

2-Bromopropane (2-ブロモプロパン)

Experimental Data without Metabolic Activation

(C9604-1/2)

Chemical Name	; <u>2-Bromopropane</u>
Synonym	; <u>Isopropyl bromide</u> <u>Propane, 2-bromo-</u> <u>イソプロピルブロミド</u>
Molecular Weight	; 122.99
Melting Point	; -89°C[Aldrich]
Boiling Point	; 59°C[Aldrich]
Flashing Point	; 19°C[Aldrich]
Molecular Formula	; C ₃ H ₇ Br
Chemical Structure	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_3 \\ \\ \text{Br} \end{array}$
CAS No.	; 75-26-3
MITI No.	; (2)-76 ;
Specified Chemical Substances	; —
Source of Substance	; Wako Jyunyaku Kogyo Co., Ltd.
Lot No.	; TWE1628
Purity	; 97.0%
Vehicle	; DMSO

Substance	Time (h)	Concen-tration (mg/ml)	No. of Metaphase	Polyploid (%)		Cell with Structural Chromosome Aberration (%)					
				Judge-ment	Gap g	Chromatid ctb	cte	Chromosome csb	Others cse	Total -g	+g
Test Chemical	DMSO	24	1.0%	200	0	—	0	0	1	0	0
		48	1.0%	200	0.5	—	0	0	0	0	0
	24	0.4	200	1	—	0	0.5	2	0	0	0
		0.6	200	4.5	—	0	2	3.5	0	0	0
		0.8	200	1.5	—	0.5	1.5	7	0	0.5	0
		1.0	200	1	—	0	2	10.5	0	0	12.5
		1.2	200	0.5	—	0	5.5	14	0	0	0
	48	0.2	200	0.5	—	0	0.5	0	0	0	0.5
		0.4	200	0	—	0	0.5	5	0	0	5.5
		0.6	200	0	—	0	4.5	17.5	0	0	21.5
		0.8	200	0.5	—	0	5.5	33	0	0	36.5
		1.0	200	0	—	0.5	8	47.5	0	1	51
Positive Control [MMC]	24	0.00004	200	0	—	0	6	19	1	0	25
	48	0.00004	200	0.5	—	0	9.5	21	0	0	27

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; not yet cited

※ There was no observation for metaphase with treatment of 24Hr and 48Hr at 1.3mg/ml.

※ The culture bottle was sealed and cultured rotating after adding the test substance.

Experimental Data with Metabolic Activation

(C9604-2/2)

Substance	Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)							
	S9 mix	Concen-tration (mg/ml)	Judge-ment		(%)	Gap g	Chromatid ctb	cte	Chromosome csb	cse	Others	Total -g	+g	Judge-ment
DMSO	—	1.0%	200	0.5	—	0	0	0	0	0	0	0	0	—
	+	1.0%	200	1	—	0	0	0	0	0	0	0	0	—
Test Chemical	—	0.5	200	0	—	0	1	0	0	0	0	1	1	—
		1.0	200	0.5	—	0	0.5	1	0	0	0	1.5	1.5	—
		2.0	200	2	—	0.5	0.5	9	0	0	0	9	9.5	±
		4.0	184	0	—	0	3.8	21.2	0	0	0	23.4	23.4	+
		8.0	No obserbation for metaphase											
	+	0.5	200	0.5	—	0	0.5	0	0	0	0	0.5	0.5	—
		1.0	200	0.5	—	0	0.5	0.5	0	0	0	1	1	—
		2.0	200	1.5	—	0	1.5	8.5	0	0	0	9.5	9.5	±
		4.0	200	0.5	—	0	1.5	9.5	0	0	0	11	11	+
		8.0	No obserbation for metaphase											
Positive Control [B[a]P]	—	0.01	200	2.5	—	0	0	0	0	0	0	0	0	—
	+	0.01	200	3.5	—	0	6.5	20	0	0	0	22	22	+

※ Test conditions: Treatment time ; 6h, Recovery time ; 18h

※ The culture bottle was sealed and cultured rotating after adding the test substance.