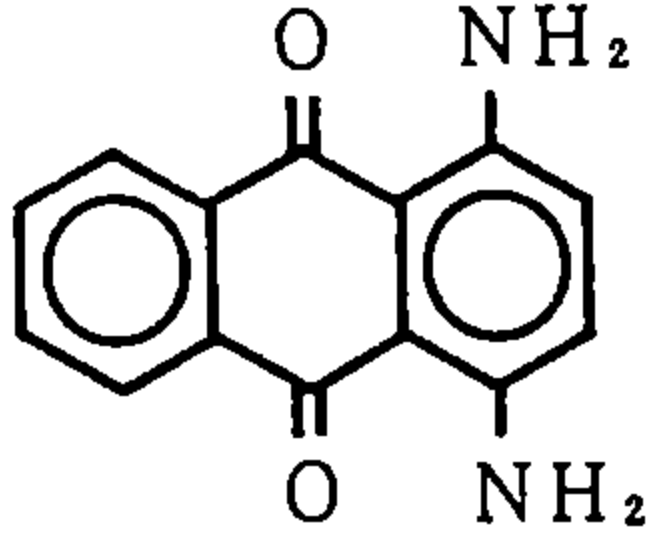


1,4-Diaminoanthraquinone (1,4-ジアミノアントラキノン)

Chemical Name:	1,4-Diaminoanthraquinone
Synonym	9,10-Anthracenedione, 1,4-diamino-
Molecular weight:	238.3
Melting point:	265-268°C
Boiling point:	°C
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 Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)								
					Gap	CTB	CTE	CSB	CSE	Total		Judge	
										-G	+G		
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 Meta- phase	Poly- ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)								
					Gap	CTB	CTE	CSB	CSE	Total		Judge	
										-G	+G		
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	+	