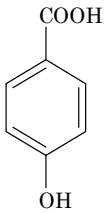
Chemical Name ; 4-Hydroxybenzoic acid

Synonym ; *p*-Hydroxybenzoic acid

Molecular Weight ; 138.12
Melting Point ; 213-214℃[CHCD]
Boiling Point ; －
Flashing Point ; 157 ℃[CHCD]
Molecular Formula ; $C_7H_6O_3$

Chemical Structure



CAS No. ; 99-96-7
MITI No. ; (3)-1640
ML No. ; －
Specified Chemical Substances ; －

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; FHB01
Purity ; 99.1%

Vehicle ; DMSO

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A		TA98		TA1537	
	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋
DMSO	(130)	(126)	(7)	(12)	(20)	(26)	(12)	(22)	(6)	(12)
	137	108	5	6	18	25	10	21	6	9
	120	133	9	5	22	17	15	14	7	10
1 .22	(129)	(121)	(7)	(6)	(20)	(21)	(13)	(18)	(7)	(10)
	143	122	7	8	17	26	13	17	7	8
	153	134	8	10	18	20	13	17	10	7
4 .88	(148)	(128)	(8)	(9)	(18)	(23)	(13)	(17)	(9)	(8)
	123	114	7	8	21	29	11	17	6	9
	138	135	7	5	22	24	11	21	6	13
19 .5	(131)	(125)	(7)	(7)	(22)	(27)	(11)	(19)	(6)	(11)
	117	114	6	7	16	25	16	22	7	13
	130	119	8	7	16	29	15	29	6	13
78 .1	(124)	(117)	(7)	(7)	(16)	(27)	(16)	(26)	(7)	(13)
	146	122	3	5	17	26	15	23	5	8
	144	121	8	6	23	21	13	20	5	10
313	(145)	(122)	(6)	(6)	(20)	(24)	(14)	(22)	(5)	(9)
	108	139	3	9	15	25	20	17	5	6
	126	115	8	8	11	31	9	20	9	11
1250	(117)	(127)	(6)	(9)	(13)	(28)	(15)	(19)	(7)	(9)
	124	116	3	10	29	34	6	25	3	17
	114	117	7	3	23	37	10	18	6	14
5000	(119)	(117)	(5)	(7)	(26)	(36)	(8)	(22)	(5)	(16)
Judgement	－	－	－	－	－	－	－	－	－	－
Specific Mutagenicity										
Positive Control	AF-2 (643)	2-AA (1222)	NaN_3 (251)	2-AA (204)	AF-2 (241)	2-AA (1059)	AF-2 (512)	2-AA (393)	9-AA (748)	2-AA (148)

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(145)	(150)	(9)	(11)	(14)	(16)	(14)	(21)	(4)	(7)
	137	144	7	7	23	30	15	18	3	6
	133	152	7	7	16	17	24	18	2	7
313	(135)	(148)	(7)	(7)	(20)	(24)	(20)	(18)	(3)	(7)
	137	158	6	5	9	22	17	11	2	9
	166	152	5	9	11	20	5	17	3	7
625	(152)	(155)	(6)	(7)	(10)	(21)	(11)	(14)	(3)	(8)
	152	176	8	14	17	31	15	21	5	6
	122	151	8	6	21	26	15	17	3	8
1250	(137)	(164)	(8)	(10)	(19)	(29)	(15)	(19)	(4)	(7)
	135	157	7	6	20	29	15	18	6	3
	130	135	8	15	25	24	17	21	5	8
2500	(133)	(146)	(8)	(11)	(23)	(27)	(16)	(20)	(6)	(6)
	137	165	3	8	11	22	7	14	5	9
	157	138	8	6	11	32	9	16	6	7
5000	(147)	(152)	(6)	(7)	(11)	(27)	(8)	(15)	(6)	(8)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (584)	2-AA (1150)	NaN_3 (291)	2-AA (252)	AF-2 (211)	2-AA (949)	AF-2 (459)	2-AA (409)	9-AA (664)	2-AA (139)

Experimental Data-3

Conc. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2*uvr*A/pKM101	
	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(201)	(314)	(263)	(387)	(50)	(79)
	229	313	243	362	38	77
	219	332	266	379	53	69
19 .5	(224)	(323)	(255)	(371)	(46)	(73)
	218	336	273	370	44	77
	213	297	235	365	55	68
78 .1	(216)	(317)	(254)	(368)	(50)	(73)
	218	301	239	397	55	86
	209	299	241	368	68	82
313	(214)	(300)	(240)	(383)	(62)	(84)
	183	292	232	445	53	90
	187	304	223	406	61	78
1250	(185)	(298)	(228)	(426)	(57)	(84)
	212	305 *	206	281	59	64
	191	310 *	165	319	44	68
5000	(202)	(308 *)	(186)	(300)	(52)	(66)
Judgement	−	−	−	−	−	−
Specific Mutagenicity						
Positive Control	BLM (467)	2-AA (1070)	PA (1435)	2-AA (1176)	AF-2 (1241)	2-AA (1021)

* Growth inhibitation was observed.

Experimental Data-4 (B9616-3/3)

Conc. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2*uvr*A/pKM101	
	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(265)	(311)	(290)	(395)	(55)	(92)
	235	318	248	370	68	70
	245	276	252	367	51	84
313	(240)	(297)	(250)	(369)	(60)	(77)
	239	309	238	348	67	107
	218	271	238	349	64	89
625	(229)	(290)	(238)	(349)	(64)	(98)
	225	285	249	354	51	96
	230	295	242	299	71	92
1250	(228)	(290)	(246)	(327)	(61)	(94)
	241	276	290	348	69	87
	243	310	238	330	76	90
2500	(242)	(293)	(264)	(339)	(73)	(89)
	222	248 *	233	269	56	62
	208	246 *	238	273	67	76
5000	(215)	(247 *)	(236)	(271)	(62)	(69)
Judgement	−	−	−	−	−	−
Specific Mutagenicity						
Positive Control	BLM (792)	2-AA (1232)	PA (1447)	2-AA (1223)	AF-2 (1247)	2-AA (994)