

2'-(2-Chloro-4,6-dinitrophenylazo)-5'-ethylamino-

(C9703-1/3)

4'-methoxyacetanilide

(2'-(2-クロロ-4,6-ジニトロフェニルアゾ)-5'-エチルアミノ-4'-メトキシアセトアニリド)

Experimental Data without Metabolic Activation-1

Chemical Name ; 2'-(2-Chloro-4,6-dinitrophenylazo)-
5'-ethylamino-4'-methoxyacetanilide

Synonym ; Acetamide, N-[2-[(2-chloro-4,6-dinitrophenyl)azo]-5-(ethylamino)-4-methoxyphenyl]-

Molecular Weight ; 436.81
Melting Point ; 258-259°C
Boiling Point ; -
Flashing Point ; -
Molecular Formula ; C₁₇H₁₇ClN₆O₆

Chemical Structure

CAS No. ; 170778-70-8
MITI No. ; (3)-3665
ML No. ; -
Specified Chemical Substances ; -

Source of Substance; -
Lot No. ; -
Purity ; >99%

Vehicle ; DMSO

Substance	Treatment		No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)									
	Time (h)	Concentration (mg/ml)		No. of Metaphase	Judgment	Gap	Chromatid			Chromosome		Others	Total		Judgment
							g	ctb	cte	csb	cse		-g	+g	
DMSO	24	1.0%	200	0.5	-	0	1	0	0	0	0	1	1	-	
	48	1.0%	200	0	-	0	0	0	0	0	0	0	0	-	
Test Chemical	24	0.0025	200	0	-	0.5	1.5	0.5	0	0	0	2	2	-	
		0.0050	200	0.5	-	0	1.5	1	0	0	0	2.5	2.5	-	
		0.010	200	1	-	0.5	1.5	0.5	0	0	0	1.5	2	-	
		0.020	200	0	-	0	0.5	0.5	0	0	0	1	1	-	
		0.040	200	0.5	-	0	0	1	0	0	0	1	1	-	
	48	0.0025	200	1	-	0.5	0	0.5	0	0.5	0	1	1.5	-	
		0.0050	200	1	-	0	1	0.5	0	0	0	1.5	1.5	-	
		0.010	200	0.5	-	0	0	0	0	0	0	0	0	-	
		0.020	200	3.5	-	0.5	0	0	0	0	0	0	0.5	-	
		0.040	200	4.5	-	0.5	0	0.5	0	0	0	0.5	1	-	
Positive Control [MMC]	24	0.00004	200	0.5	-	1	8.5	33	0	0	0	38	38	+	
	48	0.00004	200	0	-	1	11	46.5	0	0.5	0	51	51.5	+	

※ The precipitation of test chemical was observed in the culture medium over 0.01mg/ml.

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation-2

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	Time (h)	Concentration (mg/ml)		(%)	Judge- ment	Gap g	Chromatid		Chromosome		Others	Total		Judge- ment
							ctb	cte	csb	cse		-g	+g	
DMSO	28-20*	1.0%	200	0	—	0	0	1	0	0	0	1	1	—
Test Chemical	28-20*	0.0050	200	3.5	—	0	0.5	0	0	0	0	0.5	0.5	—
		0.010	200	4.5	—	0	1.5	0	0	0	0	1.5	1.5	—
		0.020	200	5	±	1	0	1.5	0	0	0	1.5	2.5	—
		0.040	200	7	±	0.5	0	1	0	0	0	1	1.5	—
		0.060	200	12	+	0.5	0.5	3	0	0	0	3.5	4	—
		0.080	200	12	+	0	1	2.5	0	0	0	3.5	3.5	—
Positive Control [MMC]	48-0	0.00004	200	0	—	1.5	6	35	0	0.5	0	37	38	+

* Test conditions: Treatment time ; 28h, Recovery time ; 20h

※ The precipitation of test chemical was observed in the culture medium over 0.01mg/ml.

Experimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	S9 mix	Concent- ration (mg/ml)		(%)	Judge- ment	Gap g	Chromatid		Chromosome		Others	Total		Judge- ment
							ctb	cte	csb	cse		-g	+g	
DMSO	-	1.0%	200	1	-	0	0	0	0	0	0	0	0	-
	+	1.0%	200	1.5	-	0	0	1	0	0	0	1	1	-
Test Chemical	-	0.038	200	1.5	-	0.5	0	1	0	0	0	1	1.5	-
		0.075	200	0.5	-	0	0	0	0	0	0	0	0	-
		0.15	200	0	-	0	0	0.5	0	0	0	0.5	0.5	-
		0.30	200	0.5	-	0	0.5	0	0	0.5	0	1	1	-
		0.60	200	0.5	-	0	0	0.5	0	0	0	0.5	0.5	-
		1.2	200	1	-	0	0.5	0	0	0	0	0.5	0.5	-
	+	0.038	200	1	-	0	0.5	0.5	0	0	0	1	1	-
		0.075	200	0.5	-	0	0.5	0.5	0	0	0	1	1	-
		0.15	200	1	-	0	0	0	0	0	0	0	0	-
		0.30	200	2	-	0	0	0	0	0	0	0	0	-
		0.60	200	2	-	0	0	0	0	0	0	0	0	-
		1.2	200	0.5	-	0	0	0	0	0	0	0	0	-
Positive Control [B[a]P]	-	0.01	200	0.5	-	0.5	0	0	0	0	0	0	0.5	-
	+	0.01	200	0	-	0.5	3.5	28	0	0.5	0	29.5	30	+

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

※ The precipitation of test chemical was observed in the culture medium of all concentration.