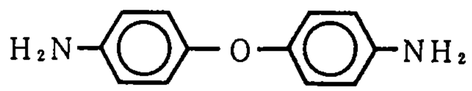
4,4'-Diaminodiphenyl ether (4,4'-ジアミノジフェニルエーテル)

Chemical Name: 4,4'-Diaminodiphenyl ether
Synonym: Bis(4-aminophenyl)ether
Benzenamine, 4,4'-oxybis-
Molecular weight: 200.24
Melting point: 190.9℃
Boiling point: ℃

Chemical Structure



CAS No : 101-80-4
MITI No : (3)-854
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AX01
Purity: %
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	−	0	0	0	0	0	0	0	−
	48		200	0.5	−	0	0	0	0	0	0	0	−
Test Chemical													
	24	0.020	200	0	−	0.5	0	1.5	0	0	1.5	2.0	−
		0.078	200	0	−	0	1.0	9.0	0	0	10.0	10.0	+
		0.31	200	0	−	4.0	9.5	45.0	0.5	0	50.0	50.0	+
		1.3	200	0	−	2.0	9.0	45.5	0	0	48.5	49.0	+
		5.0	200	0	−	4.5	10.0	39.5	0	0	45.0	45.0	+
	48	0.020	200	0.5	−	0	0.5	2.0	0	0	2.5	2.5	−
		0.078	200	1.0	−	0.5	3.5	32.0	0	0	34.5	34.5	+
		0.31	200	2.0	−	1.5	4.0	58.5	0	0	59.0	59.0	+
		1.3	200	1.0	−	2.5	7.0	58.5	0	0	59.0	59.0	+
		5.0	200	2.5	−	1.5	6.0	51.5	0	0.5	53.5	53.5	+
Positive Control													
(MMC)	24	0.00005	200	0.5	−	3.5	6.0	39.0	0	0	42.5	43.5	+
	48	0.00005	200	0	−	2.0	10.0	54.5	0	0	59.0	59 0	+

Test chemical was precipitated at the concentration of 1.3 and 5.0mg/ml.

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	0.5	1.0	0	0	1.5	1.5	−
	+		200	0	−	0	0	0.5	0	0	0.5	0.5	−
Test Chemical													
	−	0.062	200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
		0.19	200	0.5	−	0	0.5	1.0	0	0	1.0	1.0	−
		0.56	200	0	−	1.5	7.5	53.0	0	0	55.5	55.5	+
		1.7	200	0	−	0.5	10.5	38.5	0	0	42.0	42.0	+
		5.0	200	0.5	−	1.0	6.5	30.0	0	0	33.0	33.5	+
	+	0.062	200	0	−	0	0	0.5	0	0	0.5	0.5	−
		0.19	200	0.5	−	0	0	1.0	0	0	1.0	1.0	−
		0.56	200	0	−	1.5	5.5	32.5	0	0	35.5	35.5	+
		1.7	200	0	−	0.5	2.0	17.0	0	0	18.5	19.0	+
		5.0	200	0.5	−	0.5	1.5	7.5	0	0.5	8.5	9.0	±
Positive Control													
(B(a)P)	−		200	0	−	0.5	0.5	0	0	0	0.5	1.0	−
	+		200	0	−	3.0	5.0	43.0	0	0	45.0	45.5	+

Test chemical was precipitated at the concentration of 1.7 and 5.0mg/ml.