

Acetylacetone (アセチルアセトン)

Chemical Name:	Acetylacetone
Synonym	2,4-Pentadione
Molecular weight:	100.11
Melting point:	- 23.1°C
Boiling point:	140.6°C
Chemical Structure	
	CH ₃ COCH ₂ COCH ₃
CAS No:	123-54-6
MITI No:	(2)-562
Source of Substance:	Wako Pure Chem. Ind., Ltd.
Lot. No. :	STM6553
Purity:	
Vehicle:	DMSO

Mutagenicity
in Bacterial Test: Negative

IARC Evaluation: not yet cited

Judgement
Specific Mutagenicity
Positive
Control

Experimental Data

Con. μg/ plate	Number of Revertants/plate											
	Base-substitution						Frame-shift					
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(93)	(93)	(19)	(15)	(33)	(46)	(15)	(27)	(6)	(15)	(19)	(26)
	117	117	19	18	42	40	16	27	5	19	17	14
	113	111	15	12	34	45	25	32	4	15	11	17
20	(115)	(114)	(17)	(15)	(38)	(43)	(21)	(30)	(5)	(17)	(14)	(16)
	95	107	19	12	49	67	17	30	7	16	15	22
	103	109	17	20	31	58	13	26	7	14	17	22
50	(100)	(108)	(18)	(16)	(40)	(63)	(15)	(28)	(7)	(15)	(16)	(22)
	82	95	17	10	47	58	17	22	11	11	8	23
	88	106	21	12	36	52	25	30	13	13	14	21
100	(85)	(101)	(19)	(11)	(42)	(55)	(21)	(26)	(12)	(12)	(11)	(22)
	86	102	18	13	37	52	15	26	9	11	17	15
	86	109	23	6	43	52	14	28	10	9	13	16
200	(86)	(106)	(21)	(10)	(40)	(52)	(15)	(27)	(10)	(10)	(15)	(16)
	95	107	25	14	43	51	17	35	4	16	15	23
	108	90	15	13	48	52	18	30	8	21	17	27
500	(102)	(99)	(20)	(14)	(46)	(52)	(18)	(33)	(6)	(19)	(16)	(25)
	80	101	16	7	38	53	17	16	8	8	10	22
	76	119	17	11	32	58	12	13	6	7	16	22
1000	(78)	(110)	(17)	(9)	(35)	(56)	(15)	(15)	(7)	(8)	(13)	(22)
	70	70	16	11	27	33	16	12	4	10	11	30
	68	74	25	17	21	41	14	27	5	5	11	19
2000	(69)	(74)	(21)	(14)	(24)	(37)	(15)	(15)	(5)	(8)	(11)	(25)
	57	69	11	13	21	30	16	23	6	5	15	26
	62	52	5	6	25	30	10	21	6	10	13	15
5000	(60)	(61)	(8)	(10)	(23)	(30)	(13)	(22)	(6)	(8)	(14)	(21)
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	AF2	2AA 0.5	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
	(437)	(669)	(236)	(102)	(240)	(1154)	(337)	(639)	(813)	(93)	(231)	(559)