2'-(2-Chloro-4,6-dinitrophenylazo)-5'-diethylamino-4'-methoxyacetanilide

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

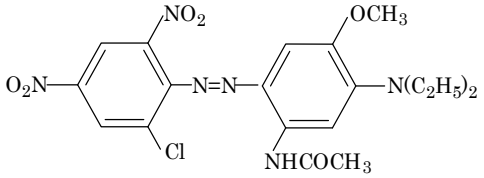
Experimental Data without Metabolic Activation-1

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

Synoym ; Acetamide, *N*-[2-[(2-chloro-4,6-dinitrophenyl)azo]-5-(diethylamino)-4-methoxyphenyl]-

Molecular Weight ; 464.86
Melting Point ; 202-203℃
Boiling Point ; －
Flashing Point ; －
Molecular Formula ; $C_{19}H_{21}ClN_6O_6$

Chemical Structure



CAS No. ; 79295-99-1
MITI No. ; (3)-3664
ML No. ; －
Specified Chemical Substances ; －

Source of Substance; －
Lot No. ; －
Purity ; 98.5%

Vehicle ; DMSO

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	Time (h)	Concentration (mg/ml)		(%)	Judgement	Gap	Chromatid		Chromosom		Others	Total		Judgement
						g	ctb	cte	csb	cse		－g	＋g	
DMSO	24	1.0%	200	0.5	－	0	0	0.5	0	0	0	0.5	0.5	－
	48	1.0%	200	0.5	－	0	0	0.5	0	0	0	0.5	0.5	－
Test Chemical	24	0.0020	200	0.5	－	0	1.5	1	0	0	0	2.5	2.5	－
		0.0040	200	0.5	－	0	1	0.5	0	0	0	1	1	－
		0.0060	200	1	－	0	0.5	0	0	0	0	0.5	0.5	－
		0.0080	141	3.5	－	0.7	1.4	0.7	0	0	0	2.1	2.8	－
		0.010	No obserbation for metaphase											
	48	0.0020	200	0.5	－	0	0.5	0.5	0	0	0	0.5	0.5	－
		0.0040	200	0.5	－	0	0	1	0	0	0	1	1	－
		0.0060	200	1.5	－	0	0	0	0	0	0	0	0	－
		0.0080	200	3	－	0	0	0.5	0	0	0	0.5	0.5	－
		0.010	200	3	－	0	0	0.5	0	0	0	0.5	0.5	－
Positive Control [MMC]	24	0.00004	200	0	－	1.5	8	35.5	0	0	0	40.5	41	＋
	48	0.00004	200	1	－	0.5	11	60	0	1	0	64	64	＋

Judgement for
Chromosomal Aberration in CHL ; Equivocal

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation-2

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	Time (h)	Concent-ration (mg/ml)		(%)	Judge-ment	Gap	Chromatid		Chromosom		Others	Total		Judge-ment
						g	ctb	cte	csb	cse		−g	+g	
DMSO	28-20*	1.0%	200	1.5	−	0	0	0	0	0	0	0	0	−
Test Chemical	28-20*	0.0015	200	2	−	0.5	0	0.5	0	0	0	0.5	1	−
		0.0030	200	0.5	−	0	0.5	0.5	0	0	0	1	1	−
		0.0060	200	2	−	0	0	0	0.5	0	0	0.5	0.5	−
		0.0090	200	6.5	±	0	0	0.5	0	0	0	0.5	0.5	−
		0.012	162	5.6	±	0	0	0.6	0	0	0	0.6	0.6	−
Positive Control [MMC]	48-0	0.00004	200	0.5	−	1.5	20.5	39	0.5	0.5	0	47.5	47.5	+

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

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	Chromatid		Chromosome		Others	Total		Judge-ment
						g	ctb	cte	csb	cse		−g	+g	
DMSO	−	1.0%	200	0	−	0	0	0	0	0	0	0	0	−
	+	1.0%	200	0	−	0	0	0	0	0	0	0	0	−
Test Chemical	−	0.0031	200	0	−	0.5	0	0.5	0	0	0	0.5	1	−
		0.0063	200	0.5	−	0	0	0	0	0	0	0	0	−
		0.013	133	0	−	0	0.8	0	0	0	0	0.8	0.8	−
		0.025	No obserbation for metaphase											
	+	0.013	200	0	−	0	0	0	0	0	0	0	0	−
		0.025	200	0.5	−	0	0	1	0	0	0	1	1	−
		0.050	200	0	−	0	0	0.5	0	0	0	0.5	0.5	−
		0.10	200	0.5	−	0	0.5	1.5	0	0	0	2	2	−
		0.20	200	1	−	0	0	1	0	0	0	1	1	−
Positive Control [B[a]P]	−	0.01	200	0	−	1	0.5	0	0	0	0	0.5	1.5	−
	+	0.01	200	0	−	0	5	48.5	0	0	0	50	50	+

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

※ The precipitation of test chemical was observed in the cultre medium over 0.1mg/ml.