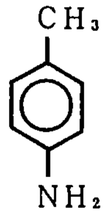
p-Toluidine (p-トルイジン)

Chemical Name: p-Toluidine
Synonym: 4-Aminotoluene
Benzamine, 4-methyl-
Molecular weight: 107.15
Melting point: 44~45℃
Boiling point: 200~201℃
Flashing point: 88℃
Chemical Structure



CAS No : 106-49-0
MITI No: (3)-186
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: FBZ01
Purity: 99 %
Vehicle: DMSO

Mutagenicity
in Bacterial Test: Negative

IARC Evaluation: not yet cited

Experimental Data

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	(181)	(161)	(9)	(10)	(17)	(28)	(39)	(39)	(7)	(7)
	184	177	6	7	15	20	59	45	10	7
	162	164	7	16	18	15	53	40	6	6
20	(173)	(171)	(7)	(12)	(17)	(18)	(56)	(43)	(8)	(7)
	166	194	5	6	14	26	40	33	3	3
	148	164	7	11	17	26	45	48	6	6
39	(157)	(179)	(6)	(9)	(16)	(26)	(43)	(41)	(5)	(5)
	131	186	9	15	11	22	29	51	5	5
	144	163	6	8	16	34	43	38	5	5
78	(138)	(175)	(8)	(12)	(14)	(28)	(36)	(45)	(5)	(5)
	158	195	7	9	17	26	37	30	7	10
	135	200	13	9	13	31	43	49	2	3
156	(147)	(198)	(10)	(9)	(15)	(29)	(40)	(40)	(5)	(7)
	192	186	7	9	14	23	33	47	8	6
	208	174	10	14	9	26	53	60	5	5
313	(200)	(180)	(9)	(12)	(12)	(25)	(43)	(54)	(7)	(6)
	166	174	5	14	15	28	36	41	9	3
	152	220	11	14	17	34	47	46	8	2
625	(159)	(197)	(8)	(14)	(16)	(31)	(42)	(44)	(9)	(3)
	148	209	3	9	13	20	36	51	6	8
	157	200	6	9	21	22	37	47	3	6
1250	(153)	(205)	(5)	(9)	(17)	(21)	(37)	(49)	(5)	(7)
	144*	169*	7*	9*	17*	23	8*	24	3*	3*
	98*	150*	5*	6*	10*	20	2*	25	0*	5*
2500	(106*)	(160*)	(6*)	(8*)	(14*)	(22)	(5*)	(25)	(2*)	(4*)
	86*	128*	3*	9*	11*	11*	0*	14*	0*	0*
	33*	111*	2*	9*	7*	9*	5*	8*	0*	0*
5000	(60*)	(120*)	(3*)	(9*)	(9*)	(10*)	(3*)	(11*)	(0*)	(0*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2 (592)	2AA (616)	NaN_3 (218)	2AA (159)	AF2 (134)	2AA 20 (1453)	AF2 (153)	2AA (244)	9AA (125)	2AA (158)

Experimental Data

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	(126)	(115)	(8)	(8)	(15)	(22)	(24)	(26)	(9)	(7)
	115	152	7	13	10	20	20	31	5	9
	114	146	6	5	20	26	25	24	5	8
78	(115)	(149)	(7)	(9)	(15)	(23)	(23)	(33)	(5)	(9)
	130	147	7	8	18	21	23	16	6	9
	123	174	11	10	15	29	24	21	10	5
156	(127)	(161)	(9)	(9)	(17)	(25)	(24)	(19)	(8)	(7)
	137	172	6	8	17	25	14	22	8	3
	115	171	6	9	18	31	20	25	7	8
313	(126)	(172)	(6)	(9)	(18)	(28)	(17)	(24)	(8)	(6)
	119	178	11	8	7	29	22	22	5	10
	108	192	6	10	13	31	24	31	6	8
625	(114)	(185)	(9)	(9)	(10)	(30)	(23)	(27)	(6)	(9)
	123	170	7	6	16	24	21	32	5	9
	119	176	7	6	8	29	23	23	7	8
1250	(121)	(173)	(7)	(6)	(12)	(27)	(22)	(28)	(6)	(9)
	82*	159	9*	9	14*	29	11*	17	2*	6*
	75*	166	8*	9	14*	25	10*	39	5*	5*
2500	(79*)	(163)	(9*)	(9)	(14*)	(27)	(11*)	(28)	(4*)	(6*)
	1*	107*	0*	7*	7*	0*	1*	22*	0*	6*
	59*	92*	0*	0*	15*	11*	0*	13*	0*	0*
5000	(30*)	(100*)	(0*)	(4*)	(11*)	(6*)	(1*)	(18*)	(0*)	(3*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2 (669)	2AA (683)	NaN_3 (230)	2AA (162)	AF2 (147)	2AA 20 (1284)	AF2 (377)	2AA (333)	9AA (225)	2AA (133)

Experimental Data　　30% S9

Con. μg/plate	Number of Revertants/plate				
	Base-substitution			Frame-shift	
	TA100	TA1535	WP2uvrA	TA98	TA1537
	S9+	S9+	S9+	S9+	S9+
DMSO	(165)	(11)	(23)	(29)	(12)
	206	6	25	27	10
	217	10	27	23	13
78	(212)	(8)	(26)	(25)	(12)
	202	9	16	29	13
	184	9	23	29	15
156	(193)	(9)	(20)	(29)	(14)
	207	13	27	28	9
	228	14	20	28	8
313	(218)	(14)	(24)	(28)	(9)
	202	7	30	29	15
	229	12	30	31	12
625	(216)	(10)	(30)	(30)	(14)
	216	10	25	34	10
	208	7	24	31	7
1250	(212)	(9)	(25)	(33)	(9)
	154*	9*	34*	27*	5*
	149*	9*	35*	29*	12*
2500	(152*)	(9*)	(35*)	(28*)	(9*)
	0*	8*	9*	20*	6*
	0*	5*	15*	12*	7*
5000	(0*)	(7*)	(12*)	(16*)	(7*)
Judgement	—	—	—	—	—
Specific Mutagenicity					
Positive Control	2AA 2.0 (429)	2AA 10 (307)	2AA 50 (1065)	2AA 2.0 (403)	2AA 10 (196)