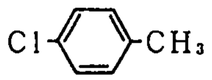
p-Chlorotoluene (p-クロロトルエン)

Chemical Name: p-Chlorotoluene
Synonym 1-Chloro-4-methylbenzene
Benzene, 1-chloro-4-methyl-
Molecular weight: 126.59
Melting point: 6~8℃
Boiling point: 162℃ (760mmHg)
Flashing point: 49℃
Chemical Structure



CAS NO : 106-43-4
MITI NO : (3)-39
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No. : AX01
Purity : 99 %
Vehicle : DMSO

Mutagenicity
in Bacterial Test : Negative

IARC Evaluation : G 2 B

Experimental Data

Number of Revertants/plate

Con. μg/plate	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(96)	(104)	(14)	(14)	(34)	(44)	(17)	(26)	(7)	(11)
	124	98	14	15	37	43	18	29	11	5
	97	96	18	10	41	26	22	23	5	11
0.0763	(111)	(97)	(16)	(13)	(39)	(35)	(20)	(26)	(8)	(8)
	115	116	13	16	46	45	23	28	10	8
	99	121	14	17	33	36	14	29	9	11
0.305	(107)	(119)	(14)	(17)	(40)	(41)	(19)	(29)	(10)	(10)
	101	112	23	18	29	33	15	25	6	10
	126	111	9	20	30	40	21	21	11	13
1.22	(114)	(112)	(16)	(19)	(30)	(37)	(18)	(23)	(9)	(12)
	97	97	17	9	40	47	10	25	10	11
	99	114	13	14	31	48	20	25	7	13
4.88	(98)	(106)	(15)	(12)	(36)	(48)	(15)	(25)	(9)	(12)
	111	116	10	17	37	29	16	30	13	10
	107	84	15	14	34	44	20	25	11	14
19.5	(109)	(100)	(13)	(16)	(36)	(37)	(18)	(28)	(12)	(12)
	94*	105	11*	17	25	43	9*	26	9*	14
	108*	104	11*	11	24	49	13*	24	6*	8
78.1	(101*)	(105)	(11*)	(14)	(25)	(46)	(11*)	(25)	(8*)	(11)
	41*	91*	8*	6*	14*	18*	2*	14*	5*	11*
	63*	79*	8*	9*	10*	22*	10*	15*	8*	11*
313	(52*)	(85*)	(8*)	(8*)	(12*)	(20*)	(6*)	(15*)	(7*)	(11*)
	0*	0*	0*	0*	0*	13*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	16*	0*	0*	0*	0*
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(15*)	(0*)	(0*)	(0*)	(0*)
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2	2AA	NaN3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(631)	(1043)	(384)	(298)	(253)	(891)	(430)	(309)	(435)	(158)

Con. μg/plate	Experimental Data: Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(107)	(123)	(13)	(16)	(22)	(29)	(17)	(23)	(8)	(8)
	102		8				16		5	
	104		6				21		9	
2.44	(103)		(7)				(19)		(7)	
	113		7				11		11	
	120		11				15		5	
4.88	(117)		(9)				(13)		(8)	
	116	126	10	10	24	26	17	13	8	6
	98	100	9	16	20	30	11	22	6	8
9.77	(107)	(113)	(10)	(13)	(22)	(28)	(14)	(18)	(7)	(7)
	115	112	15	8	23	26	11	16	8	10
	96	116	11	10	16	28	16	28	5	6
19.5	(106)	(114)	(13)	(9)	(20)	(27)	(14)	(22)	(7)	(8)
	108	113	7	9	26	23	15	25	5	16
	100	128	5	10	16	33	25	17	9	7
39.1	(104)	(121)	(6)	(10)	(21)	(28)	(20)	(21)	(7)	(12)
	84*	120	9*	10	20	23	8*	22	7*	6
	83*	137	9*	9	28	37	9*	25	5*	9
78.1	(84*)	(129)	(9*)	(10)	(24)	(30)	(9*)	(24)	(6*)	(8)
	85*	94*	5*	8*	22*	16*	16*	20*	7*	9*
	78*	85*	6*	14*	16*	24*	9*	20*	8*	6*
156	(82*)	(90*)	(6*)	(11*)	(19*)	(20*)	(13*)	(20*)	(8*)	(8*)
		64*		10*	10*	16*		22*		9*
		94*		9*	16*	22*		28*		7*
313		(79*)		(10*)	(13*)	(19*)		(25*)		(8*)
		70*		9*	11*	23*		13*		11*
		70*		10*	22*	25*		9*		11*
625		(70*)		(10*)	(17*)	(24*)		(11*)		(11*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2	2AA	NaN3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(961)	(1225)	(330)	(269)	(276)	(974)	(403)	(336)	(538)	(171)

Experimental Data						
Con. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(298)	(357)	(338)	(360)	(207)	(269)
	303	330	298	418	184	242
	292	362	303	379	187	275
0.0763	(298)	(346)	(301)	(399)	(186)	(259)
	286	371	253	361	192	245
	299	356	324	324	190	260
0.305	(293)	(364)	(289)	(343)	(191)	(253)
	274	367	281	393	213	274
	278	394	269	382	213	279
1.22	(276)	(381)	(275)	(388)	(213)	(277)
	300	336	276	360	198	242
	292	326	310	412	193	261
4.88	(296)	(331)	(293)	(386)	(196)	(252)
	293	354	294	372	185	265
	262	364	307	343	183	234
19.5	(278)	(359)	(301)	(358)	(184)	(250)
	275*	353	271*	372	187	263
	265*	352	290*	325	197	239
78.1	(271*)	(353)	(281*)	(349)	(192)	(251)
	131*	195*	298*	258*	107*	139*
	152*	218*	256*	253*	121*	141*
313	(142*)	(207*)	(277*)	(256*)	(114*)	(140*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(956)	(2580)	(1780)	(1069)	(2982)	(1054)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(245)	(313)	(270)	(345)	(163)	(242)
	235		239			
	222		247			
2.44	(229)		(243)			
	272		261			
	254		298			
4.88	(263)		(280)			
	247	330	255	362	205	258
	265	312	250	370	221	284
9.77	(256)	(321)	(253)	(366)	(213)	(271)
	238	310	267	326	169	272
	245	306	254	325	185	245
19.5	(242)	(308)	(261)	(326)	(177)	(259)
	246*	294	242	332	191	261
	233*	310	233	319	205	265
39.1	(240*)	(302)	(238)	(326)	(198)	(263)
	249*	273	247*	317	169	246
	234*	307	279*	362	156	266
78.1	(242*)	(290)	(263*)	(340)	(163)	(256)
	171*	239*	206*	229*	97*	246
	131*	229*	212*	269*	107*	230
156	(151*)	(234*)	(209*)	(249*)	(102*)	(238)
		176*		218*	89*	134*
		174*		201*	98*	123*
313		(175*)		(210*)	(94*)	(129*)
		185*		191*	64*	129*
		185*		193*	61*	135*
625		(185*)		(192*)	(63*)	(132*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(803)	(2038)	(1304)	(988)	(2147)	(1202)