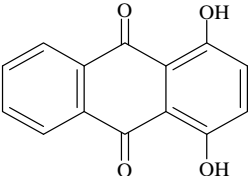


Chemical Name	: <u>1,4-Dihydroxyanthraquinone</u>
Synonym	: <u>Quinizarin</u> <u>1,4-Dihydroxy-9,10-anthracenedione</u> <u>C.I. 58050</u> <u>C.I. Solvent Orange 86</u> <u>キノザリン</u> <u>C.I. ソルベントオレンジ-86</u>
Molecular Weight	: 240.22
Melting Point	: 198-199°C[Aldrich]
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: C <sub>14</sub> H <sub>8</sub> O <sub>4</sub>
Chemical Structure	
CAS No.	: 81-64-1
MITI No.	: (4)-704, (5)-5055
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Wako Jyunyaku Kogyo Co., Ltd.
Lot No.	: DLK4327
Purity	: 98.1%
Vehicle	: Dehydrated DMSO

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap g (%)	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] 1.0%	200	0.5	0	0	0	0	0	0.5	0	100	200	2	0	2
		0.31 †	200	0	0.5	0	0	0	0	0.5	0	82	200	2.5	0	2.5
		0.63 †	200	0	0.5	0	0	0	0	0.5	0	92	200	1.5	0	1.5
		1.3 †	200	0	1.5	0	0	0	0	1.5	0	83	200	3.5	0	3.5
		2.5 †	200	0	0.5	0	0	0	0	0.5	0	74	200	3	0	3
		[MMC] 0.00012	200	9.5	36	0	0	0	0	40	2.5	-	200	1.5	0	1.5
6-18	+	[DMSO] 1.0%	200	0	0.5	0	0	0	0	0.5	0	100	200	0	0	0
		0.31 †	200	0.5	2	0	0	0	0	2	0.5	89	200	2	0	2
		0.63 †	200	0	0.5	0	0	0	0	0.5	0	78	200	1	0	1
		1.3 †	200	0	0.5	0	0	0	0	0.5	0	83	200	1	0	1
		2.5 †	200	0	0.5	0	0	0	0	0.5	0	83	200	3.5	0	3.5
		[B[a]P] 0.01	200	6.5	33	0	0	0	0	34.5	0.5	-	200	1	0	1

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

† Test chemical was precipitated.

Judgement for  
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation (Continuous Treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap g (%)	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] 1.0%	200	1	0.5	0	0	0	1	1	100	200	1	0	1
	0.0013	200	0	0	0	0	0	0	0	91	200	0.5	0	0.5
	0.0025	200	0	0.5	0	0	0	0.5	0	91	200	1.5	0	1.5
	0.0050	200	3	5	0	0	0	8	2	85	200	0.5	0	0.5
	0.010	200	11	42	0	0.5	0	51	0.5	74	200	2	0	2
	[MMC] 0.00004	200	5.5	27	0	0	0	31	0.5	—	200	1	0	1
48-0	[DMSO] 1.0%	200	0	0	0	0	0	0	0.5	100	200	1	0	1
	0.0013	200	0	0	0	0	0	0	0	94	200	1	0	1
	0.0025	200	0	1	0	0	0	1	0	85	200	0.5	0	0.5
	0.0050	200	0.5	6	0	0	0	6.5	0.5	75	200	1	0	1
	0.010	200	2	10.5	0	0.5	0	12	0	72	200	5.5	0	5.5
	[MMC] 0.00004	200	7.5	45	0	0	0	46	1	—	200	0	0	0

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