

四塩化炭素のラット及びマウスを用いた
吸入によるがん原性試験結果報告書

試験番号:急性 (ラット/0011 ; マウス/0012) 2 週間 (ラット/0013 ; マウス/0014)
13 週間 (ラット/0021 ; マウス/0022) がん原性 (ラット/0043 ; マウス 0044)

付 録
(7/9)

表 ; P-23~P-30;B-5~B-6;U-3;P-31~P-36

中央労働災害防止協会
日本バイオアッセイ研究センター

表P-23 肉眼所見. 総括表 (マウス. 急性試験. 死亡. 瀕死動物)

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		7000		8050		9250		10646		12243	
NO. OF EXAMINED ANIMALS		0	0	1	0	10	0	10	0	10	0
ORGAN	FINDINGS	D	M	D	M	D	M	D	M	D	M
LUNG	ATELECTASIS	0	0	0	0	4	0	4	0	3	0
	RED PATCH/ZONE	0	0	0	0	0	0	0	0	1	0
VENTRICLE	CONGESTION	0	0	0	0	10	0	8	0	6	0
	DILATED	0	0	1	0	1	0	0	0	3	0
LIVER	CONGESTION	0	0	0	0	0	0	1	0	0	0
	ANEMIC	0	0	0	0	10	0	6	0	7	0
SPLEEN	CONGESTION	0	0	0	0	0	0	0	0	0	0
	ANEMIC	0	0	0	0	0	0	0	0	0	0
	BLACK PATCH/ZONE	0	0	0	0	0	0	0	0	0	0
KIDNEY	CONGESTION	0	0	0	0	0	0	0	0	0	0
	ANEMIC	0	0	0	0	5	0	0	0	1	0
	HYDRONEPHROSIS	0	0	0	0	1	0	0	0	0	0
URETER	DILATED	0	0	0	0	1	0	0	0	0	0
URINARY BLADDER	DILATED	0	0	0	0	6	0	5	0	6	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		14080	
NO. OF EXAMINED ANIMALS		10	0
ORGAN	FINDINGS	D	M
LUNG	ATELECTASIS	0	0
	RED PATCH/ZONE	0	0
VENTRICLE	CONGESTION	2	0
	DILATED	4	0
LIVER	CONGESTION	4	0
	ANEMIC	4	0
SPLEEN	CONGESTION	2	0
	ANEMIC	1	0
	BLACK PATCH/ZONE	1	0
KIDNEY	CONGESTION	3	0
	ANEMIC	0	0
	HYDRONEPHROSIS	0	0
URTER	DILATED	0	0
URINARY BLADDER	DILATED	2	0

D: DEAD H: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM)		7000		8050		9258		10646		12243	
NO. OF EXAMINED ANIMALS		0	0	9	0	10	0	10	0	10	0
ORGAN	FINDINGS	D	M	D	M	D	M	D	M	D	M
LUNG	ATELECTASIS	0	0	3	0	5	0	3	0	5	0
	REDDISH	0	0	0	0	0	0	0	0	1	0
VENTRICLE	CONGESTION	0	0	9	0	8	0	7	0	7	0
	DILATED	0	0	1	0	1	0	0	0	2	0
LIVER	ANEMIC	0	0	8	0	8	0	9	0	6	0
SPLEEN	CONGESTION	0	0	0	0	0	0	0	0	2	0
	ANEMIC	0	0	0	0	0	0	1	0	0	0
	BLACK PATCH/ZONE	0	0	0	0	1	0	0	0	0	0
STOMACH	CONGESTION	0	0	0	0	0	0	0	0	1	0
	TURBID	0	0	0	0	0	0	1	0	0	0
KIDNEY	ANEMIC	0	0	7	0	7	0	1	0	3	0
URINARY BLADDER											
	DILATED	0	0	0	0	1	0	0	0	0	0
UTERUS	DILATED LUMEN	0	0	5	0	3	0	5	0	4	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM)		14080	
NO. OF EXAMINED ANIMALS		10	0
ORGAN	FINDINGS	D	M
LUNG	ATELECTASIS	1	0
	REDDISH	0	0
VENTRICLE	CONGESTION	3	0
	DILATED	3	0
LIVER	ANEMIC	8	0
SPLEEN	CONGESTION	0	0
	ANEMIC	0	0
	BLACK PATCH/ZONE	0	0
STOMACH	CONGESTION	0	0
	TURBID	0	0
KIDNEY	ANEMIC	4	0
URINARY BLADDER			
	DILATED	2	0
UTERUS	DILATED LUMEN	3	0

D: DEAD M: MORIBUND

表P-24 肉眼所見. 総括表 (マウス. 急性試験. 定期解剖動物)

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM)		7000	8050	9250	10646	12243
NO. OF EXAMINED ANIMALS		10	1	0	0	0
ORGAN	FINDINGS					
LIVER	COLORRED PATCH/ZONE	3	0	0	0	0
URINARY BLADDER	DILATED	1	0	0	0	0
UTERUS	DILATED LUMEN	0	0	0	0	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		7000	8050	9258	10646	12243
NO. OF EXAMINED ANIMALS		10	9	0	0	0
ORGAN	FINDINGS					
LIVER	ANEMIC	1	0	0	0	0
	YELLOWISH	1	0	0	0	0
	COLORRED PATCH/ZONE	2	3	0	0	0
SPLEEN	CONGESTION	1	0	0	0	0
	BLACK	1	0	0	0	0
KIDNEY	BLACK PATCH/ZONE	1	0	0	0	0
	ANEMIC	1	0	0	0	0
	HYDRONEPHROSIS	1	0	0	0	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		14080
NO. OF EXAMINED ANIMALS		0
ORGAN	FINDINGS	
LIVER	ANEMIC	0
	YELLOWISH	0
	COLORRED PATCH/ZONE	0
SPLEEN	CONGESTION	0
	BLACK	0
KIDNEY	BLACK PATCH/ZONE	0
	ANEMIC	0
	HYDRONEPHROSIS	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM) 14080
 NO. OF EXAMINED ANIMALS 0

ORGAN FINDINGS

LIVER COLORED PATCH/ZONE 0
 URINARY BLADDER DILATED 0
 UTERUS DILATED LUMEN 0

表 P - 2 5 病理組織学的所見，総括表
(マウス，急性試験，瀕死，死亡動物)

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		7000				8050				9258				10646				12243				
NO. OF EXAMINED ANIMALS		0				1				2				2				2				
ORGAN	FINDINGS	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	
LUNG	CONGESTION	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
THYROID	ECTOPIC	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LIVER	DEGENERATION	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	2	0
KIDNEY	HYDRONEPHROSIS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
SPLEEN	HYPERPLASIA	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
THYMUS	HYPERPLASIA	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	2	0	0
HEART	DILATATION	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORTUOND)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		14000			
NO. OF EXAMINED ANIMALS		2			
ORGAN	FINDINGS	T	1	2	3
LUNG	CONGESTION	0	0	0	0
THYROID	ECTOPIC	0	0	0	0
LIVER	DEGENERATION	0	0	2	0
KIDNEY	HYDRONEPHROSIS	0	0	0	0
SPLEEN	KARYORRHESIS	0	0	0	0
THYMUS	KARYORRHESIS	0	2	0	0
HEART	DILATATION	0	1	0	0

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM)		7000				8050				9258				10646				12243				
NO. OF EXAMINED ANIMALS		0				1				2				2				2				
ORGAN	FINDINGS	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	
LUNG	CONGESTION	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
THYROID	ECTOPIC	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LIVER	GRANULATION	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	DEGENERATION	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	2	0
SPLEEN	DEPOSIT OF PIGMENT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	KARYORRHEXIS	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
THYMUS	KARYORRHEXIS	0	0	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0	2	0
HEART	DILATATION	0	0	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. 1 0012

SEX : FEMALE

DOSE LEVEL (PPM)		14000			
NO. OF EXAMINED ANIMALS		2			
ORGAN	FINDINGS	T	1	2	3
LUNG	CONGESTION	0	0	0	0
THYROID	ECTOPIC	0	0	0	0
LIVER	GRANULATION	0	0	0	0
	DEGENERATION	0	0	2	0
SPLEEN	DEPOSIT OF PIGMENT	0	0	0	0
	KARYORRHEXIS	0	0	0	0
THYMUS	KARYORRHEXIS	0	2	0	0
HEART	DILATATION	0	1	0	0

表 P-26 病理組織学的所見、総括表
(マウス、急性試験、定期解剖動物)

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : MALE

DOSE LEVEL (PPM)		14080			
NO. OF EXAMINED ANIMALS		0			
ORGAN	FINDINGS	T	1	2	3
LIVER	NECROSIS	0	0	0	0
KIDNEY	REGENERATION	0	0	0	0
	HYDRONEPHROSIS	0	0	0	0
SPLEEN	DEPOSIT OF PIGMENT	0	0	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0012

SEX : FEMALE

DOSE LEVEL (PPM)		14080			
NO. OF EXAMINED ANIMALS		0			
ORGAN	FINDINGS	T	1	2	3
LIVER	NECROSIS	0	0	0	0
	GRANULATION	0	0	0	0

表 E-27 肉眼所見，總括表（マウス，2週間試験，死亡，
瀕死動物）

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		0		563		1130		2250		4500	
NO. OF EXAMINED ANIMALS		0	0	0	0	0	0	0	0	3	0
ORGAN	FINDINGS	D	M	D	M	D	M	D	M	D	M
WHOLE BODY	WASTING	0	0	0	0	0	0	0	0	3	0
	AUTOLYSIS	0	0	0	0	0	0	0	0	1	0
THYMUS	ATROPHIC	0	0	0	0	0	0	0	0	2	0
LUNG	CONGESTION	0	0	0	0	0	0	0	0	0	0
	ATELECTASIS	0	0	0	0	0	0	0	0	2	0
VENTRICLE	CONGESTION	0	0	0	0	0	0	0	0	0	0
	DILATED	0	0	0	0	0	0	0	0	2	0
LIVER	ANEMIC	0	0	0	0	0	0	0	0	0	0
KIDNEY	ANEMIC	0	0	0	0	0	0	0	0	0	0
URINARY BLADDER	DILATED	0	0	0	0	0	0	0	0	0	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		0		563		1130		2250		4500	
NO. OF EXAMINED ANIMALS		0	0	0	0	0	0	1	0	2	0
ORGAN	FINDINGS	D	M	D	M	D	M	D	M	D	M
WHOLE BODY	WASTING	0	0	0	0	0	0	0	0	2	0
	AUTOLYSIS	0	0	0	0	0	0	1	0	1	0
THYMUS	ATROPHIC	0	0	0	0	0	0	1	0	1	0
LUNG	CONGESTION	0	0	0	0	0	0	0	0	0	0
VENTRICLE	CONGESTION	0	0	0	0	0	0	0	0	0	0
	DILATED	0	0	0	0	0	0	0	0	0	0
LIVER	ANEMIC	0	0	0	0	0	0	0	0	0	0
SPLEEN	ATROPHIC	0	0	0	0	0	0	0	0	1	0
	BLACK PATCH/ZONE	0	0	0	0	0	0	0	0	0	0
GLANDULAR STOMACH											
	HEMORRHAGE	0	0	0	0	0	0	0	0	1	0
KIDNEY	ANEMIC	0	0	0	0	0	0	0	0	0	0
	REDDISH	0	0	0	0	0	0	1	0	0	0
UTERUS	ATROPHIC	0	0	0	0	0	0	1	0	0	0
	DILATED LUMEN	0	0	0	0	0	0	0	0	0	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		9000	
ORGAN	FINDINGS	10 D	0 M
WHOLE BODY	WASTING	0	0
	AUTOLYSIS	0	0
THYMUS	ATROPHIC	0	0
LUNG	CONGESTION	3	0
	ATELECTASIS	2	0
VENTRICLE	CONGESTION	6	0
	DILATED	9	0
LIVER	ANEMIC	9	0
KIDNEY	ANEMIC	5	0
URINARY BLADDER	DILATED	3	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		9000	
NO. OF EXAMINED ANIMALS		10	0
ORGAN	FINDINGS	D	M
WHOLE BODY	WASTING	0	0
	AUTOLYSIS	0	0
THYMUS	ATROPHIC	0	0
LUNG	CONGESTION	1	0
VENTRICLE	CONGESTION	10	0
	DILATED	9	0
LIVER	ANEMIC	9	0
SPLEEN	ATROPHIC	0	0
	BLACK PATCH/ZONE	1	0
GLANDULAR STOMACH	HEMORRHAGE	0	0
KIDNEY	ANEMIC	7	0
	REDDISH	0	0
UTERUS	ATROPHIC	0	0
	DILATED LUMEN	3	0

D: DEAD M: MORIBUND

表P-28 肉眼所見. 総括表 (マウス. 2週間試験. 定期解剖動物)

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPH)		0	563	1130	2250	4500
NO. OF EXAMINED ANIMALS		10	10	10	10	7
ORGAN	FINDINGS					
THYMUS	ATROPHIC	0	0	0	3	6
LIVER	ENLARGED	0	10	10	8	4
	REDDISH	0	10	10	10	7
GALL BLADDER	DILATED	0	1	0	0	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		0	563	1130	2250	4500
NO. OF EXAMINED ANIMALS		10	10	10	9	8
ORGAN	FINDINGS					
THYMUS	ATROPHIC	0	3	2	1	4
LIVER	ENLARGED	0	8	6	6	3
	SWOLLEN	0	0	1	0	0
	REDDISH	0	10	10	9	8
GALL BLADDER	DILATED	0	1	0	0	0
SPLEEN	BLACK	1	0	0	0	0
	BLACK PATCH/ZONE	1	0	0	0	0
STOMACH	NODULE	0	0	0	1	0
FORESTOMACH	THICK	0	0	0	1	0
GLANDULAR STOMACH	ATROPHIC	0	0	0	0	1
	THICK	0	0	0	0	1
UTERUS	DILATED LUMEN	5	0	0	1	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		9000
NO. OF EXAMINED ANIMALS		0
ORGAN	FINDINGS	
THYMUS	ATROPHIC	0
LIVER	ENLARGED	0
	REDDISH	0
GALL BLADDER	DILATED	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		9000
NO. OF EXAMINED ANIMALS		0
ORGAN	FINDINGS	
THYMUS	ATROPHIC	0
LIVER	ENLARGED	0
	SWOLEN	0
	REDDISH	0
GALL BLADDER	DILATED	0
SPLEEN	BLACK	0
	BLACK PATCH/ZONE	0
STOMACH	NODULE	0
FORESTOMACH	THICK	0
GLANDULAR STOMACH	ATROPHIC	0
	THICK	0
UTERUS	DILATED LUMEN	0

表 P-29 病理組織学的所見，總括表
(マウス，2週間試験，瀕死，死亡動物)

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		9000			
NO. OF EXAMINED ANIMALS		2			
ORGAN	FINDINGS	T	1	2	3
LUNG	CONGESTION	0	1	0	0
LIVER	NECROSIS	0	0	0	0
	DEGENERATION	0	0	0	2
	HYDROPIIC CHANGE	0	0	0	0
KIDNEY	TUBULAR NECROSIS	0	0	0	0
SPLEEN	HEMORRHAGE	0	0	0	0
	ATROPHY	0	0	0	0
	KARYORRHESIS	0	2	0	0
THYMUS	KARYORRHESIS	0	2	0	0
HEART	DILATATION	0	1	0	0
MUSCLE	NECROSIS	0	0	0	0
BONE MARROW					
	HEMORRHAGE	0	0	0	0

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		9000			
NO. OF EXAMINED ANIMALS		2			
ORGAN	FINDINGS	T	1	2	3
LUNG	CONGESTION	0	0	0	0
LIVER	NECROSIS	0	0	0	0
	DEGENERATION	0	0	2	0
	HYDROPIIC CHANGE	0	0	0	0
STOMACH	ULCER	0	0	0	0
SPLEEN	ATROPHY	0	0	0	0
	DEPOSIT OF PIGMENT	0	1	0	0
	KARYORRHEXIS	0	2	0	0
THYMUS	KARYORRHEXIS	0	2	0	0
HEART	DILATATION	0	0	1	0
	NECROSIS	0	0	0	0
BONE MARROW	HEMORRHAGE	0	0	0	0

表P-30 病理組織学的所見，総括表
(マウス，2週間試験，定期解剖動物)

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		0				563				1130				2250				4500				
NO. OF EXAMINED ANIMALS		2				2				2				3				2				
ORGAN	FINDINGS	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	
LIVER	SWELLING	0	0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0	0	2	0	0
	NECROSIS	0	0	0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0	0	2	0
	FIBROSIS	0	0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0	0	2	0	0
	MITOSIS	0	0	0	0	0	1	1	0	0	0	2	0	0	1	2	0	0	0	0	2	0
	HYDROPIIC CHANGE	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	0	1	0	0
KIDNEY	REGENERATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
SPLFFN	HEMATOPOIESIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
THYMUS	ATROPHY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
HEART	NECROSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
MUSCLE	NECROSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		0				563				1130				2250				4500				
NO. OF EXAMINED ANIMALS		2				2				2				2				2				
ORGAN	FINDINGS	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	
LIVER	SWELLING	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	0	2	0	0
	NECROSIS	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	2	0	0	0	2	0
	FIBROSIS	0	0	0	0	0	2	0	0	0	2	0	0	0	0	2	0	0	0	2	0	0
	MITOSIS	0	0	0	0	0	1	1	0	0	0	2	0	0	0	1	1	0	0	1	1	0
	HYDROPIIC CHANGE	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	1	1	0
SPLEEN	HEMATOPOIESIS	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
MUSCLE	NECROSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : MALE

DOSE LEVEL (PPM)		9000			
NO. OF EXAMINED ANIMALS		0			
ORGAN	FINDINGS	T	1	2	3
LIVER	SWELLING	0	0	0	0
	NECROSIS	0	0	0	0
	FIBROSIS	0	0	0	0
	MITOSIS	0	0	0	0
	HYDROPIIC CHANGE	0	0	0	0
KIDNEY	REGENERATION	0	0	0	0
SPLEEN	HEMATOPOIESIS	0	0	0	0
THYMUS	ATROPHY	0	0	0	0
HEART	NECROSIS	0	0	0	0
MUSCLE	NECROSIS	0	0	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 14 DAY)

STUDY NO. : 0014

SEX : FEMALE

DOSE LEVEL (PPM)		9000			
NO. OF EXAMINED ANIMALS		0			
ORGAN	FINDINGS	T	1	2	3
LIVER	SWELLING	0	0	0	0
	NECROSIS	0	0	0	0
	FIBROSIS	0	0	0	0
	MITOSIS	0	0	0	0
	HYDROPIIC CHANGE	0	0	0	0
SPLEEN	HEMATOPOIESIS	0	0	0	0
MUSCLE	NECROSIS	0	0	0	0

表B-5 血液学的検査. 総括表 (マウス. 13週間試験)

TABLE HEMATOLOGY (1)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	RBC (10 ¹² /CMM)	HEMOGLOBIN (G/DL)	HEMATOCRIT (%)	MCV (FL)	MCH (PG)	MCHC (%)
MALE	0	9	11.22 ± 0.50	15.6 ± 0.5	48.7 ± 2.1	43.4 ± 0.9	13.9 ± 0.2	32.2 ± 0.8
	10	9	11.34 ± 0.37	15.8 ± 0.3	49.3 ± 1.5	43.4 ± 0.6	14.0 ± 0.2	32.2 ± 0.5
	30	9	11.16 ± 0.66	15.5 ± 0.7	47.4 ± 3.0	42.4 ± 0.9 ^{II}	13.9 ± 0.3	32.7 ± 0.8
	90	9	11.17 ± 0.39	15.5 ± 0.5	48.0 ± 1.5	42.9 ± 0.9	13.9 ± 0.2	32.4 ± 0.8
	270	10	11.15 ± 0.37	15.4 ± 0.4	47.9 ± 1.8	42.9 ± 1.0	13.8 ± 0.2	32.2 ± 0.5
	810	8	10.73 ± 0.24 ^{III}	14.9 ± 0.4 ^{III}	46.4 ± 1.4 ^{II}	43.2 ± 0.8	13.9 ± 0.2	32.1 ± 0.6
FEMALE	0	9	11.24 ± 0.21	16.0 ± 0.3	48.7 ± 0.9	43.3 ± 0.7	14.2 ± 0.2	32.7 ± 0.7
	10	9	11.34 ± 0.33	16.0 ± 0.2	49.0 ± 1.4	43.1 ± 0.8	14.1 ± 0.3	32.7 ± 0.8
	30	9	11.24 ± 0.43	15.7 ± 0.5	47.8 ± 1.5	42.5 ± 0.9 ^{II}	13.9 ± 0.3	32.9 ± 0.8
	90	10	11.03 ± 0.35	15.6 ± 0.4	47.9 ± 1.3	43.4 ± 0.8	14.1 ± 0.3	32.6 ± 0.6
	270	8	10.79 ± 0.25 ^{III}	15.1 ± 0.5 ^{III}	47.4 ± 0.9 ^{III}	43.9 ± 1.0	14.0 ± 0.3	32.0 ± 1.0
	810	10	10.72 ± 0.45 ^{III}	15.1 ± 0.7 ^{III}	46.6 ± 2.1 ^{II}	43.5 ± 0.9	14.1 ± 0.2	32.5 ± 0.8

SIGNIFICANT DIFFERENCE: II: P<0.05 III: P<0.01 IIII: P<0.001

TABLE HEMATOLOGY (2)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	WBC (10 ⁶ W ³ /CM ³)	DIFFERENTIAL N-SEG	DIFFERENTIAL WBC (%) N-BAND	LYMPHO	MONO	EOSINO	BASO	OTHERS
MALE	0	9	2.1 ± 1.0	11 ± 3	0 ± 0	86 ± 3	2 ± 1	0 ± 1	0 ± 0	0 ± 0
	10	9	2.9 ± 1.1	11 ± 3	0 ± 0	87 ± 3	2 ± 1	0 ± 0	0 ± 0	0 ± 0
	30	9	2.0 ± 1.2	9 ± 3	0 ± 0	89 ± 4	1 ± 2	0 ± 1	0 ± 0	0 ± 0
	90	9	2.4 ± 2.1	12 ± 2	0 ± 0	87 ± 2	1 ± 1	0 ± 0	0 ± 0	0 ± 0
	270	10	2.6 ± 0.9	10 ± 2	0 ± 0	88 ± 2	2 ± 1	0 ± 0	0 ± 0	0 ± 0
	810	8	2.3 ± 1.1	9 ± 4	0 ± 0	89 ± 4	2 ± 1	0 ± 0	0 ± 0	0 ± 0
FEMALE	0	9	2.2 ± 0.9	11 ± 3	0 ± 0	88 ± 3	1 ± 1	1 ± 1	0 ± 0	0 ± 0
	10	9	2.6 ± 1.0	13 ± 4	0 ± 0	86 ± 4	1 ± 1	0 ± 1	0 ± 0	0 ± 0
	30	9	1.9 ± 0.9	11 ± 3	0 ± 0	87 ± 4	1 ± 1	0 ± 0	0 ± 0	0 ± 0
	90	10	2.0 ± 0.9	11 ± 3	0 ± 0	87 ± 3	2 ± 1	0 ± 1	0 ± 0	0 ± 0
	270	8	2.6 ± 1.9	9 ± 2	0 ± 0	91 ± 3 ^{XX}	1 ± 1 ^{XX}	0 ± 0	0 ± 0	0 ± 0
	810	10	2.3 ± 0.8	12 ± 6	0 ± 0	87 ± 6	1 ± 1	0 ± 0	0 ± 0	0 ± 0

SIGNIFICANT DIFFERENCE: X: P<0,05 XX: P<0,01 XXX: P<0,001

TABLE HEMATOLOGY (3)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	PLATELET (100003/CMM)	MPV (FL)
MALE	0	9	1343 ± 153	4.7 ± 0.2
	10	9	1362 ± 88	4.6 ± 0.2
	30	8	1238 ± 159	4.7 ± 0.2
	90	9	1347 ± 75	4.7 ± 0.2
	270	10	1435 ± 109	4.9 ± 0.2*
	810	8	1424 ± 78	5.0 ± 0.2***
FEMALE	0	8	1228 ± 113	4.8 ± 0.1
	10	9	1121 ± 206	4.8 ± 0.1
	30	8	1319 ± 94	4.7 ± 0.1
	90	10	1396 ± 111**	4.7 ± 0.3
	270	7	1377 ± 109*	4.9 ± 0.2
	810	10	1364 ± 303	4.9 ± 0.2

SIGNIFICANT DIFFERENCE: * : P<0.05 ** : P<0.01 *** : P<0.001

表 B-6 血液生化学的検査. 総括表 (マウス. 13 週間試験)

TABLE BIOCHEMISTRY (1)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	TOTAL PROTEIN (G/DL)	ALBUMIN (G/DL)	A/G RATIO	T-BILI RUBIN (MG/DL)	GLUCOSE (MG/DL)	T-CHOLESTEROL (MG/DL)
MALE	0	9	5.5 ± 0.4	3.2 ± 0.2	1.4 ± 0.1	0.15 ± 0.08	193 ± 27	79 ± 10
	10	9	5.6 ± 0.2	3.3 ± 0.1	1.4 ± 0.1	0.20 ± 0.06	206 ± 30	89 ± 10
	30	9	5.3 ± 0.2	3.2 ± 0.1	1.4 ± 0.1	0.21 ± 0.07	189 ± 40	67 ± 8K
	90	9	5.4 ± 0.2	3.2 ± 0.1	1.4 ± 0.1	0.21 ± 0.06	202 ± 35	71 ± 7
	270	10	5.7 ± 0.2	3.4 ± 0.1KK	1.5 ± 0.1K	0.21 ± 0.08	205 ± 16	78 ± 9
	810	9	6.0 ± 0.2KK	3.5 ± 0.1KKK	1.4 ± 0.1	0.20 ± 0.05	187 ± 26	91 ± 9K
FEMALE	0	9	5.5 ± 0.2	3.3 ± 0.2	1.5 ± 0.1	0.28 ± 0.08	148 ± 21	71 ± 9
	10	10	5.5 ± 0.1	3.3 ± 0.1	1.5 ± 0.0	0.27 ± 0.07	154 ± 28	75 ± 10
	30	10	5.5 ± 0.1	3.3 ± 0.1	1.5 ± 0.1	0.24 ± 0.06	180 ± 27K	67 ± 9
	90	10	5.5 ± 0.2	3.3 ± 0.1	1.5 ± 0.1	0.23 ± 0.05	181 ± 30K	64 ± 13
	270	10	6.0 ± 0.4KK	3.6 ± 0.2KK	1.5 ± 0.1	0.25 ± 0.15	186 ± 37K	80 ± 8K
	810	10	5.9 ± 0.3KK	3.5 ± 0.1KK	1.5 ± 0.1	0.23 ± 0.10	189 ± 33KK	79 ± 13

SIGNIFICANT DIFFERENCE: K: P<0.05 KK: P<0.01 KKK: P<0.001

TABLE BIOCHEMISTRY (2)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	GOT (IU/L 37°C)		GPT (IU/L 37°C)		LDH (IU/L 37°C)		AL-P (IU/L 37°C)		LAP (IU/L 37°C)	
MALE	0	9	47 ±	7	14 ±	6	407 ±	142	145 ±	15	39 ±	3
	10	9	43 ±	7	11 ±	3	352 ±	211	153 ±	5	43 ±	3K
	30	9	48 ±	9	17 ±	5	356 ±	131	182 ±	21KK	45 ±	30KK
	90	9	66 ±	31	43 ±	30K	408 ±	123	209 ±	17KK	56 ±	10KK
	270	10	65 ±	20K	55 ±	25KK	378 ±	121	218 ±	20KK	67 ±	11KK
	810	9	100 ±	55K	71 ±	33KK	425 ±	103	229 ±	20KK	75 ±	12KK
FEMALE	0	9	53 ±	10	12 ±	3	388 ±	165	249 ±	26	38 ±	6
	10	10	51 ±	9	12 ±	4	387 ±	124	241 ±	25	38 ±	3
	30	10	49 ±	7	13 ±	3	359 ±	91	270 ±	40	45 ±	3KK
	90	10	59 ±	10	30 ±	12KK	378 ±	129	273 ±	33	52 ±	9KK
	270	10	67 ±	17K	42 ±	16KK	493 ±	303	273 ±	36	59 ±	10KK
	810	10	75 ±	41	44 ±	21KK	445 ±	85	278 ±	49	64 ±	14KK

SIGNIFICANT DIFFERENCE; K: P<0.05 KK: P<0.01 KKK: P<0.001

TABLE BIOCHEMISTRY (3)

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BUN (MG/DL)	SODIUM (MEQ/L)	POTASSIUM (MEQ/L)	CHLORIDE (MEQ/L)
MALE	0	9	20.8 ± 3.7	154 ± 3	4.6 ± 0.5	118 ± 2
	10	9	23.1 ± 4.0	155 ± 3	4.5 ± 0.5	120 ± 3
	30	9	22.1 ± 6.1	153 ± 1	4.1 ± 0.5 ^{**}	118 ± 4
	90	9	23.5 ± 4.0	154 ± 3	4.3 ± 0.2	118 ± 2
	270	10	23.8 ± 3.8	154 ± 3	4.1 ± 0.4	118 ± 3
	810	9	25.2 ± 2.9 ^{**}	155 ± 3	4.7 ± 1.4	118 ± 3
FEMALE	0	9	19.1 ± 3.6	154 ± 4	4.5 ± 0.7	119 ± 3
	10	10	17.8 ± 2.4	153 ± 2	4.0 ± 0.3	118 ± 2
	30	10	19.4 ± 4.1	153 ± 2	3.8 ± 0.3 ^{**}	118 ± 2
	90	10	20.5 ± 3.8	153 ± 2	3.9 ± 0.3 ^{**}	118 ± 3
	270	10	38.3 ± 47.3	155 ± 3	5.4 ± 2.7	117 ± 4
	810	10	22.6 ± 2.8 ^{**}	154 ± 3	4.4 ± 0.3	118 ± 3

SIGNIFICANT DIFFERENCE: * : P<0.05 ** : P<0.01 *** : P<0.001

表U-3 尿検査. 総括表 (マウス. 13週間試験)

TABLE URINARYSIS

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BLOOD				UROBILINOGEN				
			-	±	+ 2+	3+	±	+ 2+	3+	4+	
MALE	0	9	9								
	10	9	9								
	30	10	10								
	90	10	10								
	270	10	10								
	810	10	10								
FEMALE	0	10	10								
	10	10	10								
	30	10	10								
	90	10	10								
	270	10	10								
	810	10	10					9	1		

表P-31 肉眼所見. 総括表
(マウス. 13週間試験. 死亡. 瀕死動物)

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		0		10		30		90		270	
NO. OF EXAMINED ANIMALS		0	1	1	0	0	0	0	0	0	0
ORGAN	FINDINGS	D	M	D	M	D	M	D	M	D	M
THYMUS	ATROPHIC	0	1	1	0	0	0	0	0	0	0
VENTRICLE	DILATED	0	0	1	0	0	0	0	0	0	0
KIDNEY	ANFNIC	0	0	1	0	0	0	0	0	0	0
	ENLARGED	0	0	1	0	0	0	0	0	0	0
URETER	DILATED	0	1	1	0	0	0	0	0	0	0
URINARY BLADDER	DILATED	0	0	1	0	0	0	0	0	0	0

D: DEAD M: MORIBUND

TABLE SUMMARY OF GROSS FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		810	
NO. OF EXAMINED ANIMALS		0	0
ORGAN	FINDINGS	D	M
THYMUS	ATROPHIC	0	0
VENTRICLE	DILATED	0	0
KIDNEY	ANEMIC	0	0
	ENLARGED	0	0
URETER	DILATED	0	0
URINARY BLADDER			
	DILATED	0	0

D: DEAD M: MORIBUND

表 P-32 肉眼所見. 総括表 (マウス. 13 週間試験. 定期解剖動物)

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		0	10	30	90	270
NO. OF EXAMINED ANIMALS		9	9	10	10	10
ORGAN	FINDINGS					
HAIR	REDUCED	3	1	1	5	3
LIVER	GRANULAR	0	0	0	0	0
	YELLOWISH	0	1	8	7	10
SPLEEN	ENLARGED	0	0	0	0	2
	BLACK PATCH/ZONE	0	0	1	1	0
MESENTERIUM	HEMORRHAGE	1	0	0	0	0
KIDNEY	HYDRONEPHROSIS	0	0	2	0	0
URTER	DILATED	0	0	1	0	0
URINARY BLADDER	FLUID	2	1	1	2	1
SEMINAL VESICLE	SMALL	1	0	1	0	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		810
NO. OF EXAMINED ANIMALS		10
ORGAN	FINDINGS	
HAIR	REDUCED	4
LIVER	GRANULAR	1
	YELLOWISH	10
SPLEEN	ENLARGED	0
	BLACK PATCH/ZONE	1
MESENTERIUM	HEMORRHAGE	0
KIDNEY	HYDRONEPHROSIS	0
URETER	DILATED	0
URINARY BLADDER	FLUID	1
SEMINAL VESICLE	SMALL	0

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : FEMALE

DOSE LEVEL (PPM)		0	10	30	90	270
NO. OF EXAMINED ANIMALS		10	10	10	10	10
ORGAN	FINDINGS					
HAIR	REDUCED	5	6	5	6	1
LIVER	GRANULAR	0	0	1	2	3
	NODULE	0	0	0	0	1
	YELLOWISH	0	2	9	8	10
SPLEEN	ENLARGED	0	0	1	1	1
	BLACK PATCH/ZONE	1	1	0	3	1
URINARY BLADDER	FLUID	1	2	4	2	1
UTERUS	DILATED LUMEN	7	7	8	7	6

TABLE SUMMARY OF GROSS FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : FEMALE

DOSE LEVEL (PPM)		810
NO. OF EXAMINED ANIMALS		10
ORGAN	FINDINGS	
HAIR	REDUCED	3
LIVER	GRANULAR	4
	NODULE	0
	YELLOWISH	10
SPLEEN	ENLARGED	2
	BLACK PATCH/ZONE	0
URINARY BLADDER	FLUID	3
UTERUS	DILATED LUMEN	3

表P-33 臓器重量(実重量) . 総括表(マウス. 13週間試験)

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. 1 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BODY WEIGHT (G)		THYMIUS (MG)		ADRENAL R (MG)		ADRENAL L. (MG)		TESTIS R (MG)	
MALE	0	9	31.1 ±	1.9	36 ±	4	3 ±	1	3 ±	1	125 ±	14
	10	9	31.2 ±	2.9	37 ±	5	3 ±	1	3 ±	1	117 ±	21
	30	10	28.6 ±	2.4 #	37 ±	7	3 ±	1	4 ±	2	123 ±	13
	90	10	27.4 ±	0.8 ###	36 ±	6	3 ±	1	4 ±	2	114 ±	12
	270	10	27.0 ±	1.3 ###	40 ±	4	3 ±	1	4 ±	1	114 ±	14
	810	10	26.3 ±	1.9 ###	37 ±	6	4 ±	1#	3 ±	1	114 ±	15

SIGNIFICANT DIFFERENCE: # P<0.05 ## P<0.01 ### P<0.001

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	TESTIS L (MG)		HEART (MG)		LUNG R (MG)		LUNG L (MG)		KIDNEY R (MG)	
MALE	0	9	122 ±	13	157 ±	18	113 ±	12	50 ±	3	218 ±	12
	10	9	114 ±	22	154 ±	13	108 ±	12	50 ±	2	214 ±	15
	30	10	121 ±	12	149 ±	14	113 ±	9	54 ±	5	240 ±	42
	90	10	113 ±	12	148 ±	5	117 ±	11	56 ±	4**	229 ±	13
	270	10	113 ±	12	149 ±	13	119 ±	11	55 ±	3**	219 ±	15
	810	10	116 ±	22	137 ±	14**	111 ±	13	54 ±	4	217 ±	19

SIGNIFICANT DIFFERENCE) ** : P < 0.05 *** : P < 0.01 **** : P < 0.001

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

MEFK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	KIDNEY L (MG)		SPLEEN (MG)		LIVER (MG)		BRAIN (MG)	
MALE	0	9	210 ±	14	53 ±	7	1086 ±	83	454 ±	14
	10	9	208 ±	14	52 ±	9	1130 ±	77	445 ±	12
	30	10	369 ±	384	57 ±	8	1086 ±	76	443 ±	19
	90	10	216 ±	19	62 ±	5**	1158 ±	83	457 ±	13
	270	10	211 ±	15	66 ±	10**	1192 ±	52**	451 ±	8
	810	10	211 ±	25	72 ±	9***	1249 ±	91***	452 ±	10

SIGNIFICANT DIFFERENCE: * : P<0.05 ** : P<0.01 *** : P<0.001

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BODY WEIGHT (G)		THYMUS (MG)		ADRENAL R (MG)		ADRENAL L (MG)		OVARY R (MG)	
FEMALE	0	10	22.5 ±	1.5	41 ±	3	4 ±	1	5 ±	1	10 ±	2
	10	10	21.8 ±	1.5	43 ±	6	5 ±	1	5 ±	1	10 ±	2
	30	10	22.4 ±	1.8	41 ±	7	5 ±	1	5 ±	1 ^{##}	9 ±	2
	90	10	21.4 ±	1.3	42 ±	6	4 ±	1	5 ±	1	9 ±	1
	270	10	21.8 ±	1.0	44 ±	4	5 ±	1	5 ±	0 ^{##}	9 ±	2
	810	10	21.5 ±	1.5	46 ±	8	5 ±	1	5 ±	1	9 ±	3

SIGNIFICANT DIFFERENCE: #: P<0.05 ##: P<0.01 ###: P<0.001

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. 1 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	OVARY L (MG)		HEART (MG)		LUNG R (MG)		LUNG L (MG)		KIDNEY R (MG)	
FEMALE	0	10	9 ±	2	114 ±	4	110 ±	7	51 ±	5	152 ±	9
	10	10	10 ±	3	122 ±	5**	107 ±	10	49 ±	3	150 ±	10
	30	10	10 ±	2	117 ±	11	119 ±	40	56 ±	6	156 ±	10
	90	10	9 ±	2	113 ±	9	106 ±	12	50 ±	5	151 ±	13
	270	10	9 ±	2	117 ±	8	112 ±	13	51 ±	3	164 ±	10**
	810	10	10 ±	2	115 ±	5	112 ±	12	52 ±	7	164 ±	15**

SIGNIFICANT DIFFERENCE: * : P<0.05 ** : P<0.01 *** : P<0.001

TABLE ABSOLUTE BODY AND ORGAN WEIGHT

STUDY NO. : 002)

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	KIDNEY L (MG)		SPLEEN (MG)		LIVER (MG)		BRAIN (MG)	
FEMALE	0	10	148 ±	7	56 ±	5	889 ±	44	457 ±	12
	10	10	146 ±	8	55 ±	6	899 ±	67	459 ±	13
	30	10	153 ±	13	56 ±	6	921 ±	83	458 ±	14
	90	10	147 ±	15	62 ±	7H	910 ±	83	453 ±	17
	270	10	162 ±	10HH	72 ±	6HHH	1044 ±	88HHH	457 ±	7
	810	10	155 ±	14	73 ±	12HH	1016 ±	82HHH	461 ±	14

SIGNIFICANT DIFFERENCE: H: P<0.05 HH: P<0.01 HHH: P<0.001

表P-34 臓器重量(体重比)・総括表(マウス・13週間試験)

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BODY WEIGHT (G)	THYMIUS (%)	ADRENAL. R (%)	ADRENAL. L (%)	TESTIS R (%)
MALE	0	9	31.1 ± 1.9	0.117 ± 0.012	0.009 ± 0.004	0.011 ± 0.002	0.402 ± 0.057
	10	9	31.2 ± 2.9	0.118 ± 0.010	0.009 ± 0.003	0.009 ± 0.002	0.373 ± 0.053
	30	10	28.6 ± 2.4 \times	0.129 ± 0.020	0.012 ± 0.005	0.015 ± 0.008	0.430 ± 0.049
	90	10	27.4 ± 0.8 $\times\times\times$	0.133 ± 0.018 \times	0.012 ± 0.003	0.015 ± 0.006	0.416 ± 0.046
	270	10	27.0 ± 1.3 $\times\times\times$	0.147 ± 0.017 $\times\times\times$	0.013 ± 0.003 \times	0.013 ± 0.003	0.424 ± 0.050
	610	10	26.3 ± 1.9 $\times\times\times$	0.140 ± 0.018 $\times\times$	0.014 ± 0.003 $\times\times$	0.013 ± 0.004	0.435 ± 0.064

SIGNIFICANT DIFFERENCE: \times : $P \leq 0.05$ $\times\times$: $P \leq 0.01$ $\times\times\times$: $P \leq 0.001$

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	TESTIS L (%)	HEART (%)	LUNG R (%)	LUNG L (%)	KIDNEY R (%)
MALE	0	9	0.395 ± 0.058	0.505 ± 0.051	0.362 ± 0.037	0.163 ± 0.014	0.701 ± 0.037
	10	9	0.365 ± 0.057	0.497 ± 0.050	0.346 ± 0.030	0.160 ± 0.014	0.688 ± 0.048
	30	10	0.422 ± 0.040	0.523 ± 0.047	0.396 ± 0.032 ^{##}	0.190 ± 0.012 ^{###}	0.845 ± 0.179 ^{##}
	90	10	0.414 ± 0.048	0.540 ± 0.022	0.420 ± 0.042 ^{##}	0.206 ± 0.010 ^{###}	0.837 ± 0.050 ^{##}
	270	10	0.418 ± 0.047	0.552 ± 0.047	0.442 ± 0.035 ^{###}	0.203 ± 0.012 ^{###}	0.813 ± 0.041 ^{##}
	810	10	0.443 ± 0.090	0.523 ± 0.061	0.422 ± 0.037 ^{##}	0.204 ± 0.015 ^{###}	0.824 ± 0.047 ^{##}

SIGNIFICANT DIFFERENCE: * : P<0.05 ** : P<0.01 *** : P<0.001

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	KIDNEY L (%)	SPLEEN (%)	LIVER (%)	BRAIN (%)
MALE	0	9	0.674 ± 0.038	0.171 ± 0.017	3.488 ± 0.170	1.460 ± 0.070
	10	9	0.668 ± 0.045	0.168 ± 0.025	3.635 ± 0.238	1.440 ± 0.161
	30	10	1.340 ± 1.509	0.202 ± 0.039 ^{xx}	3.796 ± 0.153 ^{xxxx}	1.557 ± 0.167
	90	10	0.789 ± 0.072 ^{xxx}	0.226 ± 0.019 ^{xxxx}	4.236 ± 0.306 ^{xxxx}	1.670 ± 0.038 ^{xxxx}
	270	10	0.781 ± 0.041 ^{xxxx}	0.245 ± 0.028 ^{xxxx}	4.425 ± 0.169 ^{xxxx}	1.676 ± 0.073 ^{xxxx}
	810	10	0.801 ± 0.064 ^{xxxx}	0.272 ± 0.022 ^{xxxx}	4.759 ± 0.326 ^{xxxx}	1.727 ± 0.120 ^{xxxx}

SIGNIFICANT DIFFERENCE: x: P<0.05 xx: P<0.01 xxx: P<0.001

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	BODY WEIGHT (G)	THYMUS (%)	ADRENAL R (%)	ADRENAL I (%)	OVARY R (%)
FEMALE	0	10	22.5 ± 1.5	0.182 ± 0.018	0.019 ± 0.003	0.020 ± 0.005	0.043 ± 0.012
	10	10	21.8 ± 1.5	0.199 ± 0.026	0.021 ± 0.003	0.022 ± 0.004	0.048 ± 0.013
	30	10	22.4 ± 1.8	0.184 ± 0.030	0.020 ± 0.003	0.024 ± 0.005	0.041 ± 0.010
	90	10	21.4 ± 1.3	0.195 ± 0.024	0.020 ± 0.005	0.021 ± 0.002	0.043 ± 0.006
	270	10	21.8 ± 1.0	0.200 ± 0.017*	0.021 ± 0.003	0.024 ± 0.002**	0.040 ± 0.011
	810	10	21.5 ± 1.5	0.215 ± 0.033**	0.021 ± 0.005	0.022 ± 0.003	0.044 ± 0.015

SIGNIFICANT DIFFERENCE) *; P<0.05 **; P<0.01 ***; P<0.001

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	OVARY L. (%)	HEART (%)	LUNG R (%)	LUNG L (%)	KIDNEY R (%)
FEMALE	0	10	0.039 ± 0.013	0.511 ± 0.039	0.492 ± 0.053	0.227 ± 0.025	0.678 ± 0.066
	10	10	0.048 ± 0.013	0.561 ± 0.040 ^{xx}	0.492 ± 0.033	0.225 ± 0.017	0.690 ± 0.053
	30	10	0.045 ± 0.009	0.525 ± 0.054	0.529 ± 0.180	0.248 ± 0.029	0.696 ± 0.055
	90	10	0.044 ± 0.009	0.527 ± 0.046	0.496 ± 0.053	0.233 ± 0.028	0.705 ± 0.042
	270	10	0.041 ± 0.009	0.536 ± 0.039	0.512 ± 0.063	0.234 ± 0.014	0.752 ± 0.030 ^{xxx}
	810	10	0.045 ± 0.008	0.535 ± 0.036	0.522 ± 0.038	0.241 ± 0.026	0.764 ± 0.049 ^{xxx}

SIGNIFICANT DIFFERENCE: x: P<0.05 xx: P<0.01 xxx: P<0.001

TABLE RELATIVE BODY AND ORGAN WEIGHT

STUDY NO. : 0021

WEEK: 13

SEX	DOSE LEVEL (PPM)	NO. OF ANIMALS	KIDNEY L (%)	SPLEEN (%)	LIVER (%)	BRAIN (%)
FEMALE	0	10	0.660 ± 0.060	0.249 ± 0.033	3.969 ± 0.311	2.044 ± 0.159
	10	10	0.669 ± 0.040	0.253 ± 0.025	4.130 ± 0.250	2.114 ± 0.114
	30	10	0.682 ± 0.042	0.250 ± 0.027	4.105 ± 0.265	2.049 ± 0.149
	90	10	0.686 ± 0.038	0.289 ± 0.027 ^{██}	4.245 ± 0.192 [█]	2.124 ± 0.160
	270	10	0.742 ± 0.037 ^{███}	0.330 ± 0.031 ^{████}	4.791 ± 0.365 ^{█████}	2.101 ± 0.096
	810	10	0.722 ± 0.059 [█]	0.336 ± 0.037 ^{████}	4.730 ± 0.234 ^{████}	2.157 ± 0.149

SIGNIFICANT DIFFERENCE: █: P<0.05 ███: P<0.01 █████: P<0.001

表 P - 3 5 病理組織学的所見. 総括表
(マウス. 1 3 週間試験. 死亡. 瀕死動物)

TABLE SUMMARY OF MICRO FINDINGS (DEAD OR MORIBUND)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		810			
NO. OF EXAMINED ANIMALS		0			
ORGAN	FINDINGS	T	1	2	3
KIDNEY	HYDRONEPHROSIS	0	0	0	0
	PAPILLARY NECROSIS	0	0	0	0
SPLEEN	ATROPHY	0	0	0	0
	DEPOSIT OF HEMOSIDERIN	0	0	0	0
	HEMATOPOIESIS	0	0	0	0
THYMUS	ATROPHY	0	0	0	0
PANCREAS	EOSINOPHILIC CHANGE	0	0	0	0
HEART	NECROSIS	0	0	0	0

表 P-36 病理組織学的所見. 総括表
(マウス. 13週間試験. 定期解剖動物)

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : MALE

DOSE LEVEL (PPM)		B10			
NO. OF EXAMINED ANIMALS		10	10		
ORGAN	FINDINGS	1	2	3	
LUNG	HEMORRHAGE	0	0	0	0
LIVER	PELIOSIS-LIKE LESION	0	1	0	0
	FATTY CHANGE	0	0	0	0
	CYTOLOGICAL ALTERATION	0	0	10	0
	DEPOSIT OF CERIOD	0	10	0	0
	DEPOSIT OF CALCIUM	0	1	0	0
	GRANULATION	0	0	0	0
	PLFOMORPHISM	0	10	0	0
	MITOSIS	0	7	1	0
	COLLAPSE	0	0	10	0
	PROLIFERATIVE DUCTS	0	10	0	0
	EOSINOPHILIC FOCI	0	0	0	0
	CLEAR CELL FOCI	0	2	0	0
	BASOPHILIC FOCI	0	3	0	0
	MIXED FOCI	0	2	0	0
KIDNEY	VACUOLIC CHANGE	0	0	0	0
	HYDRONEPHROSIS	0	0	0	0
URFTR	INFLAMMATION	0	0	0	0
SPLEEN	DEPOSIT OF PIGMENT	0	1	0	0
	HEMATOPOIESIS	0	9	1	0
PANCREAS	HYALINE DEGENERATION	0	0	0	0
	EOSINOPHILIC CHANGE	0	1	0	0
HEART	DEPOSIT OF CALCIUM	0	3	0	0
ARTERY	DEPOSIT OF CALCIUM	0	0	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : FEMALE

DOSE LEVEL (PPM)		0				10				30				90				270				
NO. OF EXAMINED ANIMALS		10				10				10				10				10				
ORGAN	FINDINGS	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	
LUNG	HEMORRHAGE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIVER	FATTY CHANGE	0	5	0	0	0	4	0	0	0	5	0	0	0	3	0	0	0	0	3	0	0
	CYTOLOGICAL ALTERATION	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	0	0	0	0	10	0
	DEPOSIT OF CEROID	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	0	0
	GRANULATION	0	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	PLEOMORPHISM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0
	MITOSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
	COLLAPSE	0	0	0	0	0	0	0	0	0	10	0	0	0	9	0	0	0	0	0	10	0
	PROLIFERATIVE DUCTS	0	0	0	0	0	0	0	0	0	3	0	0	0	9	0	0	0	0	10	0	0
	CLEAR CELL FOCI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	BASOPHILIC FOCI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
KIDNEY	VACUOLIC CHANGE	0	5	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
STOMACH	+PAPILLOMA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
UTERUS	HYDROMETRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
	CYSTIC ENDOMETRIAL HYPERPLASIA	0	4	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SPLEEN	DEPOSIT OF PIGMENT	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0
	DEPOSIT OF HEMOSIDERIN	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	HEMATOPOIESIS	0	3	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4	0	0
PANCREAS	EOSINOPHILIC CHANGE	0	0	0	0	0	3	0	0	0	4	0	0	0	3	0	0	0	0	3	0	0
	INFLAMMATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
SALIVARY GLAND	LYMPHOCYTIC INFILTRATION	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	INFLAMMATION	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEART	DEPOSIT OF CALCIUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
NASAL CAVITY	INFLAMMATION	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

TABLE SUMMARY OF MICRO FINDINGS (SACRIFICED AT 13 WEEK)

STUDY NO. : 0021

SEX : FEMALE

DOSE LEVEL (PPM)		810			
NO. OF EXAMINED ANIMALS		10			
ORGAN	FINDINGS	T	1	2	3
LUNG	HEMORRHAGE	0	0	0	0
LIVER	FATTY CHANGE	0	1	0	0
	CYTOLOGICAL ALTERATION	0	0	10	0
	DEPOSIT OF CEROID	0	10	0	0
	GRANULATION	0	0	0	0
	PLEOMORPHISM	0	10	0	0
	MITOSIS	0	4	0	0
	COLLAPSE	0	0	10	0
	PROLIFERATIVE DUCTS	0	10	0	0
	CLEAR CELL FOCI	0	0	0	0
	BASOPHILIC FOCI	0	0	0	0
KIDNEY	VACUOLIC CHANGE	0	1	0	0
STOMACH	*PAPILLOMA	0	0	0	0
UTERUS	HYDROMETRA	0	0	0	0
	CYSTIC ENDOMETRIAL HYPERPLASIA	0	0	0	0
SPLEEN	DEPOSIT OF PIGMENT	0	0	0	0
	DEPOSIT OF HEMOSIDERIN	0	0	0	0
	HEMATOPOIESIS	0	7	1	0
PAUCREAS	EOSINOPHILIC CHANGE	0	0	1	0
	INFLAMMATION	0	1	0	0
SALIVARY GLAND	LYMPHOCYTIC INFILTRATION	0	0	0	0
	INFLAMMATION	0	1	0	0
HEART	DEPOSIT OF CALCIUM	0	1	0	0
NASAL CAVITY	INFLAMMATION	0	0	0	0