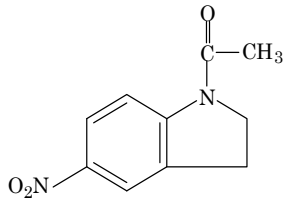
Chemical Name ; 1-Acetyl-5-nitroindoline

Synonym ; 1*H*-Indole, 1-acetyl-2,3-dihydro-5-nitro-
N-アセチル-5-ニトロインドリン

Molecular Weight ; 206.2
Melting Point ; 175-176℃[Aldrich]
Boiling Point ; −
Flashing Point ; −
Molecular Formula ; $C_{10}H_{10}N_2O_3$

Chemical Structure



CAS No. ; 33632-27-8
MITI No. ; −
ML No. ; 8-(1)-2305
Specified Chemical Substances ; −

Source of Substance; −
Lot No. ; LF-5049
Purity ; −

Vehicle ; DMSO

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; not yet cited

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	Time (h)	Concentration (mg/ml)		(%)	Judgement	Gap	Chromatid		Chromosome		Others	Total		Judgement
						g	ctb	cte	csb	cse		−g	+g	
DMSO	24	1.0%	200	1	−	0	0.5	0.5	0	0	0	1	1	−
	48	1.0%	200	0.5	−	0	0.5	0	0	0	0	0.5	0.5	−
Test Chemical	24	0.03	200	3.5	−	0	0	1	0	0	0	1	1	−
		0.06	200	3	−	0	0.5	0.5	0	0	0	1	1	−
		0.09	200	4.5	−	0	0	1	0	0	0	1	1	−
		0.12	200	3.5	−	0.5	1.5	1.5	0	0	0	3	3.5	−
		0.18	200	0.5	−	0.5	2	1	0	0	0	2.5	3	−
		0.36	200	1.5	−	0.5	1.5	0.5	0	0	0	2	2.5	−
		0.72	200	1	−	0.5	1.5	1	0	0	0	2.5	3	−
	48	0.03	200	1	−	0	0.5	0.5	0	0	0	1	1	−
		0.06	200	1.5	−	0	0	0	0	0	0	0	0	−
		0.09	200	3.5	−	0	0	1	0	0	0	1	1	−
		0.12	200	4.5	−	0.5	0	1	0	0.5	0	1.5	2	−
		0.18	No obserbation for metaphase											
Positive Control [MMC]	24	0.00004	200	1	−	2.5	7.5	17	0	0	0	22.5	23.5	+
	48	0.00004	200	0	−	0.5	7	19.5	0	0.5	0	24	24	+

※ There was no obserbation for methaphase with treatment of 24Hr and 48Hr at 1.5mg/ml.

※ The precipitation of test chemical was observed in the cultre medium over 0.18mg/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	Chromatid		Chromosome		Others	Total		Judge-ment
						g	ctb	cte	csb	cse		−g	+g	
DMSO	−	1.0%	200	1.5	−	0	0	0	0	0	0	0	0	−
	+	1.0%	200	0.5	−	0	0	0.5	0	0	0	0.5	0.5	−
Test Chemical	−	0.031	200	2	−	0	0.5	0	0	0	0	0.5	0.5	−
		0.077	200	6.5	±	0	0	1	0	0	0	1	1	−
		0.19	200	4	−	0	0	0	0	0	0	0	0	−
		0.48	200	6	±	0.5	0	0.5	0	0	0	0.5	1	−
		1.2	200	8.5	±	0	0.5	0.5	0	0.5	0	1.5	1.5	−
		3.0	200	10.5	+	0	0	0.5	0	1	0	1.5	1.5	−
	+	0.031	200	1.5	−	0	0	0	0	0	0	0	0	−
		0.077	200	0	−	0	0	0.5	0	0	0	0.5	0.5	−
		0.19	200	2.5	−	0	0.5	0	0	0	0	0.5	0.5	−
		0.48	200	4.5	−	0	1	0.5	0	0	0	1.5	1.5	−
		1.2	200	5	±	0.5	0.5	1	0	0.5	0	2	2.5	−
		3.0	200	3.5	−	0	0	1	0	0	0	1	1	−
Positive Control [B[a]P]	−	0.01	200	3	−	0	1	0.5	0	0	0	1.5	1.5	−
	+	0.01	200	1	−	0.5	4	22.5	0	0	0	24.5	25	+

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

※ The precipitation of test chemical was observed in the cultre medium over 0.19mg/ml.
It couldn't be administerd over 3.0mg/ml.