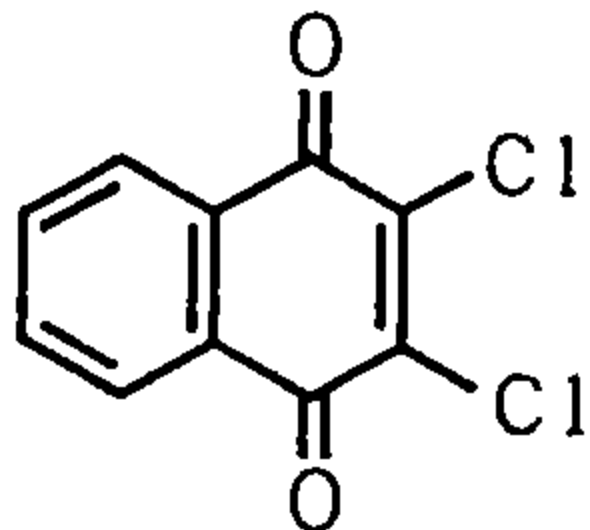


2,3-Dichloro-1,4-naphthoquinone

(2,3-ジクロロナフトキノン)

Chemical Name:	2,3-Dichloro-1,4-naphthoquinone
Synonym	2,3-Dichloro-1,4-naphthalenedione
Molecular weight:	227.05
Melting point:	193°C
Boiling point:	°C
Chemical Structure	
CAS No:	117-80-6
MITI No:	(4)-378
ML No:	7-(1)-99
Source of Substance:	Tokyo Kasei Kogyo Co. Ltd
Lot.No.:	FBS01
Purity:	extra pure reagent
Vehicle:	DMSO

Mutagenicity  
in Bacterial Test: Negative  
IARC Evaluation: not yet cited

Judgement  
Specific Mutagenicity  
Positive  
Control

Experimental Data

Con. μg/ plate	Number of Revertants/plate												
	Base-substitution						Frame-shift						
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538		
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	
DMSO	(105)	( )	(19)	( )	(38)	( )	(23)	( )	(11)	( )	(16)	( )	
	126		22		40		24		13		12		
	104		25		54		26		6		15		
0.02	(115)	( )	(24)	( )	(47)	( )	(25)	( )	(10)	( )	(14)	( )	
	97		22		52		19		7		8		
	127		20		39		20		11		22		
0.05	(112)	( )	(21)	( )	(46)	( )	(20)	( )	(9)	( )	(15)	( )	
	121		20		33		24		8		20		
	115		21		32		23		9		11		
0.1	(118)	( )	(21)	( )	(33)	( )	(24)	( )	(9)	( )	(16)	( )	
	129		17		45		20		8		23		
	111		23		42		28		11		16		
0.2	(120)	( )	(20)	( )	(44)	( )	(24)	( )	(10)	( )	(20)	( )	
	112		27		38		22		14		19		
	122		18		32		20		6		11		
0.5	(117)	( )	(23)	( )	(35)	( )	(21)	( )	(10)	( )	(15)	( )	
	118		29		47		26		4		13		
	126		18		33		23		4		18		
1	(122)	( )	(24)	( )	(40)	( )	(25)	( )	(4)	( )	(16)	( )	
	69*		0*		27		0*		0*		0*		
	101*		0*		25		0*		0*		0*		
2	(85*)	( )	(0*)	( )	(26)	( )	(0*)	( )	(0*)	( )	(0*)	( )	
	0*		0*		0*		0*		0*		0*		
	0*		0*		0*		0*		0*		0*		
5	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )	
	-		-		-		-		-		-		
	AF2	2AA	0.5	NaN <sub>3</sub>	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
	(434)	( )	(254)	( )	(220)	( )	(321)	( )	(497)	( )	(303)	( )	

Experimental Data

Con. μg/ plate	Number of Revertants/plate												
	Base-substitution						Frame-shift						
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538		
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	
DMSO	( )	( 110 )	( )	( 16 )	( )	( 35 )	( )	( 23 )	( )	( 16 )	( )	( 19 )	
		107		19		29		30		13		25	
		121		18		29		34		14		28	
0.5	( )	( 114 )	( )	( 19 )	( )	( 29 )	( )	( 32 )	( )	( 14 )	( )	( 27 )	
		111		26		29		33		11		22	
		118		17		30		41		25		25	
1	( )	( 115 )	( )	( 22 )	( )	( 30 )	( )	( 37 )	( )	( 18 )	( )	( 24 )	
		111		20		28		39		14		23	
		115		16		28		34		19		20	
2	( )	( 113 )	( )	( 18 )	( )	( 28 )	( )	( 37 )	( )	( 17 )	( )	( 22 )	
		121		18		31		32		12		30	
		116		12		29		28		17		20	
5	( )	( 119 )	( )	( 15 )	( )	( 30 )	( )	( 30 )	( )	( 15 )	( )	( 25 )	
		121		23		30		36		14		18	
		110		19		35		42		15		26	
10	( )	( 116 )	( )	( 21 )	( )	( 33 )	( )	( 39 )	( )	( 15 )	( )	( 22 )	
		108		12		32		37		10		23	
		125		16		30		37		20		23	
20	( )	( 117 )	( )	( 14 )	( )	( 31 )	( )	( 37 )	( )	( 15 )	( )	( 23 )	
		122		15		36		35		2		24	
		120		15		37		0*		3		19	
50	( )	( 121 )	( )	( 15 )	( )	( 37 )	( )	( 18* )	( )	( 3 )	( )	( 22 )	
		0*		0*		0*		0*		0*		0*	
		0*		0*		0*		0*		0*		0*	
100	( )	( 0* )	( )	( 0* )	( )	( 0* )	( )	( 0* )	( )	( 0* )	( )	( 0* )	
Judgement													
Specific Mutagenicity													
Positive	AF2	2AA	0.5	NaN <sub>3</sub>	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
Control	( )	( 501 )	( )	( )	( 159 )	( )	( 634 )	( )	( 319 )	( )	( 380 )	( )	( 368 )