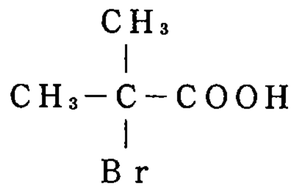
2-Bromo-2-methylpropionic acid (2-ブロモ-2-メチルプロピオン酸)

Chemical Name: 2-Bromo-2-methylpropionic acid
Synonym α-Bromoisobutyric acid
Molecular weight: 167.01
Melting point: 44-47℃
Boiling point: 198-200℃
Flashing point: >110℃

Chemical Structure



CAS No : 2052-01-9

Source of Substance:Fluka Chemical AG
Lot.No.: 252812 889
Purity: %
Vehicle: Saline

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

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
Saline	24		200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
	48		200	0	−	0	0	0	0	0	0	0	−
Test Chemical													
	24	0.4	200	0	−	0	0	0.5	0	0	0.5	0.5	−
		0.8	200	0	−	0.5	0.5	7.0	0	0.5	7.5	7.5	±
		1.2	200	0.5	−	2.0	8.5	35.0	0	0	40.5	40.5	+
		1.6	200	1.0	−	18.5	49.0	83.5	0	0	87.0	87.0	+
		2.0				No observation for metaphase							
	48	0.4	200	0.5	−	0.5	0	0.5	0	0	0.5	1.0	−
		0.8	200	1.0	−	0	0	0.5	0	0	0.5	0.5	−
		1.2	200	0.5	−	0.5	0	3.0	0	0	3.0	3.5	−
		1.6	200	0.5	−	3.5	7.0	39.0	0	0.5	43.5	44.5	+
		2.0				No observation for metaphase							
Positive Control													
(MMC)	24	0.00005	200	0.5	−	1.5	5.0	34.0	0	0	35.0	36.0	+
	48	0.00005	200	1.0	−	2.5	10.0	61.0	0	0.5	63.5	63.5	+

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
Saline −		200	1.0	−	0	0	0.5	0	0	0.5	0.5	−
+		200	0	−	0	0	0	0	0	0	0	−
Test Chemical												
−	0.25	200	1.0	−	0.5	0	0.5	0	0	0.5	1.0	−
	0.50	200	2.5	−	0	0	1.5	0	0	1.5	1.5	−
	1.0	200	0	−	1.0	2.0	4.0	0	0	5.5	5.5	±
	2.0	200	0.5	−	9.0	12.0	70.5	0	0	71.5	72.5	+
	3.0				No observation for metaphase							
+	0.25	200	0	−	0	0.5	0	0	0	0.5	0.5	−
	0.50	200	1.0	−	0	0	1.5	0	0	1.5	1.5	−
	1.0	200	1.0	−	1.5	3.0	23.0	0	0	25.0	25.5	+
	2.0				No observation for metaphase							
	3.0				No observation for metaphase							
Positive Control												
(B(a)P)−		200	1.5	−	1.0	0.5	0	0	0	0.5	1.5	−
+		200	0.5	−	3.5	2.0	43.0	0	0	43.0	43.5	+