Dinitorosopentamethylenetetramine (ジニトロソペンタメチレンテトラミン)

Experimental Data

Chemical Name: Dinitorosopentamethylenetetramine
Synonym: 1,3,5,7-Tetraazabicyclo〔3.3.1〕nonane,3,7-dinitroso-
Molecular weight: 186.17
Melting point: 204~205℃
Boiling point: ℃

Chemical Structure

CAS No : 101-25-7
MITI No : (5)-1140, (5)-3908
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AW01
Purity: %
Vehicle: DMSO

	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	−	0	0	0.5	0	0	0.5	0.5	−
Test Chemical													
	24	0.01	200	0	−	0	0	0	0	0	0	0	−
		0.02	200	0	−	0	1.0	2.5	0	0	3.5	3.5	−
		0.03	200	0.5	−	1.0	0	2.0	0	0	2.0	3.0	−
		0.04	200	0	−	1.5	1.5	0.5	0	0	2.0	3.5	−
		0.05	189	0.5	−	1.1	2.6	3.2	0	0	5.8	6.9	±
	48	0.01	200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
		0.02	200	0.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.03	200	4.5	−	0.5	0.5	3.0	0	0.5	4.0	4.5	−
		0.04	200	2.5	−	0.5	1.5	3.0	0	0	4.5	5.0	±
		0.05	174	0	−	1.1	0.6	2.9	0	0	3.4	4.6	−
Positive Control													
(MMC)	24	0.00005	200	0.5	−	2.0	9.5	42.0	0	0	45.5	46.0	+
	48	0.00005	200	1.0	−	3.5	10.5	59.5	0	0.5	63.5	64.0	+

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : G3

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	0.5	0.5	0	0	1.0	1.5	−
	+		200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
Test Chemical													
	−	0.05	200	15.5	+	1.5	2.5	9.5	0	0.5	11.5	12.5	+
		0.1	200	1.5	−	7.5	28.5	66.0	0	0	68.5	68.5	+
		0.2				No observation for metaphase							
		0.3				No observation for metaphase							
	+	0.05	200	0.5	−	1.0	1.0	2.0	0	0	3.0	3.5	−
		0.1	200	16.0	+	0.5	0.5	10.0	0	0	10.5	10.5	+
		0.2	130	0	−	8.5	16.9	81.5	0	0	84.6	84.6	+
		0.3				No observation for metaphase							
Positive Control													
(B(a)P)	−		200	0	−	1.0	0	0.5	0	0	0.5	1.5	−
	+		200	0	−	5.5	7.5	51.5	0	0	53.5	55.5	+