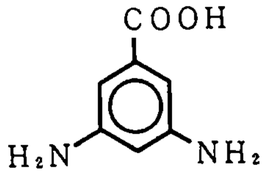
3,5-Diaminobenzoic acid (3,5-ジアミノ安息香酸)

Chemical Name: 3,5-Diaminobenzoic acid
Synonym Benzoic acid, 3,4-diamino-
Molecular weight: 152.2
Melting point: 228℃
Boiling point: ℃

Chemical Structure



CAS No : 535-87-5
MITI No : (3)-3789
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AR01
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

Experimental Data

	Tre-Rec Time (Hr)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)		Cell with Structural Chromosome Aberration (%)							
											Total		
					Judge	Gap	CTB	CTE	CSB	CSE	-G	+G	Judge
DMSO	24		200	0.5	−	1.0	0.5	0	0	0	0.5	1.5	−
	48		200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
Test Chemical													
	24	1.0	200	0	−	1.0	0.5	0.5	0	0	1.0	2.0	−
		1.5	200	0	−	0.5	1.0	0	0	0	1.0	1.5	−
		2.0	200	0.5	−	0.5	0.5	0	0	0	0.5	1.0	−
		2.5	200	0	−	3.0	2.5	1.0	0	0	3.5	6.5	±
		3.0	200	0	−	7.0	12.0	4.5	0	0	16.5	21.5	+
	48	1.0	200	0	−	0	0	0	0	0	0	0	−
		1.5	200	0	−	1.0	0	0	0	1.0	1.0	2.0	−
		2.0	200	0	−	0	0.5	0	0	0	0.5	0.5	−
		2.5	200	0.5	−	2.5	2.0	1.5	0	0	3.5	5.5	±
		3.0	200	0	−	9.5	44.5	11.5	0	0	89.5	90.5	+
Positive Control (MMC)	24	0.00008	200	0	−	6.0	9.5	20.0	0	0	27.0	30.0	+
	48	0.00008	200	1.0	−	6.0	14.0	32.5	0	0.5	37.5	38.5	+

Metaphase was not observed at the concentration of 4.0mg/ml.

Experimental Data

S 9 with or without	Concentration (mg/ml)	No. of Meta-Phase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							
					Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO −		200	0.5	−	1.0	0	0	0	0	0	1.0	−
+		200	0	−	0	0.5	0	0	0	0.5	0.5	−
Test Chemical												
−	0.5	200	0	−	0	0	0	0	0	0	0	−
	1.0	200	0.5	−	1.5	0.5	0	0	0	0.5	2.0	−
	2.0	200	0.5	−	1.0	1.0	0	0	0	1.0	2.0	−
	3.0	200	0.5	−	1.0	0	0	0	0	0	1.0	−
	4.0				No observation for metaphase							
+	0.5	200	0.5	−	1.0	0.5	0	0	0	0.5	1.5	−
	1.0	200	0	−	0.5	0	0	0	0	0	0.5	−
	2.0	200	0	−	0.5	0	0	0	0	0	0.5	−
	3.0				No observation for metaphase							
	4.0				No observation for metaphase							
Positive Control												
(B(a)P)−	0.008	200	1.0	−	1.5	1.0	0.5	0	0	1.0	2.5	−
+	0.008	200	0.5	−	2.0	10.5	37.5	0	0.5	42.0	43.0	+