

4,4'-Diaminostilbene-2,2'-disulfonic acid
 (4,4'-ジアミノスチルベン-2,2'-ジルスルホン酸)

Experimental Data-1

(B9807-1/2)

Chemical Name	; 4,4'-Diaminostilbene-2,2'-disulfonic acid
Synonym	; Benzenesulfonic acid, 2,2'-(1,2-ethenedivyl)bis[5-amino-2,2'-(1,2-エテンジイル)ビス[5-アミノベンゼンスルホン酸]
Molecular Weight	; 370.41
Melting Point	; >300°C [Aldrich]
Boiling Point	; -
Flashing Point	; -
Molecular Formula	; C ₁₄ H ₁₄ N ₂ O ₆ S ₂
Chemical Structure	
CAS No.	; 81-11-8
MITI No.	; (4)-288
ML No.	; -
Specified Chemical Substances	; -
Source of Substance	; Tokyo Kasei Kogyo Co., Ltd.
Lot No.	; GG01-EM
Purity	; -
Vehicle	; DMSO

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(125)	(139)	(10)	(10)	(48)	(62)	(15)	(24)	(8)	(9)
0 .610	122 124 (123)	153 138 (146)	6 9 (8)	11 14 (13)	31 41 (36)	61 53 (57)	7 10 (9)	21 29 (25)	11 10 (11)	6 14 (10)
2 .44	142 127 (135)	134 148 (141)	10 15 (13)	16 8 (12)	45 38 (42)	68 83 (76)	20 16 (18)	20 23 (22)	8 6 (7)	11 10 (11)
9 .77	116 133 (125)	177 166 (172)	5 6 (6)	10 11 (11)	43 61 (52)	78 72 (75)	10 20 (15)	23 22 (23)	11 8 (10)	3 9 (6)
39 .1	113 109 (111)	152 150 (151)	11 9 (10)	13 10 (12)	31 41 (36)	52 64 (58)	17 11 (14)	28 25 (27)	6 7 (7)	9 11 (10)
156	121 146 (134)	145 117 (131)	10 13 (12)	10 15 (13)	40 39 (40)	81 83 (82)	20 11 (16)	18 24 (21)	13 9 (11)	13 13 (13)
625	107 116 (112)	178 158 (168)	9 8 (9)	13 13 (13)	29 40 (35)	78 66 (72)	15 20 (18)	23 29 (26)	10 3 (7)	10 13 (12)
2500	133 142 (138)	159 172 (166)	13 11 (12)	9 17 (13)	36 44 (40)	78 71 (75)	15 14 (15)	26 22 (24)	3 5 (4)	3 10 (7)
10000	131 146 (139)	170 164 (167)	7 11 (9)	13 6 (10)	30 54 (42)	61 52 (57)	13 15 (14)	23 18 (21)	9 8 (9)	11 15 (13)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (752)	2-AA (1432)	NaN ₃ (427)	2-AA (305)	AF-2 (1211)	2-AA (959)	AF-2 (459)	2-AA (440)	9-AA (485)	2-AA (217)

Experimental Data-2

(B9807-2/2)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 _{uvrA} /pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(118)	(142)	(8)	(11)	(35)	(56)	(18)	(22)	(7)	(10)
156	138	131	13	3	32	56	14	18	6	7
	127	127	8	11	33	51	14	24	3	10
	(133)	(129)	(11)	(7)	(33)	(54)	(14)	(21)	(5)	(9)
313	139	157	11	9	39	43	14	15	2	14
	144	152	5	9	45	55	13	20	5	9
	(142)	(155)	(8)	(9)	(42)	(49)	(14)	(18)	(4)	(12)
625	136	134	5	13	38	45	13	22	2	7
	114	148	6	13	39	52	14	10	5	3
	(125)	(141)	(6)	(13)	(39)	(49)	(14)	(16)	(4)	(5)
1250	124	163	6	10	38	41	21	22	7	11
	120	172	11	11	51	44	15	32	6	8
	(122)	(168)	(9)	(11)	(45)	(43)	(18)	(27)	(7)	(10)
2500	137	162	5	14	28	41	23	17	9	3
	150	170	5	9	40	40	10	23	5	11
	(144)	(166)	(5)	(12)	(34)	(41)	(17)	(20)	(7)	(7)
5000	158	169	8	9	37	52	21	34	2	7
	136	144	7	11	36	34	15	24	5	9
	(147)	(157)	(8)	(10)	(37)	(43)	(18)	(29)	(4)	(8)
10000	135	199	9	14	36	38	17	25	5	7
	126	153	5	11	29	33	20	22	8	13
	(131)	(176)	(7)	(13)	(33)	(36)	(19)	(24)	(7)	(10)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (701)	2-AA (1519)	NaN ₃ (375)	2-AA (295)	AF-2 (786)	2-AA (723)	AF-2 (374)	2-AA (448)	9-AA (577)	2-AA (190)