101	0.908± 0.054	0.942± 0.064
2ppm	10	254± 10**	0.193± 0.022**	0.050± 0.003	3.052± 0.066	0.853± 0.029	0.914± 0.031
3ppm	10	196± 8**	0.140± 0.012**	0.051± 0.004	2.845± 0.059**	0.744± 0.030**	0.986± 0.087

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (14W)

PAGE : 2

Group Name	NO. of Animals	KIDNEYS		SPLEEN		LIVER		BRAIN	
Control	10	1.778±	0.108	0.540±	0.030	7.335±	0.486	1.903±	0.042
0.1ppm	10	1.727±	0.071	0.533±	0.032	6.912±	0.340	1.896±	0.027
0.3ppm	10	1.752±	0.072	0.531±	0.034	7.071±	0.478	1.905±	0.034
1ppm	10	1.756±	0.071	0.528±	0.035	6.928±	0.461	1.913±	0.034
2ppm	10	1.621±	0.048**	0.470±	0.033**	6.311±	0.334**	1.874±	0.046
3ppm	10	1.379±	0.074**	0.375±	0.026**	4.758±	0.259**	1.774±	0.077**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE J2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (14W)

Group Name	NO. of Animals	Body Weight		THYMUS		ADRENALS		OVARIES		HEART		LUNGS	
Control	10	165±	9	0.187±	0.020	0.057±	0.006	0.096±	0.011	0.604±	0.034	0.695±	0.035
0.1ppm	10	165±	5	0.197±	0.018	0.058±	0.004	0.112±	0.016	0.610±	0.039	0.697±	0.033
0.3ppm	10	168±	9	0.188±	0.023	0.058±	0.004	0.099±	0.011	0.608±	0.036	0.699±	0.033
1ppm	10	164±	8	0.190±	0.026	0.057±	0.003	0.108±	0.013	0.603±	0.028	0.711±	0.024
2ppm	10	151±	9**	0.154±	0.018**	0.056±	0.005	0.095±	0.014	0.588±	0.037	0.680±	0.044
3ppm	10	140±	5**	0.145±	0.016**	0.058±	0.004	0.100±	0.019	0.575±	0.042	0.708±	0.036

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (14W)

Group Name	NO. of Animals	KIDNEYS		SPLEEN		LIVER		BRAIN	
Control	10	1.085±	0.043	0.361±	0.016	3.908±	0.177	1.760±	0.029
0.1ppm	10	1.076±	0.031	0.366±	0.035	3.929±	0.174	1.746±	0.090
0.3ppm	10	1.086±	0.057	0.375±	0.016	3.938±	0.175	1.764±	0.033
1ppm	10	1.085±	0.036	0.365±	0.019	3.900±	0.214	1.779±	0.039
2ppm	10	1.076±	0.048	0.343±	0.029	3.795±	0.219	1.743±	0.086
3ppm	10	1.020±	0.045**	0.322±	0.019**	3.460±	0.106**	1.719±	0.041

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE K1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIcrlj [F344/DuCrIj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT : %

ORGAN WEIGHT:RELATIVE (SUMMARY)
 SURVIVAL ANIMALS (14W)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	293± 16	0.086± 0.008	0.017± 0.002	1.052± 0.041	0.304± 0.012	0.327± 0.013
0.1ppm	10	284± 11	0.083± 0.009	0.018± 0.001	1.060± 0.069	0.318± 0.011	0.329± 0.009
0.3ppm	10	288± 16	0.083± 0.010	0.018± 0.002	1.062± 0.070	0.313± 0.011	0.328± 0.012
1ppm	10	284± 17	0.081± 0.011	0.018± 0.002	1.079± 0.059	0.320± 0.019*	0.331± 0.009
2ppm	10	254± 10**	0.076± 0.007	0.020± 0.002**	1.206± 0.056**	0.337± 0.010**	0.361± 0.015**
3ppm	10	196± 8**	0.071± 0.005**	0.026± 0.002**	1.454± 0.050**	0.380± 0.012**	0.504± 0.046**

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0782
ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (14W)

PAGE : 2

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.607± 0.016	0.184± 0.006	2.502± 0.041	0.651± 0.032
0.1ppm	10	0.608± 0.017	0.188± 0.012	2.432± 0.061	0.668± 0.022
0.3ppm	10	0.610± 0.025	0.185± 0.007	2.459± 0.073	0.664± 0.033
1ppm	10	0.619± 0.029	0.186± 0.009	2.437± 0.067	0.675± 0.032
2ppm	10	0.640± 0.016**	0.186± 0.010	2.489± 0.072	0.740± 0.034**
3ppm	10	0.703± 0.016**	0.192± 0.009	2.428± 0.045*	0.907± 0.050**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE K2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
 SURVIVAL ANIMALS (14#)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	10	165± 9	0.113± 0.012	0.035± 0.003	0.058± 0.008	0.367± 0.027	0.422± 0.017
0.1ppm	10	165± 5	0.119± 0.009	0.035± 0.002	0.068± 0.009	0.370± 0.016	0.423± 0.017
0.3ppm	10	168± 9	0.112± 0.012	0.035± 0.002	0.059± 0.007	0.364± 0.024	0.418± 0.023
1ppm	10	164± 8	0.116± 0.013	0.035± 0.001	0.066± 0.008	0.369± 0.012	0.436± 0.028
2ppm	10	151± 9**	0.103± 0.015	0.037± 0.003	0.063± 0.010	0.390± 0.016	0.451± 0.026*
3ppm	10	140± 5**	0.103± 0.010	0.041± 0.002**	0.071± 0.012*	0.409± 0.022**	0.505± 0.022**

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0782
ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (14W)

PAGE : 4

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.659 ± 0.023	0.219 ± 0.005	2.372 ± 0.050	1.070 ± 0.055
0.1ppm	10	0.653 ± 0.013	0.222 ± 0.017	2.386 ± 0.086	1.062 ± 0.069
0.3ppm	10	0.649 ± 0.026	0.224 ± 0.009	2.353 ± 0.070	1.056 ± 0.061
1ppm	10	0.664 ± 0.030	0.223 ± 0.013	2.385 ± 0.107	1.089 ± 0.047
2ppm	10	0.715 ± 0.030**	0.227 ± 0.009	2.518 ± 0.093**	1.158 ± 0.058**
3ppm	10	0.727 ± 0.023**	0.229 ± 0.009	2.465 ± 0.059*	1.224 ± 0.026**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

TABLE L1

**HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit																		
	respiratory metaplasia:olfactory epithelium		<10>				<10>				<10>				<10>			
			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)
	atrophy:turbinate		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atrophy:olfactory gland		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:nasal gland		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:transitional epithelium		0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)
	atrophy:olfactory nerve		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammntory infiltration:respiratory epithelium		1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1J[F344/DuCrJ]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]									
nasal cavit		<10>				<10>			
	respiratory metaplasia:olfactory epithelium	2 (20)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium	2 (20)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 ** (0)
	atrophy:turbinate	10 (100)	0 (0)	0 (0)	0 ** (0)	0 (0)	10 (100)	0 (0)	0 ** (0)
	atrophy:olfactory gland	0 (0)	10 (100)	0 (0)	0 ** (0)	0 (0)	0 (0)	10 (100)	0 ** (0)
	hyperplasia:nasal gland	8 (80)	1 (10)	0 (0)	0 ** (0)	9 (90)	0 (0)	0 (0)	0 ** (0)
	hyperplasia:transitional epithelium	0 (0)	10 (100)	0 (0)	0 ** (0)	0 (0)	2 (20)	0 (0)	0 (0)
	atrophy:olfactory nerve	0 (0)	10 (100)	0 (0)	0 ** (0)	0 (0)	0 (0)	10 (100)	0 ** (0)
	inflammotry infiltration:respiratory epithelium	7 (70)	0 (0)	0 (0)	0 * (0)	4 (40)	6 (60)	0 (0)	0 ** (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr|Cr|j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study				Control				0.1ppm				0.3ppm				1ppm			
		Grade				1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
						<10>				<10>				<10>				<10>			
		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																					
nasal cavit																					
	inflammatory infiltration:olfactory epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:transitional epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	100	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia:transitional epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	100	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:olfactory epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atrophy:olfactory epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:respiratory epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	exudate:respiratory region	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		1+	2+	3+	4+	1+	2+	3+	4+
		10	0	0	0 **	9	1	0	0 **
		(100)	(0)	(0)	(0)	(90)	(10)	(0)	(0)
		10	0	0	0 **	10	0	0	0 **
		(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
		10	0	0	0 **	0	2	8	0 **
		(100)	(0)	(0)	(0)	(0)	(20)	(80)	(0)
		0	10	0	0 **	10	0	0	0 **
		(0)	(100)	(0)	(0)	(100)	(0)	(0)	(0)
		0	10	0	0 **	10	0	0	0 **
		(0)	(100)	(0)	(0)	(100)	(0)	(0)	(0)
		0	10	0	0 **	0	0	10	0 **
		(0)	(100)	(0)	(0)	(0)	(0)	(100)	(0)
		0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
[Respiratory system]																		
nasal cavity																		
			<10>				<10>				<10>				<10>			
exudate:olfactory region			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
exudate:neutrophil leukocyte, respiratory region			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
exudate:neutrophil leukocyte, olfactory region			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
ossification:turbinate			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adhesion:turbinate			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
granulation, edematous:olfactory epithelium			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx																		
hyperplasia:epithelium			<10>				<10>				<10>				<10>			
			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
goblet cell hyperplasia			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		1+	2+	3+	4+	1+	2+	3+	4+
		<10>				<10>			
	exudate:olfactory region	3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	3 (30)	3 (30)	0 ** (0)
	exudate:neutrophil leukocyte, respiratory region	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	1 (10)	0 (0)	0 (0)
	exudate:neutrophil leukocyte, olfactory region	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)
	ossification:turbinat	3 (30)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	adhesion:turbinat	3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	2 (20)	0 (0)	0 (0)
	granulation, edematous:olfactory epithelium	10 (100)	0 (0)	0 (0)	0 ** (0)	4 (40)	6 (60)	0 (0)	0 ** (0)
		<10>				<10>			
	hyperplasia:epithelium	0 (0)	0 (0)	0 (0)	0 (0)	9 (90)	0 (0)	0 (0)	0 ** (0)
	goblet cell hyperplasia	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1][F344/DuCrJ]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control				0.1ppm				0.3ppm				1ppm				
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				
		Grade				Grade				Grade				Grade				
		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
[Respiratory system]																		
nasopharynx	regeneration:epithelium	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
larynx	inflammatory infiltration	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:epithelium	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
trachea	inflammatory infiltration	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia	<10>				<10>				<10>				<10>				
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		10				10			
Group Name No. of Animals on Study		1+	2+	3+	4+	1+	2+	3+	4+
Grade		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]									
nasopharynx	regeneration:epithelium	<10>				<10>			
		0	0	0	0	0	10	0	0 **
		(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
larynx	inflammatory infiltration	<10>				<10>			
		1	0	0	0	2	0	0	0
		(10)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	squamous cell metaplasia	<10>				<10>			
		0	0	0	0	0	9	0	0 **
		(0)	(0)	(0)	(0)	(0)	(90)	(0)	(0)
	regeneration:epithelium	<10>				<10>			
		1	0	0	0	1	1	0	0
		(10)	(0)	(0)	(0)	(10)	(10)	(0)	(0)
	dilated glands	<10>				<10>			
		0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
trachea	inflammatory infiltration	<10>				<10>			
		1	0	0	0	5	0	0	0 *
		(10)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
	squamous cell metaplasia	<10>				<10>			
		0	0	0	0	5	2	0	0 **
		(0)	(0)	(0)	(0)	(50)	(20)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCrIj[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control				0.1ppm				0.3ppm				1ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
Grade		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																	
trachea		<10>				<10>				<10>				<10>			
	goblet cell hyperplasia	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:epithelium	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung		<10>				<10>				<10>				<10>			
	inflammatory infiltration	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	goblet cell metaplasia	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:epithelium, bronchus	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		1+	2+	3+	4+	1+	2+	3+	4+
		10				10			
		Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]									
trachea		<10>				<10>			
	goblet cell hyperplasia	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	regeneration:epithelium	1	0	0	0	0	10	0	0 **
		(10)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
	dilated glands	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:epithelium	0	0	0	0	4	0	0	0
		(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
lung		<10>				<10>			
	inflammatory infiltration	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	goblet cell metaplasia	0	0	0	0	3	0	0	0
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	accumulation of foamy cells	0	0	0	0	3	0	0	0
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	hyperplasia:epithelium,bronchus	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			<10>				<10>				<10>				<10>			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																		
lung	regeneration:epithelium,bronchus		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:BALT		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia,bronchiolar type		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Circulatory system]																		
heart	inflammatory cell nest		1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
[Digestive system]																		
liver	herniation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm				
		1+	2+	3+	4+	1+	2+	3+	4+	
[Respiratory system]										
lung	regeneration:epithelium,bronchus	0 (0)	0 (0)	0 (0)	0 (0)	6 (60)	4 (40)	0 (0)	0 (0)	**
	hyperplasia:BALT	0 (0)	0 (0)	0 (0)	0 (0)	7 (70)	0 (0)	0 (0)	0 (0)	**
	bronchiolar-alveolar cell hyperplasia,bronchiolar type	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	
[Circulatory system]										
heart	inflammatory cell nest	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
[Digestive system]										
liver	herniation	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study	Control				0.1ppm				0.3ppm				1ppm			
			Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+
[Digestive system]																		
liver																		
	necrosis:focal		<10>				<10>				<10>				<10>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest		2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
[Urinary system]																		
kidney																		
	eosinophilic body		<10>				<10>				<10>				<10>			
			10	0	0	0	8	2	0	0	9	1	0	0	9	1	0	0
			(100)	(0)	(0)	(0)	(80)	(20)	(0)	(0)	(90)	(10)	(0)	(0)	(90)	(10)	(0)	(0)
	regeneration:proximal tubule		2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
[Endocrine system]																		
pituitary																		
	Rathke pouch		<10>				<10>				<10>				<10>			
			0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	2ppm				3ppm			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Digestive system]										
liver	necrosis:focal		<10>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory cell nest		1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
[Urinary system]										
kidney	eosinophilic body		<10>				<10>			
			9 (90)	1 (10)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0)
	regeneration:proximal tubule		0 (0)	1 (10)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
[Endocrine system]										
pituitary	Rathke pouch		<10>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study	Control				0.1ppm				0.3ppm				1ppm						
			1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+			
		10																			
		Grade																			
		(%)																			
thyroid	ultimobranchial body remanet		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(<10>)																			
		(0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (20) (0) (0) (0)																			

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

PAGE : 16

Organ	Findings	Group Name		2ppm				3ppm			
		No. of Animals on Study		10				10			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	

{Endocrine system}

thyroid			<10>				<10>			
	ultimobranchial body remanet		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

(HPT150)

BAIS5

TABLE L2

**HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE**

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																		
nasal cavit			<10>				<10>				<10>				<10>			
	respiratory metaplasia:olfactory epithelium		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 (0)	0 (0)	0 (0)	
	squamous cell metaplasia:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	
	atrophy:turbinate		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	
	atrophy:olfactory gland		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 (0)	0 (0)	0 (0)	
	hyperplasia:nasal gland		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	hyperplasia:transitional epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	
	atrophy:olfactory nerve		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 (0)	0 (0)	0 (0)	
	inflammatory infiltration:respiratory epithelium		1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	2 (20)	0 (0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name		2ppm				3ppm			
		No. of Animals on Study		10				10			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
[Respiratory system]											
nasal cavit			<10>				<10>				
	respiratory metaplasia:olfactory epithelium		4	0	0	0	2	0	0	0	
			(40)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	
	squamous cell metaplasia:respiratory epithelium		6	0	0	0 *	10	0	0	0 **	
			(60)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	
	atrophy:turbinat		10	0	0	0 **	0	10	0	0 **	
			(100)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	
	atrophy:olfactory gland		2	8	0	0 **	0	0	10	0 **	
			(20)	(80)	(0)	(0)	(0)	(0)	(100)	(0)	
	hyperplasia:nasal gland		6	0	0	0 *	10	0	0	0 **	
			(60)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	
	hyperplasia:transitional epithelium		0	10	0	0 **	0	2	0	0	
			(0)	(100)	(0)	(0)	(0)	(20)	(0)	(0)	
	atrophy:olfactory nerve		0	10	0	0 **	0	0	10	0 **	
			(0)	(100)	(0)	(0)	(0)	(0)	(100)	(0)	
	inflammatory infiltration:respiratory epithelium		7	2	0	0 **	6	3	0	0 **	
			(70)	(20)	(0)	(0)	(60)	(30)	(0)	(0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																		
nasal cavit			<10>				<10>				<10>				<10>			
	inflammatory infiltration:olfactory epithelium		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 (0)	0 (0)	0 (0)	
	regeneration:transitional epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 ** (0)	
	squamous cell metaplasia:transitional epithelium		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 (0)	0 (0)	0 (0)	
	regeneration:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 ** (0)	0 (0)	
	regeneration:olfactory epithelium		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 (0)	0 (0)	0 (0)	
	atrophy:olfactory epithelium		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 (0)	0 (0)	0 (0)	
	hyperplasia:respiratory epithelium		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 (0)	0 (0)	0 (0)	
	exudate:olfactory region		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 (0)	0 (0)	0 (0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name		2ppm				3ppm			
		No. of Animals on Study		10				10			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
[Respiratory system]											
nasal cavit			<10>				<10>				
	inflammatory infiltration:olfactory epithelium		9 (90)	0 (0)	0 (0)	0 ** (0)	8 (80)	1 (10)	0 (0)	0 ** (0)	
	regeneration:transitional epithelium		10 (100)	0 (0)	0 (0)	0 ** (0)	10 (100)	0 (0)	0 (0)	0 ** (0)	
	squamous cell metaplasia:transitional epithelium		4 (40)	6 (60)	0 (0)	0 ** (0)	0 (0)	2 (20)	8 (80)	0 ** (0)	
	regeneration:respiratory epithelium		0 (0)	10 (100)	0 (0)	0 ** (0)	10 (100)	0 (0)	0 (0)	0 ** (0)	
	regeneration:olfactory epithelium		0 (0)	10 (100)	0 (0)	0 ** (0)	10 (100)	0 (0)	0 (0)	0 ** (0)	
	atrophy:olfactory epithelium		0 (0)	10 (100)	0 (0)	0 ** (0)	0 (0)	0 (0)	10 (100)	0 ** (0)	
	hyperplasia:respiratory epithelium		2 (20)	8 (80)	0 (0)	0 ** (0)	0 (0)	0 (0)	10 (100)	0 ** (0)	
	exudate:olfactory region		1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	7 (70)	1 (10)	0 ** (0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																		
nasal cavit	ossification:turbinate		<10>				<10>				<10>				<10>			
			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 (0)	0 (0)	0 (0)	0 (0)
	adhesion:turbinate		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 (0)	0 (0)	0 (0)	0 (0)
	granulation, edematous:olfactory epithelium		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 (0)	0 (0)	0 (0)	0 (0)
nasopharynx	hyperplasia:epithelium		<10>				<10>				<10>				<10>			
			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 (0)	0 (0)	0 (0)	0 (0)
	goblet cell hyperplasia		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 (0)	0 (0)	0 (0)	0 (0)
	regeneration:epithelium		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 (0)	0 (0)	0 (0)	0 (0)
larynx	inflammatory infiltration		<10>				<10>				<10>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 . b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name		2ppm				3ppm			
		No. of Animals on Study		10				10			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
[Respiratory system]											
nasal cavit	ossification:turbinate		<10>				<10>				
			1	0	0	0	0	0	0	0	
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	adhesion:turbinate		0	0	0	0	4	0	0	0	
			(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	
	granulation,edematous:olfactory epithelium		5	0	0	0 *	8	2	0	0 **	
			(50)	(0)	(0)	(0)	(80)	(20)	(0)	(0)	
nasopharynx	hyperplasia:epithelium		<10>				<10>				
			0	0	0	0	8	0	0	0 **	
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	
	goblet cell hyperplasia		2	0	0	0	0	0	0	0	
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	regeneration:epithelium		0	0	0	0	0	10	0	0 **	
			(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	
larynx	inflammatory infiltration		<10>				<10>				
			5	0	0	0 *	5	0	0	0 *	
			(50)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control				0.1ppm				0.3ppm				1ppm			
			1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																		
larynx																		
	squamous cell metaplasia		<10>				<10>				<10>				<10>			
			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory polyp		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:epithelium		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
trachea																		
	inflammatory infiltration		<10>				<10>				<10>				<10>			
			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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:epithelium		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:epithelium		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study				2ppm				3ppm				
		Grade	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]														
larynx	squamous cell metaplasia		<10>				<10>							
		0	0	0	0	0	8	0	0	0	0	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory polyp	1	0	0	0	0	0	0	0	0	0	0	0	
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	regeneration:epithelium	0	0	0	0	0	2	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	
	dilated glands	0	0	0	0	2	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
trachea	inflammatory infiltration		<10>				<10>							
		0	0	0	0	3	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	squamous cell metaplasia	0	0	0	0	9	0	0	0	0	0	0	0 **	
		(0)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	regeneration:epithelium	0	0	0	0	0	10	0	0	0	0	0	0 **	
		(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:epithelium	0	0	0	0	0	1	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control				0.1ppm				0.3ppm				1ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		10				10				10				10			
		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																	
lung	regeneration:epithelium,bronchus	<10>				<10>				<10>				<10>			
		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:BALT	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Hematopoietic system]																	
bone marrow	granulation	<10>				<10>				<10>				<10>			
		1	2	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(10)	(20)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
[Circulatory system]																	
heart	inflammatory cell nest	<10>				<10>				<10>				<10>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Digestive system]																	
liver	herniation	<10>				<10>				<10>				<10>			
		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	2ppm				3ppm			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]										
lung	regeneration:epithelium, bronchus		<10>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	9 (90)	0 (0)	0 (0)	0 (0) **
	hyperplasia:BALT		0 (0)	0 (0)	0 (0)	0 (0)	8 (80)	0 (0)	0 (0)	0 (0) **
[Hematopoietic system]										
bone marrow	granulation		<10>				<10>			
			2 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Circulatory system]										
heart	inflammatory cell nest		<10>				<10>			
			1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Digestive system]										
liver	herniation		<10>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control				0.1ppm				0.3ppm				1ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Digestive system]																	
liver																	
	inflammatory cell nest	<10>				<10>				<10>				<10>			
		2	0	0	0	2	0	0	0	1	0	0	0	4	0	0	0
		(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
pancreas																	
	atrophy	<10>				<10>				<10>				<10>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Urinary system]																	
kidney																	
	mineralization:cortico-medullary junction	<10>				<10>				<10>				<10>			
		3	0	0	0	3	0	0	0	5	0	0	0	2	0	0	0
		(30)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	mineralization:papilla	<10>				<10>				<10>				<10>			
		1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Endocrine system]																	
thyroid																	
	ultimobranchial body remanet	<10>				<10>				<10>				<10>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	2ppm				3ppm			
		1+	2+	3+	4+	1+	2+	3+	4+
[Digestive system]									
liver	inflammatory cell nest	<10>				<10>			
		1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
pancreas	atrophy	<10>				<10>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Urinary system]									
kidney	mineralization:cortico-medullary junction	<10>				<10>			
		5 (50)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
	mineralization:papilla	2 (20)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
[Endocrine system]									
thyroid	ultimobranchial body remanet	<10>				<10>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control				0.1ppm				0.3ppm				1ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		10				10				10				10			
		1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Reproductive system]																	
ovary	cyst	<10>				<10>				<10>				<10>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0782
 ANIMAL : RAT F344/DuCr10Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name		2ppm				3ppm			
		No. of Animals on Study		10				10			
		Grade		1+	2+	3+	4+	1+	2+	3+	4+
				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

[Reproductive system]

ovary	cyst			<10>				<10>			
				0	0	0	0	0	0	0	0
				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square