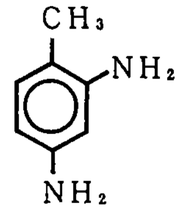
2,4-Diaminotoluene (2,4-ジアミノトルエン)

Chemical Name: 2,4-Diaminotoluene
Synonym 2,4-Tolulenediamine
m-Tolulenediamine
1,3-Benzenediamine, 4-methyl-
Molecular weight: 122.7
Melting point: 97-99℃
Boiling point: 280-285℃

Chemical Structure



CAS No : 95-80-7
MITI No : (3)-126
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: FAY01
Purity: 99.9%
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : G 2B

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	−	0.5	0	1.0	0	0	1.5	1.5	−
	48		200	0	−	0	0.5	0	0	0	0.5	0.5	−
Test Chemical													
	24	0.00078	200	0.5	−	0	0	0	0	0	0	0	−
		0.0031	200	0.5	−	0.5	0.5	0	0	0	0.5	1.0	−
		0.013	200	1.5	−	2.0	1.0	5.0	0	0	5.5	7.0	±
		0.05	200	0.5	−	3.5	9.5	20.0	0.5	0	24.5	25.5	+
		0.2				No observation for metaphase							
	48	0.00078	200	0	−	0	0	1.0	0	0	1.0	1.0	−
		0.0031	200	0	−	1.0	3.0	0.5	0	0	3.0	3.5	−
		0.013	200	1.0	−	1.5	8.0	27.5	0	0	30.0	30.5	+
		0.05	200	0	−	4.5	20.5	58.5	0	0	65.0	66.0	+
		0.2				No observation for metaphase							
Positive Control													
(MMC)	24		200	0	−	2.5	3.0	29.0	0	0	30.5	31.0	+
	48		200	1.5	−	1.5	6.0	23.0	1.0	0	28.0	29.0	+

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	0.5	−	0.5	0	0.5	0	0	0.5	1.0	−
	+		200	0.5	−	0	0	0	0	0	0	0	−
Test Chemical													
	−	0.16	200	0.5	−	1.5	5.0	17.0	0	0	18.0	18.5	+
		0.31	200	0	−	0	3.0	13.5	0	0	14.5	14.5	+
		0.63	200	0	−	1.5	7.0	15.5	0	0	20.0	21.0	+
		1.3				No observation for metaphase							
		2.5				No observation for metaphase							
	+	0.16	200	0	−	0.5	1.0	0.5	0	0	1.5	1.5	−
		0.31	200	0.5	−	0.5	1.0	5.5	0	0	6.5	6.5	±
		0.63	200	0.5	−	1.5	3.0	12.0	0	0	13.0	13.5	+
		1.3	200	1.0	−	0.5	1.5	5.5	0	0	6.5	7.0	±
		2.5				No observation for metaphase							
Positive Control (CP)	−		200	0.5	−	0	0.5	0	0	0	0.5	0.5	−
	+		200	0	−	2.5	6.0	39.0	0	0.5	40.5	41.0	+