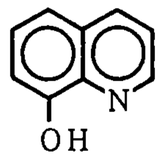
8-Hydroxyquinoline (8-ヒドロキシキノリン)

Chemical Name: 8-Hydroxyquinoline
Synonym 8-Quinolinol
Oxine
Molecular weight: 145.2
Melting point: 72-76℃
Boiling point: 267℃
Chemical Structure



CAS No: 148-24-3
MITI No: (5)-804
Source of Substance: Wako Pure Chem. Ind. Ltd.
Lot. No: LAM8893
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation: G 3

Experimental Data

	Treated Time (Hr)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	24		200	0	−	0.5	0	0	0	0	0	0.5	−
	48		200	0.5	−	0	0	0	0	0	0.5	0.5	
Test Chemical													
	24	0.00025	200	0.5	−	1.0	0	0.5	0	0	0.5	1.5	−
		0.0005	200	0	−	0.5	0	0.5	0	0	0.5	1.0	−
		0.001	200	0.5	−	2.0	1.0	0.5	0	0	1.5	3.5	−
		0.002	145	0	−	1.4	2.1	1.4	0	0	3.4	4.8	−
		0.004				No observation for metaphase							
	48	0.00025	200	1.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.0005	200	0.5	−	0.5	0	0.5	0	0	0.5	1.0	−
		0.001	200	0.5	−	0	0.5	0.5	0	0	1.0	1.0	−
		0.002	200	2.5	−	1.5	1.0	2.0	0	0	2.5	3.0	−
		0.004				No observation for metaphase							
Positive Control													
(MMC)	24	0.00008	200	0	−	6.0	14.5	40.0	0	0	49.0	50.0	+
	48	0.00008	200	2.0	−	6.0	12.0	46.5	0	0	54.5	55.0	+

Experimental Data

	S 9 with or without	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	−		200	0	−	1.5	0	0.5	0	0	0.5	2.0	−
	+		200	0	−	0	0	0.5	0	0	0.5	0.5	−
Test Chemical													
	−	0.004	200	0	−	0.5	0	1.0	0	0	1.0	1.5	−
		0.008	200	0.5	−	0.5	0	5.0	0	0	5.0	5.5	±
		0.012	200	0	−	2.0	1.0	6.5	0	0	7.5	9.0	±
		0.016	200	0.5	−	2.5	3.5	6.5	0	0.5	10.5	12.0	+
		0.020	200	0	−	4.5	4.0	3.5	0	0	7.5	12.0	+
	+	0.004	200	0	−	1.0	0	0	0	0	0	1.0	−
		0.008	200	0.5	−	1.0	0.5	5.0	0	0	5.5	6.5	±
		0.012	200	0.5	−	2.5	2.0	10.0	0	0	11.5	12.5	+
		0.016	200	6.0	±	2.0	2.0	5.5	0	0	7.5	8.5	±
		0.020				No observation for metaphase							
Positive Control (B(a)P)													
	−	0.016	200	0.5	−	0	0	0.5	0	0	0.5	0.5	−
	+	0.016	200	0	−	5.0	8.0	39.5	0	0	43.0	43.5	+