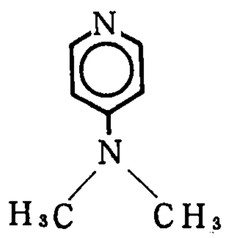
4-Dimethylaminopyridine (4-ジメチルアミノピリジン)

Chemical Name: 4-Dimethylaminopyridine
Synoym N,N-Dimethyl-4-pyridinamine
DMAP
Molecular weight: 122.17
Melting point: 112-113℃
Boiling point: ℃

Chemical Structure



CAS NO : 1122-58-3
MITI NO: (5)-5479
ML NO: 8-(1)-550, 8-(1)-586
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No.: FAX01
Purity: ≧ 97 %
Vehicle: H_2O

Mutagenicity
in Bacterial Test : Negative

IARC Overall 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+
H_2O	(198)	(185)	(12)	(12)	(27)	(39)	(38)	(47)	(11)	(13)
	169	178	7	15	25	25	43	46	11	9
	167	198	7	8	37	32	40	45	8	9
9.77	(168)	(188)	(7)	(12)	(31)	(29)	(42)	(46)	(10)	(9)
	187	214	11	11	23	31	31	54	5	9
	191	190	11	7	23	38	33	52	7	7
19.5	(189)	(202)	(11)	(9)	(23)	(35)	(32)	(53)	(6)	(8)
	190	193	11	13	26	40	37	51	7	7
	191	193	9	7	36	41	31	38	9	9
39.1	(191)	(193)	(10)	(10)	(31)	(41)	(34)	(45)	(8)	(8)
	183	188	10	16	29	34	40	39	16	10
	169	201	9	14	33	37	38	34	7	9
78.1	(176)	(195)	(10)	(15)	(31)	(36)	(39)	(37)	(12)	(10)
	169	192	14	15	32	34	29	44	9	15
	180	200	14	16	37	29	46	40	5	6
156	(175)	(196)	(14)	(16)	(35)	(32)	(38)	(42)	(7)	(11)
	187	180	9	15	23	44	47	41	7	7
	180	180	16	13	33	36	32	45	8	5
313	(184)	(180)	(13)	(14)	(28)	(40)	(40)	(43)	(8)	(6)
	173	206	9	10	36	36	43	48	10	7
	190	186	15	10	37	40	24	41	9	8
625	(182)	(196)	(12)	(10)	(37)	(38)	(34)	(45)	(10)	(8)
	146*	188	5*	10	32	25	21*	31	7*	8
	144*	155	8*	8	29	37	26*	43	6*	9
1250	(145*)	(172)	(7*)	(9)	(31)	(31)	(24*)	(37)	(7*)	(9)
	0*	0*	0*	0*	0*	37*	0*	18*	0*	0*
	0*	0*	0*	0*	0*	39*	0*	0*	0*	0*
2500	(0*)	(0*)	(0*)	(0*)	(0*)	(38*)	(0*)	(9*)	(0*)	(0*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	–	–	–	–	–	–	–	–	–	–
Specific Mutagenicity										
Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
	(799)	(887)	(476)	(163)	(219)	(1240)	(454)	(490)	(213)	(215)

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+
H_2O	(186)	(197)	(15)	(11)	(41)	(46)	(36)	(45)	(11)	(21)
	191		8				26		9	
	199		13				53		7	
19.5	(195)		(11)				(40)		(8)	
	216	180	10	14	49	51	37	52	9	20
	207	216	16	16	39	53	33	44	11	23
39.1	(212)	(198)	(13)	(15)	(44)	(52)	(35)	(48)	(10)	(22)
	207	200	13	10	36	43	37	56	6	20
	200	197	10	10	41	52	41	33	9	22
78.1	(204)	(199)	(12)	(10)	(39)	(48)	(39)	(45)	(8)	(21)
	176	221	8	13	40	46	49	40	7	18
	202	195	10	15	31	38	38	45	10	13
156	(189)	(208)	(9)	(14)	(36)	(42)	(44)	(43)	(9)	(16)
	195	204	14	13	36	46	38	48	9	23
	214	194	11	14	34	47	37	41	7	21
313	(205)	(199)	(13)	(14)	(35)	(47)	(38)	(45)	(8)	(22)
	206	195	8	10	37	47	25	40	14	22
	197	193	9	16	40	38	39	37	10	20
625	(202)	(194)	(9)	(13)	(39)	(43)	(32)	(39)	(12)	(21)
	207*	199	10*	14	45	45	33*	53	0*	17
	173*	200	8*	14	38	44	29*	43	7*	21
1250	(190*)	(200)	(9*)	(14)	(42)	(45)	(31*)	(48)	(4*)	(19)
		87*		7*	14*	47*		15*		14*
		85*		11*	39*	37*		30*		11*
2500		(86*)		(9*)	(27*)	(42*)		(23*)		(13*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
	(849)	(825)	(370)	(218)	(198)	(1504)	(389)	(449)	(292)	(167)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
H20	(289)	(363)	(350)	(412)	(113)	(160)
	275	367	389	385		
	319	356	329	368		
39.1	(297)	(362)	(359)	(377)		
	317	377	334	384	117	155
	313	373	355	379	99	179
78.1	(315)	(375)	(345)	(382)	(108)	(167)
	310	360	342	384	117	183
	290	378	408	367	133	176
156	(300)	(369)	(375)	(376)	(125)	(180)
	310	338	390	373	119	170
	313	362	367	376	107	160
313	(312)	(350)	(379)	(375)	(113)	(165)
	300	362	360*	347	105	185
	252	355	292*	371	109	178
625	(276)	(359)	(326*)	(359)	(107)	(182)
	142*	362*	0*	230*	129	174
	179*	330*	0*	229*	123	177
1250	(161*)	(346*)	(0*)	(230*)	(126)	(176)
	0*	0*	0*	0*	93*	146*
	0*	167*	0*	59*	104*	172*
2500	(0*)	(84*)	(0*)	(30*)	(99*)	(159*)
					72*	105*
					71*	85*
5000					(72*)	(95*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(696)	(1318)	(2268)	(1412)	(877)	(857)