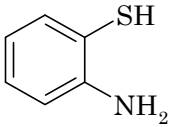
2-Aminobenzenethiol (2-ｱﾐﾉﾍﾞﾝｾﾞﾝﾁｵｰﾙ)

Chemical Name ; 2-Aminobenzenethiol

Synoym ; 2-Aminothiophenol
2-Mercaptobenzeneamine
2-Mercaptoaniline
2-Aminothiophenyl mercaptan

Molecular Weight ; 125.19
Melting Point ; 26 ℃[CHCD]
Boiling Point ; 234 ℃[CHCD]
Flashing Point ; 79 .4℃[Aldrich]
Molecular Formula ; C_6H_7NS

Chemical Structure ;



CAS No. ; 137-07-5
MITI No. ; (3)-2899
ML No. ; －
Specified Chemical Substances ; －

Source of Substance ; Wako Pure Chemical Industries Ltd.
Lot No. ; PKK4409
Purity ; 99.3%

Vehicle ; Dehydrated DMSO

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; Not yet cited

Experimental Data (Short treatments)

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	0	0.5	0	0	0	0.5	0.5	100	201	0.5	0	0.5
		0.002	200	1	0	0	0	0	1	0	98	203	1.5	0	1.5
		0.004	200	0.5	0	0	0	0	0.5	0	85	206	2.9	0	2.9
		0.006	200	0.5	0	0	0	0	0.5	0	72	240	16.7	0	16.7
		0.008	200	0.5	1	0	0	0	1.5	0	63	267	25.1	0	25.1
		0.010	200	1.5	4.5	0	0	0	5.5	0	49	275	27.3	0	27.3
		0.012	200	2	4	0	0	0	6	0.5	44	286	30.1	0	30.1
		0.014	200	1	9	0	0	0	9.5	0	38	288	30.6	0	30.6
		[MMC] (0.0001)	200	9.5	44	0	0	0	50	0	－	201	0.5	0	0.5
6-18	＋	[DMSO] (1%)	200	0	0	0	0	0	0	0	100	205	2.4	0	2.4
		0.005	200	0	1.5	0	0	0	1.5	0	93	207	3.4	0	3.4
		0.01	200	0	0	0	0	0	0	0	102	208	3.8	0	3.8
		0.02	200	0	2.5	0	0	0	2.5	0	89	221	9.5	0	9.5
		0.03	200	3	16	0	0	0	18	0.5	54	234	14.5	0	14.5
		0.04	192	10.4	14.1	0	0	0	21.9	0	21	281	31.7	0	31.7
		[B[a]P] (0.01)	200	2.5	25	0	0	0	26.5	0	－	203	1.5	0	1.5

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h

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	0	0	0	1.5	0	100	206	2.9	0	2.9
	0.001	200	0.5	1	0	0	0	1.5	0	89	206	2.9	0	2.9
	0.002	200	1	1	0	0	0	2	0	98	206	2.9	0	2.9
	0.004	200	2	1.5	0	0	0	3.5	0.5	87	205	2.4	0	2.4
	0.006	200	2	2	0	0	0	3.5	1	72	204	2.0	0	2.0
	0.008	200	0.5	1.5	0	0	0	2	0.5	57	207	3.4	0	3.4
	0.010	200	1	1.5	0	0	0	2	0.5	44	210	4.8	0	4.8
	0.012	200	3.5	1	0	0	0	4.5	0.5	33	212	5.7	0	5.7
	[MMC] (0.00004)	200	11	42	0	0	0	47	1	—	202	1.0	0	1.0
48-0	[DMSO] (1%)	200	0	0.5	0	0	0	0.5	0	100	201	0.5	0	0.5
	0.001	200	0	0.5	0	0	0	0.5	0	114	204	2.0	0	2.0
	0.002	200	0	0.5	0	0	0	0.5	0	91	201	0.5	0	0.5
	0.004	200	0.5	1	0	0	0	1.5	0	89	201	0.5	0	0.5
	0.006	200	0.5	1	0	0	0	1.5	0	78	209	4.3	0	4.3
	0.008	200	0.5	3.5	0	0	0	3.5	0	58	221	9.5	0	9.5
	0.010	200	3	7.5	0	0	0	10	0.5	30	233	14.2	0	14.2
	0.012	174	2.9	12.1	0	0	0	13.8	0.6	18	213	18.3	0	18.3
	[MMC] (0.00004)	200	10.5	58.5	0	0	0	63	0	—	204	2.0	0	2.0

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