4-Aminophenol (4-アミノフェノール)

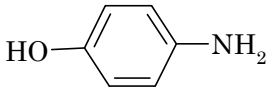
Experimental Data (Short treatments)

Chemical Name ; 4-Aminophenol

Synoym ; *p*-Aminophenol
4-Hydroxyaniline
p-Hydroxyaniline

Molecular Weight ; 109.13
Melting Point ; 189.6-190.2℃ [Merck]
Boiling Point ; 284 ℃(decomposition)[Merck]
Flashing Point ; －
Molecular Formula ; C_6H_7NO

Chemical Structure ;



CAS No. ; 123-30-8
MITI No. ; (3)-675
ML No. ; －
Specified Chemical Substances ; －

Source of Substance ; Wako Pure Chemical Industries Ltd.
Lot No. ; WAN0901
Purity ; 99.8%

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	1	0.5	0	0	0	1.5	0	100	204	2.0	0	2.0
		0.0011	200	1	2	0	0	0	2	0	96	203	1.5	0	1.5
		0.0021	200	3	6.5	0	0	0	8.5	0.5	96	205	2.4	0	2.4
		0.0043	200	6.5	22	0	0	0	23	0	100	206	2.9	0	2.9
		0.0086	67	16.4	40.3	0	0	0	46.3	0	12	72	6.9	0	6.9
		0.017	TOX								0	TOX			
		[MMC] (0.0001)	200	17	55.5	0	0	0	62.5	0	－	205	2.4	0	2.4
6-18	＋	[DMSO] (1%)	200	0.5	1	0	0	0	1.5	0	100	205	2.4	0	2.4
		0.017	200	0.5	6	0	0	0	6	0	95	202	1.0	0	1.0
		0.034	200	2	10.5	0	0	0	11.5	0	83	204	2.0	0	2.0
		0.069	200	1	13	0	0	0	13.5	0.5	99	206	2.9	0	2.9
		0.14	200	1	7	0	0	0	7.5	0	85	208	3.8	0	3.8
		0.28	200	1	18	0	0	0	18	0	88	210	4.8	0	4.8
		0.55	200	0.5	9	0	0	0	9	0	88	204	2.0	0	2.0
		1.1	200	1.5	6.5	0	0	0	8	0	72	202	1.0	0	1.0
		[B[a]P] (0.01)	200	1.5	23	0	0	0	24	0	－	205	2.4	0	2.4

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h
TOX: Metaphase cell division was not observed.

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	1.5	0	0	0	2.5	1	100	203	1.5	0	1.5
	0.00013	200	2.5	2	0	0	0	4.5	1	102	205	2.4	0	2.4
	0.00025	200	2.5	4.5	0	0	0	6.5	0	112	202	1.0	0	1.0
	0.0005	200	4.5	6	0	0	0	10	0.5	98	208	3.8	0	3.8
	0.001	200	7.5	13	0	0	0	17.5	1.5	86	203	1.5	0	1.5
	0.002	200	16	27	0	0	0	37	1	96	205	2.4	0	2.4
	0.004	TOX								51	TOX			
	[MMC] (0.00004)	200	11	36	0	0	0	43.5	0	—	206	2.9	0	2.9
48-0	[DMSO] (1%)	200	1	2	0	0	0	3	0.5	100	205	2.4	0	2.4
	0.00013	200	0.5	2.5	0	0	0	2.5	0	104	202	1.0	0	1.0
	0.00025	200	0.5	2.5	0	0	0	3	0	97	207	3.4	0	3.4
	0.0005	200	2.5	4	0	0	0	6	0	82	203	1.5	0	1.5
	0.001	200	7.5	20.5	0	0	0	23	0.5	69	210	4.8	0	4.8
	0.002	200	9	33	0	0	0	35	0.5	62	215	7.0	0	7.0
	0.004	TOX								18	TOX			
	[MMC] (0.00004)	200	15	62				65.5	0.5	—	206	2.9	0	2.9

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h
TOX: Metaphase cell division was not observed.