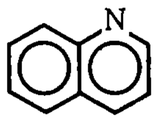
Quinoline (キノリン)

Chemical Name: Quinoline
Synonym 1-Benzazine
Molecular weight: 129.16
Melting point: -16~-15℃
Boiling point: 113~114℃ (17mmHg)
Flashing point: 101 ℃

Chemical Structure



CAS No : 91-22-5
MITI No: (5)-794
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: FF001
Purity: >99.8 %
Vehicle: DMSO

Mutagenicity
in Bacterial test: Positive

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-
DMSO	(126)	(17)	(43)	(11)	(4)
	157	15	41	15	4
	136	20	34	11	7
50	(147)	(18)	(38)	(13)	(6)
	133	12	45	13	8
	121	16	30	9	5
100	(127)	(14)	(38)	(11)	(7)
	148	19	34	11	3
	124	20	41	12	7
200	(136)	(20)	(38)	(12)	(5)
	111	17	39	10	5
	106	15	29	10	3
500	(109)	(16)	(34)	(10)	(4)
	92	20	28	13	2
	93	17	40	10	5
1000	(93)	(19)	(34)	(12)	(4)
	98	15	22	8	3
	94	13	33	8	1
2000	(96)	(14)	(28)	(8)	(2)
	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—
Specific Mutagenicity Positive Control	AF2 (745)	NaN_3 (344)	AF2 (746)	AF2 (341)	9AA (523)

Experimental Data

Con. μg/plate	Number of Revertants/plate				
	Base-substitution			Frame-shift	
	TA100	TA1535	WP2uvrA	TA98	TA1537
	S9+		S9+	S9+	
DMSO	(139)		(54)	(27)	
	150		50	26	
	155		51	36	
2	(153)		(51)	(31)	
	183		63	33	
	152		58	31	
5	(168)		(61)	(32)	
	243		68	29	
	212		51	29	
10	(228)		(60)	(29)	
	360		55	36	
	332		49	40	
20	(346)		(63)	(38)	
	457		58	53	
	345		67	52	
50	(401)		(63)	(53)	
	538		113	60	
	542		138	61	
100	(540)		(126)	(61)	
	696		130	48	
	981		123	78	
200	(839)		(127)	(63)	
Judgement	+		+	+	
Specific Mutagenicity	10000		720	340	
Positive Control	2AA		2AA	2AA	
	(1348)		(822)	(463)	

Experimental Data

Con. μg/plate	Number of Revertants/plate				
	Base-substitution			Frame-shift	
	TA100	TA1535	WP2uvrA	TA98	TA1537
	S9-		S9-	S9-	
DMSO	(142)		(55)	(11)	
	125		50	12	
	134		47	11	
2	(130)		(49)	(12)	
	126		48	10	
	132		43	11	
5	(129)		(46)	(11)	
	119		55	10	
	122		45	9	
10	(121)		(50)	(10)	
	123		36	10	
	123		41	12	
20	(123)		(39)	(11)	
	123		56	11	
	118		47	11	
50	(121)		(52)	(11)	
	119		52	17	
	158		41	16	
100	(136)		(47)	(17)	
	126		41	8	
	132		41	14	
200	(129)		(41)	(11)	
Judgement	—		—	—	
Specific Mutagenicity					
Positive Control	AF2 (427)		AF2 (701)	AF2 (288)	

Experimental Data

Con. μg/plate	Number of Revertants/plate				
	Base-substitution			Frame-shift	
	TA100	TA1535	WP2uvrA	TA98	TA1537
	S9+	S9+	S9+	S9+	S9+
DMSO	(148)	(13)	(42)	(20)	(7)
	728	16	79	26	8
	642	10	71	26	5
50	(685)	(13)	(75)	(26)	(7)
	840	9	82	53	8
	841	16	73	43	9
100	(841)	(13)	(78)	(48)	(9)
	936	11	120	65	6
	1010	12	108	70	5
200	(973)	(12)	(114)	(68)	(6)
	1030	12	119	82	7
	913	9	99	65	9
500	(972)	(11)	(109)	(74)	(8)
	916	11	124	71	7
	1021	17	98	70	11
1000	(969)	(14)	(111)	(71)	(9)
	798	14	86	59	5
	846	13	53	59	8
2000	(822)	(14)	(70)	(59)	(7)
	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	+	−	+	+	−
Specific Mutagenicity	10700		360	280	
Positive Control	2AA (1345)	2AA (282)	2AA (913)	2AA (269)	2AA (247)