Exp. No. 9046 (115-197)

Table 1. Summary data on dose-finding study of 2-ethylhexyl vinyl ether
[Non-activation method : -S9]

Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]															
		TA100			TA1535			WP2*uvrA*			TA98			TA1537			
2-ethylhexyl vinyl ether	0 a)	129	130	136	15	15	13	22	24	22	20	20	16	7	8	7	
		[132	±	4]	[14	±	1]	[23	±	1]	[19	±	2]	[7	±	1]	
	8.19	107	101	115	8	12	12	22	22	20	20	18	19	7	9	8	
		[108	±	7]	[11	±	2]	[21	±	1]	[19	±	1]	[8	±	1]	
	20.5	75*	69*	70*	7*	12*	8*	20	21	18	15*	18*	15*	6*	8*	7*	
		[71	±	3]	[9	±	3]	[20	±	2]	[16	±	2]	[7	±	1]	
	51.2	79*	64*	66*	5*	9*	9*	18	14	18	16*	16*	13*	5*	5*	5*	
		[70	±	8]	[8	±	2]	[17	±	2]	[15	±	2]	[5	±	0]	
	128	59*	65*	67*	7*	6*	6*	22	18	20	16*	18*	18*	5*	6*	3*	
		[64	±	4]	[6	±	1]	[20	±	2]	[17	±	1]	[5	±	2]	
	320	23*	27*	40*	7*	5*	7*	21	24	24	18*	12*	12*	6*	3*	4*	
		[30	±	9]	[6	±	1]	[23	±	2]	[14	±	3]	[4	±	2]	
	800	18*	20*	15*	7*	4*	6*	20	19	22	12*	13*	12*	5*	5*	3*	
		[18	±	3]	[6	±	2]	[20	±	2]	[12	±	1]	[4	±	1]	
	2000	13*	12*	20*	6*	6*	7*	20	18	23	13*	8*	8*	1*	4*	4*	
		[15	±	4]	[6	±	1]	[20	±	3]	[10	±	3]	[3	±	2]	
	5000	16*	21*	15*	6*	8*	6*	16*	14*	15*	13*	14*	17*	3*	4*	4*	
		[17	±	3]	[7	±	1]	[15	±	1]	[15	±	2]	[4	±	1]	
Positive control		806	820	849 b)	589	511	562 c)	104	130	122 b)	596	530	535 d)	352	282	266 e)	
		[825	±	22]	[554	±	40]	[119	±	13]	[554	±	37]	[300	±	46]	

a): Negative control(Dimethyl sulfoxide, 100 μL/plate)
b): AF-2; 2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide, 0.01 μg/plate c): NaN3; Sodium azide, 0.5 μg/plate
d): AF-2, 0.1 μg/plate e): 9-AA; 9-Aminoacridine hydrochloride, 80 μg/plate
* : Growth inhibition was observed.

Table 2. Summary data on dose-finding study of 2-ethylhexyl vinyl ether
[Activation method : +S9]

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Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]																	
		TA100				TA1535				WP2*uvrA*				TA98				TA1537			
2-ethylhexyl vinyl ether	0 a)	104	122	114	[113 ± 9]	15	10	13	[13 ± 3]	25	26	22	[24 ± 2]	28	34	33	[32 ± 3]	16	14	21	[17 ± 4]
	8.19	116	121	115	[117 ± 3]	17	14	13	[15 ± 2]	21	21	22	[21 ± 1]	33	29	29	[30 ± 2]	15	13	14	[14 ± 1]
	20.5	124	117	111	[117 ± 7]	15	11	11	[12 ± 2]	16	20	20	[19 ± 2]	27	26	24	[26 ± 2]	14	11	14	[13 ± 2]
	51.2	116	119	106	[114 ± 7]	16	15	18	[16 ± 2]	21	21	18	[20 ± 2]	30	24	27	[27 ± 3]	14	16	21	[17 ± 4]
	128	74*	79*	67*	[73 ± 6]	9*	5*	8*	[7 ± 2]	23	25	20	[23 ± 3]	23*	23*	20*	[22 ± 2]	13*	15*	9*	[12 ± 3]
	320	63*	79*	76*	[73 ± 9]	8*	9*	9*	[9 ± 1]	20	27	25	[24 ± 4]	19*	12*	19*	[17 ± 4]	7*	12*	9*	[9 ± 3]
	800	67*	70*	74*	[70 ± 4]	6*	6*	5*	[6 ± 1]	19	20	20	[20 ± 1]	20*	16*	20*	[19 ± 2]	9*	6*	10*	[8 ± 2]
	2000	53*	59*	55*	[56 ± 3]	6*	9*	7*	[7 ± 2]	16*	20*	15*	[17 ± 3]	22*	20*	17*	[20 ± 3]	10*	7*	8*	[8 ± 2]
	5000	48*	64*	56*	[56 ± 8]	9*	10*	8*	[9 ± 1]	20*	22*	15*	[19 ± 4]	19*	21*	20*	[20 ± 1]	8*	6*	6*	[7 ± 1]
Positive control		808	768	867 b)	[814 ± 50]	286	252	276 c)	[271 ± 17]	522	501	495 d)	[506 ± 14]	321	360	337 e)	[339 ± 20]	121	133	138 c)	[131 ± 9]

a): Negative control(Dimethyl sulfoxide, 100 μL/plate)
b):2-AA; 2-Aminoanthracene, 1 μg/plate c):2-AA, 2 μg/plate d):2-AA, 10 μg/plate e):2-AA, 0.5 μg/plate
* : Growth inhibition was observed.

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Table 3. Summary data on dose-finding study of 2-ethylhexyl vinyl ether (Additional study)
[Non-activation method : -S9]

Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]															
		TA100				TA1535				WP2*uvrA*				TA98			
2-ethylhexyl vinyl ether	0 a)	105	116	108	[110 ± 6]	12	12	13	[12 ± 1]					25	21	20	[22 ± 3]
	0.781	128	111	119	[119 ± 9]	10	12	9	[10 ± 2]					27	26	20	[24 ± 4]
	1.56	115	109	105	[110 ± 5]	9	12	12	[11 ± 2]					21	26	23	[23 ± 3]
	3.13	118	107	109	[111 ± 6]	16	14	13	[14 ± 2]					27	23	28	[26 ± 3]
	6.25	100	109	109	[106 ± 5]	12	10	11	[11 ± 1]					27	25	24	[25 ± 2]
	12.5	92*	98*	97*	[96 ± 3]	10*	8*	7*	[8 ± 2]					22	23	20	[22 ± 2]
	25.0	72*	66*	69*	[69 ± 3]	5*	7*	7*	[6 ± 1]					16*	15*	19*	[17 ± 2]
	50.0	60*	72*	65*	[66 ± 6]	7*	8*	8*	[8 ± 1]					12*	14*	13*	[13 ± 1]
Positive control		732	797	778 b)	[769 ± 33]	628	646	640 c)	[638 ± 9]					638	660	595 d)	[631 ± 33]

Compound	Dose (μg/plate)	TA1537			
2-ethylhexyl vinyl ether	0 a)	7	9	11	[9 ± 2]
	0.781	10	5	6	[7 ± 3]
	1.56	13	9	8	[10 ± 3]
	3.13	12	11	9	[11 ± 2]
	6.25	12	9	11	[11 ± 2]
	12.5	3*	6*	6*	[5 ± 2]
	25.0	7*	6*	4*	[6 ± 2]
	50.0	3*	3*	5*	[4 ± 1]
Positive control		209	285	283 e)	[259 ± 43]

a): Negative control(Dimethyl sulfoxide, 100 μL/plate)
b): AF-2; 2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide, 0.01 μg/plate c): NaN3; Sodium azide, 0.5 μg/plate
d): AF-2, 0.1 μg/plate e): 9-AA; 9-Aminoacridine hydrochloride, 80 μg/plate
* : Growth inhibition was observed.

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Table 4. Summary data on dose-finding study of 2-ethylhexyl vinyl ether (Additional study)
[Activation method : +S9]

Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]															
		TA100				TA1535				WP2*uvrA*				TA98				TA1537			
2-ethylhexyl vinyl ether	0 a)	121	118	113	[117 ± 4]	12	12	15	[13 ± 2]					33	28	29	[30 ± 3]	13	17	16	[15 ± 2]
	6.25	110	116	109	[112 ± 4]	11	9	13	[11 ± 2]					25	31	34	[30 ± 5]	13	15	12	[13 ± 2]
	12.5	105	103	106	[105 ± 2]	12	10	9	[10 ± 2]					29	32	27	[29 ± 3]	17	19	11	[16 ± 4]
	25.0	102	109	107	[106 ± 4]	11	16	10	[12 ± 3]					28	31	29	[29 ± 2]	17	16	14	[16 ± 2]
	50.0	107	111	111	[110 ± 2]	12	11	16	[13 ± 3]					34	28	30	[31 ± 3]	16	12	14	[14 ± 2]
	100	85*	92*	87*	[88 ± 4]	6*	6*	9*	[7 ± 2]					28	25	31	[28 ± 3]	11*	13*	9*	[11 ± 2]
	200	74*	68*	68*	[70 ± 3]	7*	8*	7*	[7 ± 1]					25*	27*	22*	[25 ± 3]	10*	8*	8*	[9 ± 1]
Positive control		1048	980	1021 b)	[1016 ± 34]	370	359	392 c)	[374 ± 17]					341	409	350 e)	[367 ± 37]	106	115	130 c)	[117 ± 12]

a): Negative control(Dimethyl sulfoxide, 100 μL/plate)
b):2-AA; 2-Aminoanthracene, 1 μg/plate c):2-AA, 2 μg/plate e):2-AA, 0.5 μg/plate
* : Growth inhibition was observed.

Exp. No. 9046 (115-197)

Table 5. Summary data on bacterial reverse mutation test of 2-ethylhexyl vinyl ether
[Non-activation method : -S9]

Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]															
		TA100			TA1535			WP2*uvrA*			TA98			TA1537			
2-ethylhexyl vinyl ether	0 a)	107	106	106	11	12	13	21	26	22	25	20	24	12	8	12	
		[106	±	1]	[12	±	1]	[23	±	3]	[23	±	3]	[11	±	2]	
	0.610	115	110	108	10	13	12							6	12	9	
		[111	±	4]	[12	±	2]							[9	±	3]	
	1.22	106	112	101	9	10	9				20	26	21	10	13	11	
		[106	±	6]	[9	±	1]				[22	±	3]	[11	±	2]	
	2.44	121	111	106	13	15	11				21	20	22	14	11	11	
		[113	±	8]	[13	±	2]				[21	±	1]	[12	±	2]	
	4.88	104	110	106	14	14	11				21	21	21	10	10	8	
		[107	±	3]	[13	±	2]				[21	±	0]	[9	±	1]	
	9.77	93*	83*	96*	6*	11*	8*				25	21	20	9*	6*	9*	
		[91	±	7]	[8	±	3]				[22	±	3]	[8	±	2]	
	19.5	72*	67*	79*	6*	5*	4*				19*	20*	20*	7*	7*	6*	
		[73	±	6]	[5	±	1]				[20	±	1]	[7	±	1]	
	39.1										16*	14*	18*				
											[16	±	2]				

a): Negative control(Dimethyl sulfoxide, 100 μL/plate)
* : Growth inhibition was observed.

Table 5. -Continued

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Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]					
		TA100	TA1535	WP2*uvrA*	TA98	TA1537	
2-ethylhexyl vinyl ether	156			20 24 24 [23 ± 2]			
	313			22 20 21 [21 ± 1]			
	625			20 25 25 [23 ± 3]			
	1250			22 20 21 [21 ± 1]			
	2500			21 22 22 [22 ± 1]			
	5000			12* 14* 14* [13 ± 1]			
Positive control		827 768 790 b) [795 ± 30]	596 609 602 c) [602 ± 7]	121 106 118 b) [115 ± 8]	713 728 695 d) [712 ± 17]	254 231 244 e) [243 ± 12]	

b): AF-2; 2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide, 0.01 μg/plate c): NaN_3; Sodium azide, 0.5 μg/plate
d): AF-2, 0.1 μg/plate e): 9-AA; 9-Aminoacridine hydrochloride, 80 μg/plate
* : Growth inhibition was observed.

Exp. No. 9046 (115-197)

Table 6. Summary data on bacterial reverse mutation test of 2-ethylhexyl vinyl ether
[Activation method : +S9]

Compound	Dose (μg/plate)	Revertant colonies per plate [Mean ± S.D.]																			
		TA100				TA1535				WP2uvrA				TA98				TA1537			
2-ethylhexyl vinyl ether	0 a)	112	104	114	[110 ± 5]	12	14	10	[12 ± 2]	25	26	22	[24 ± 2]	35	38	36	[36 ± 2]	23	21	20	[21 ± 2]
	4.88	109	113	119	[114 ± 5]	14	11	12	[12 ± 2]									16	19	20	[18 ± 2]
	9.77	115	122	114	[117 ± 4]	11	10	11	[11 ± 1]								[33 ± 2]	22	20	18	[20 ± 2]
	19.5	118	124	116	[119 ± 4]	9	14	12	[12 ± 3]								[32 ± 3]	21	18	20	[20 ± 2]
	39.1	126	117	117	[120 ± 5]	13	12	10	[12 ± 2]								[35 ± 3]	18	21	18	[19 ± 2]
	78.1	92*	85*	81*	[86 ± 6]	10*	7*	9*	[9 ± 2]	23	28	24	[25 ± 3]	38	36	31	[35 ± 4]	16*	20*	19*	[18 ± 2]
	156	74*	85*	80*	[80 ± 6]	8*	10*	6*	[8 ± 2]	22	23	21	[22 ± 1]	28*	28*	26*	[27 ± 1]	12*	16*	13*	[14 ± 2]
	313									26	23	24	[24 ± 2]	23*	26*	28*	[26 ± 3]				
	625									29	26	26	[27 ± 2]								
	1250									23	23	22	[23 ± 1]								
	2500									19*	20*	17*	[19 ± 2]								
Positive control		1195	1163	1111 b)	[1156 ± 42]	434	460	414 c)	[436 ± 23]	527	516	495 d)	[513 ± 16]	403	424	441 e)	[423 ± 19]	143	190	142 c)	[158 ± 27]

a): Negative control(Dimethyl sulfoxide,100 μL/plate)
b):2-AA; 2-Aminoanthracene, 1 μg/plate c):2-AA, 2 μg/plate d):2-AA, 10 μg/plate e):2-AA, 0.5 μg/plate
* : Growth inhibition was observed.