9-Anthracenemethanol (9-アントラセンメタノール)

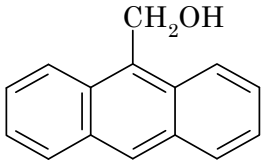
Experimental Data (Short treatments)-1

Chemical Name ; 9-Anthracenemethanol

Synoym ; (9-Anthryl)methanol
Anthracene-9-methanol
9-(Hydroxymethyl)anthracene
9-(ヒドロキシメチル)アントラセン
9-アントリルメタノール

Molecular Weight ; 208.26
Melting Point ; 162-164℃[CHCD]
Boiling Point ; −
Flashing Point ; −
Molecular Formula ; $C_{15}H_{12}O$

Chemical Structure ;



CAS No. ; 1468-95-7
MITI No. ; −
ML No. ; 7-(1)-654
Specified Chemical Substances ; −

Source of Substance ; Ryoyo Trading Company, Ltd.
Lot No. ; 80929
Purity ; 99wt%

Vehicle ; Dehydrated DMSO

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; Not yet cited

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
			No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
				ctb	cte	csb	cse								
6-18	−	[DMSO] (1%)	200	0	0	0	0	0	0	0	100	206	2.9	0.0	2.9
		0.013	200	2	1	0	0	0	3	0	96	204	2.0	0.0	2.0
		0.025	200	2	0.5	0	0	0	2.5	0	91	208	3.4	0.5	3.8
		0.05	200	1.5	0	0	0	0	1.5	0	98	207	3.4	0.0	3.4
		0.1†	200	1.5	2	0	0	0	3.5	0	80	206	2.9	0.0	2.9
		0.15†	200	3	3	0	0	0	6	0	68	202	0.0	1.0	1.0
		0.2†	200	3.5	3	0	0	0	6	0	64	206	1.5	1.5	2.9
		[MMC] (0.0001)	200	17	50.5	0	0	0	58.5	1.5	−	206	2.9	0.0	2.9
6-18	+	[DMSO] (1%)	200	0.5	1	0	0	0	1.5	0	100	201	0.5	0.0	0.5
		0.013	200	0	0.5	0	0	0	0.5	0	92	201	0.5	0.0	0.5
		0.025	200	0	1	0	0	0	1	0	83	203	1.5	0.0	1.5
		0.05	200	2	6.5	0	0	0	7.5	0	63	201	0.5	0.0	0.5
		0.1†	200	11.5	28.5	0	0	0	32	0.5	34	209	4.3	0.0	4.3
		0.2†	132	18.9	37.1	0	0	1.5	43.9	0.8	25	134	1.5	0.0	1.5
		[B[a]P] (0.01)	200	7.5	38.5	0	0	0	41	0	−	205	2.4	0.0	2.4

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h
† The precipitation of test chemical was observed in the culture medium.

Experimental Data (Short treatments)-2

Treat-ment Time (h)	S9 mix	Concent-ration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
			No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
				ctb	cte	csb	cse								
6-18	−	[DMSO] (1%)	200	1	0.5	0	0	0	1.5	0	100	203	1.5	0.0	1.5
		0.025	200	1	0.5	0	0	0	1	0	90	202	1.0	0.0	1.0
		0.05	200	1.5	2	0	0	0	3	0	84	201	0.5	0.0	0.5
		0.1†	200	1	1.5	0	0	0	2.5	0	78	205	2.4	0.0	2.4
		0.15†	200	2	3.5	0	0	0	5.5	0.5	77	206	2.9	0.0	2.9
		0.2†	200	0	0.5	0	0	0	0.5	0	79	209	3.3	1.0	4.3
		[MMC] (0.0001)	200	18.5	51	0	0	0	58.5	0	−	201	0.5	0.0	0.5

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

† The precipitation of test chemical was observed in the culture medium.

Experimental Data without Metabolic Activation (Continuous treatments)

Treat-ment Time (h)	Concent-ration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
		No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
			ctb	cte	csb	cse								
24-0	[DMSO] (1%)	200	1.5	0.5	0	0	0	2	0	100	200	0.0	0.0	0.0
	0.010	200	2	0.5	0	0	0	2.5	0.5	73	201	0.5	0.0	0.5
	0.026	200	3.5	2	0	0	0	5.5	0	77	203	1.5	0.0	1.5
	0.064	200	4.5	9	0	0	0	13.5	0	58	203	1.5	0.0	1.5
	0.16†	200	0.5	9	0	0	0	9.5	0.5	63	204	2.0	0.0	2.0
	0.4†	200	7.5	3.5	0	0	0	11	0	54	200	0.0	0.0	0.0
	1.0†	200	2.5	6.5	0	0	0	9	0	59	201	0.5	0.0	0.5
	[MMC] (0.00004)	200	15.5	50.5	0	0	0	58	0	—	200	0.0	0.0	0.0
48-0	[DMSO] (1%)	200	0.5	1.5	0	0	0	2	0	100	201	0.5	0.0	0.5
	0.010	200	0	0.5	0	0	0	0.5	0	85	201	0.5	0.0	0.5
	0.026	200	0.5	1.5	0	0	0	2	0	62	205	2.4	0.0	2.4
	0.064	200	1.5	3	0	0	0	4.5	0	49	200	0.0	0.0	0.0
	0.16†	200	1	5.5	0	0	0	6.5	0	43	200	0.0	0.0	0.0
	0.4†	200	4.5	6.5	0	0	0	10.5	0.5	35	202	1.0	0.0	1.0
	1.0†	200	2	6	0	0	0	8	0	25	200	0.0	0.0	0.0
	[MMC] (0.00004)	200	18.5	59	0	0	0	65	0	—	200	0.0	0.0	0.0

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h

† The precipitation of test chemical was observed in the culture medium.