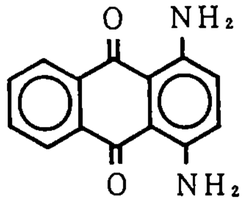
1,4-Diaminoanthraquinone (1,4-ジアミノアントラキノン)

Chemical Name: 1,4-Diaminoanthraquinone
Synonym 9,10-Anthracenedione, 1,4-diamino-
Molecular weight: 238.3
Melting point: 265-268℃
Boiling point: ℃

Chemical Structure



CAS No : 128-95-0
MITI No : (4)-710, (5)-2539, (5)-3108
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AL01
Purity: 93.9%
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

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	0.5	−	0	0	1.0	0	0	1.0	1.0	−
	48		200	0.5	−	0.5	0.5	0	0	0	0.5	1.0	−
Test Chemical													
	24	0.0030	200	1.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.0089	200	0.5	−	1.5	2.0	2.0	0	0	4.0	5.5	±
		0.027	200	0.5	−	3.5	4.5	3.0	0	0	7.5	11.0	+
		0.080	200	2.5	−	6.0	7.0	6.0	0	0	13.0	17.5	+
		0.24	200	1.5	−	6.0	9.5	7.0	0	0	15.0	20.0	+
	48	0.0030	200	0	−	0.5	1.5	1.0	0	0	2.0	2.5	−
		0.0089	200	3.0	−	2.0	1.0	2.0	0	0	3.0	5.0	±
		0.027	200	1.0	−	1.0	1.0	1.5	0	0	2.5	3.5	−
		0.080	200	1.0	−	1.5	1.5	1.0	0	0	2.5	3.5	−
		0.24	200	2.5	−	2.0	2.5	1.5	0	0	4.0	6.0	±
Positive Control													
(MMC)	24		200	0.5	−	2.5	6.5	39.5	0	0	43.0	44.0	+
	48		200	0	−	4.5	11.5	46.0	0	0	49.5	50.5	+

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	−	0.5	0	0	0	0	0	0.5	−
	+		200	0	−	0	0.5	0	0	0.5	1.0	1.0	−
Test Chemical													
	−	0.31	200	2.0	−	0.5	0.5	1.0	0	0.5	2.0	2.5	−
		0.63	200	1.0	−	0.5	0	0.5	0	0	0.5	1.0	−
		1.3	200	2.5	−	0.5	1.5	1.0	0	0.5	3.0	3.5	−
		2.5	200	1.0	−	0	1.0	2.0	0	0	3.0	3.0	−
		5.0	200	3.5	−	1.0	1.0	1.5	0	0	2.0	3.0	−
	+	0.31	200	0	−	0.5	0	0	0	0	0	0.5	−
		0.63	200	0	−	0.5	0.5	0.5	0	0	1.0	1.5	−
		1.3	200	1.0	−	0.5	0.5	0.5	0	0	1.0	1.5	−
		2.5	200	0.5	−	0	0.5	1.0	0	0	1.5	1.5	−
		5.0	200	0.5	−	0	0.5	0	0	0	0.5	0.5	−
Positive Control (CP)	−		200	1.5	−	1.0	1.5	70.0	0	0	1.5	2.0	−
	+		200	0.5	−	3.0	4.5	0	0	0	71.0	71.0	+