

2-Bromopropionic acid (2-ブロモプロピオン酸)

Chemical Name:	2-Bromopropionic acid
Synonym	Propanoic acid, 2-bromo-
Molecular weight:	153.0
Melting point:	26.3°C
Boiling point:	201-203°C
Flashing point:	100°C
Chemical Structure	
	CH ₃ CHBrCOOH
CAS No :	598-72-1
MITI No :	(9)-1167
Source of Substance:	Wako Pure Chemical Ind., Ltd.
Lot.No. :	CTR5065
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 Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							
					Gap	CTB	CTE	CSB	CSE	Total		Judge
										-G	+G	
Saline 24		200	0	—	0.5	0	0	0	0	0.5	1.0	—
48		200	0	—	0	0	0	0	0	0	0	—
Test Chemical												
24	0.025	200	0	—	0	0	0.5	0	0	0	0	—
	0.050	200	1.0	—	0.5	0	0	0	0	0	0.5	—
	0.10	200	0.5	—	0	0	0	0	0	0	0	—
	0.20	200	1.0	—	1.5	0	3.5	0	0	4.5	6.0	±
	0.40	161	0	—	5.0	13.0	11.2	0	0	20.5	21.7	+
48	0.025	200	0	—	0	0	0	0	0	0	0	—
	0.050	200	0	—	0	0	0	0	0	0	0	—
	0.10	200	0.5	—	0	0	2.0	0	0	2.5	2.5	—
	0.20	200	7.0	—	3.0	3.0	4.5	0	0	7.5	9.0	±
	0.40	no metaphase			No observation for metaphase							
Positive Control												
(MMC) 24	0.00005	200	1.0	—	1.5	7.0	39.0	0	0.5	43.0	44.5	+
48	0.00005	200	1.0	—	1.5	4.0	54.5	0.5	0	55.5	55.5	+

Experimental Data

S 9 with or without	Concent- ration (mg/ml)	No. of Meta- phase	Poly- ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							Judge	
					Gap	CTB	CTE	Total		-G	+G		
								CSB	CSE				
Saline	-	200	0.5	-	0	0	0	0	0	0	0	-	
	+	200	1.5	-	0.5	0.5	0	0	0	0.5	1.0	-	
Test Chemical													
-	0.25	200	3.5	-	0	0.5	0.5	0	0.5	1.5	1.5	-	
	0.50	200	2.0	-	0.5	0	0.5	0	0	0.5	1.0	-	
	1.0	200	1.5	-	3.0	4.0	33.5	0	0	34.5	34.5	+	
	1.5	200	0.5	-	9.0	22.0	86.5	0	1.0	89.5	89.5	+	
	2.0	113	0	-	52.2	69.0	0	0	0	100.0	100.0	+	
	+	0.25	200	1.0	-	0	0.5	0.5	0	0.5	1.5	1.5	-
		0.50	200	4.0	-	0	0.5	1.5	0	0	2.0	2.0	-
		1.0	200	0.5	-	2.0	2.5	31.0	0	0	32.5	33.0	+
		1.5	200	0	-	13.0	26.5	81.0	0	0	85.0	86.0	+
		2.0				No observation for metaphase							
Positive Control													
(B(a)P)	-	200	0	-	0	0	0.5	0	0	0.5	0.5	-	
	+	200	0	-	1.5	2.0	23.5	0	0	24.5	25.5	+	