

2-Chloroethanol (2-クロロエタノール)

Experimental Data

Chemical Name: 2-Chloroethanol Synonym: Ethylene chlorohydrin Ethanol, 2-chloro- Molecular weight: 80.52 Boiling point: 127~131°C Melting point: -89°C Flashing point: 60°C Chemical Structure CH ₂ CH ₂ OH CAS No : 107-07-3 MITI No: (2)-2002 Source of Substance: Wako Pure Chem. Ind., Ltd. Lot. No. : AWH5040 Purity: 99.2 % Vehicle: DMSO	Con. μg/ plate	Number of Revertants/plate									
		Base-substitution						Frame-shift			
		TA100		TA1535		WP2uvrA		TA98		TA1537	
		S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(142)	(152)	(22)	(17)	(43)	(47)	(17)	(25)	(4)	(7)	
	158	160	15	14	42	61	14	33	10	5	
50	(156)	(162)	(21)	(16)	(44)	(55)	(13)	(32)	(6)	(6)	
	154	157	16	13	34	33	16	19	6	3	
	142	170	17	15	32	42	16	30	10	7	
100	(148)	(164)	(17)	(14)	(33)	(38)	(16)	(25)	(8)	(5)	
	146	171	9	15	44	59	20	31	5	4	
	155	161	13	12	46	44	22	29	6	11	
200	(151)	(166)	(11)	(14)	(45)	(52)	(21)	(30)	(6)	(8)	
	150	178	17	11	35	44	18	44	2	4	
	145	165	18	11	44	55	16	40	5	4	
500	(148)	(172)	(18)	(11)	(40)	(50)	(17)	(42)	(4)	(4)	
	130	170	13	13	31	69	8	31	5	2	
	146	165	26	17	47	46	14	35	6	6	
1000	(138)	(168)	(20)	(15)	(39)	(58)	(11)	(33)	(6)	(4)	
	157	138	26	15	70	70	26	42	2	3	
	159	147	14	14	59	58	15	33	9	6	
2000	(158)	(143)	(20)	(15)	(65)	(64)	(21)	(38)	(6)	(5)	
	184	178	28	23	175	80	27	31	5	4	
	211	163	29	27	196	78	21	34	8	9	
5000	(198)	(171)	(29)	(25)	(186)	(79)	(24)	(33)	(7)	(7)	
IARC Evaluation: not yet cited					+	-	-	-	-	-	
Judgement					28.6						
Specific Mutagenicity											
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA	
Control	(635)	(1455)	(315)	(510)	(553)	(1022)	(448)	(479)	(600)	(354)	

Experimental Data

Con. μ g/ plate	Number of Revertants/plate	
	Base-substitution	
	WP2uvrA	
	S9-	S9+
<u>DMSO</u>	(50)	(52)
	47	43
<u>200</u>	43	35
	(45)	(39)
<u>500</u>	50	44
	46	47
<u>1000</u>	(48)	(46)
	52	65
<u>2000</u>	48	55
	(50)	(60)
<u>3000</u>	52	71
	68	57
<u>4000</u>	(60)	(64)
	92	85
<u>5000</u>	87	74
	(90)	(80)
Judgement	122	83
	105	78
Specific Mutagenicity	(114)	(81)
	123	112
Positive	102	73
	(113)	(93)
Control	+	-
	16.0	
	AF2	2AA
	(413)	(918)