

Crotonaldehyde(trans-form) (クロトンアルデヒド(トランス体))

Experimental Data

Chemical Name: Crotonaldehyde(trans-form) Synonym: trans-2-Butenal 2-Butenal, (E)- Molecular weight: 70.09 Melting point: -76.5~-69°C Boiling point: 102.2~104°C Flashing point: 8°C Chemical Structure CH ₃ CH=CHCHO CAS No : 123-73-9 MITI No : (2)-524 Source of Substance: Wako Pure Chem. Ind., Ltd. Lot.No. : CTH5665 Purity: 99 % Vehicle: H ₂ O	Con. μg/ plate	Number of Revertants/plate									
		Base-substitution						Frame-shift			
		TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	
H ₂ O	(179)	(185)	(10)	(8)	(30)	(38)	(22)	(24)	(8)	(13)	
	165	188	9	8	28	37	22	20	3	18	
	132	206	5	9	27	32	15	15	7	18	
9.77	(149)	(197)	(7)	(9)	(28)	(35)	(19)	(18)	(5)	(18)	
	185	195	8	10	29	39	21	21	9	10	
	198	192	12	12	27	32	27	28	9	14	
19.5	(192)	(194)	(10)	(11)	(28)	(36)	(24)	(25)	(9)	(12)	
	242	187	12	8	30	29	44	23	18	10	
	247	194	9	10	24	38	50	24	10	14	
39.1	(245)	(191)	(11)	(9)	(27)	(34)	(47)	(24)	(14)	(12)	
	378	214	7	7	23	40	37*	21	10	18	
	347	184	6	17	35	30	28*	14	18	9	
78.1	(363)	(199)	(7)	(12)	(29)	(35)	(33*)	(18)	(14)	(14)	
	526	347	12	12	38	38	0*	25	0*	10	
	572	310	8	9	42	34	0*	20	0*	14	
156	(549)	(329)	(10)	(11)	(40)	(36)	(0*)	(23)	(0*)	(12)	
	926	809	6	5	43	36	0*	23	0*	9	
	962	943	9	8	40	40	0*	32	0*	8	
313	(944)	(876)	(8)	(7)	(42)	(38)	(0*)	(28)	(0*)	(9)	
	0*	1013	0*	8	32*	66	0*	66	0*	18	
	0*	1048	0*	9	30*	50	0*	58	0*	9	
625	(0*)	(1031)	(0*)	(9)	(31*)	(58)	(0*)	(62)	(0*)	(14)	
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(33*)	(0*)	(0*)	(0*)	(0*)	
2500	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	
Judgement	+	+	-	-	-	-	+	+	-	-	
Specific Mutagenicity	2440	2210					639	60.8			
Positive Control	AF2	2AA	NaN ₃	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA	
Control	(701)	(799)	(409)	(224)	(176)	(1511)	(403)	(409)	(442)	(146)	

Experimental Data

Con. μg/ plate	Number of Revertants/plate				
	Base-substitution			Frame-shift	
	TA100	TA1535	WP2uvrA	TA98	TA1537
H ₂ O	S9- (135)	S9- (10)	S9- (21)	S9- (19)	S9- (6)
1.25				(26)	
2.5				(28)	
5				(25)	(7)
	154			32	8
	146			27	9
10	(150)			(30)	(9)
	158		23	24	5
	161		22	27	7
20	(160)		(23)	(26)	(6)
	183	7	21	45	18
	176	7	31	32	15
40	(180)	(7)	(26)	(42)	(17)
	280	13	29	24*	17*
	247	7	20	14*	13*
60	(264)	(10)	(25)	(19*)	(15*)
	334	9	16	0*	0*
	326	9	20	0*	0*
80	(330)	(9)	(18)	(0*)	(0*)
	333	5	28		0*
	245	9	21		0*
100	(289)	(7)	(25)		(0*)
	498	8	31		
	392	8	23		
200	(445)	(8)	(27)		
	472	3*	22*		
	397	5*	25*		
400	(435)	(4*)	(24*)		
600	(0*)	(0*)	(12*)		
800		(0*)			
Judgement	+	-	-	+	+
Specific Mutagenicity	2440			575	275
Positive	AF2	NaN ₃	AF2	AF2	9AA
Control	(668)	(320)	(195)	(440)	(355)

Experimental Data						
Con. μ g/ plate	Number of Revertants/plate					
	Base-substitution			Frame-shift		
	TA100	TA1535	WP2uvrA	TA98	TA1537	
	S9+	S9+	S9+	S9+	S9+3	
H ₂ O	(180)	(9)	(24)	(23)	(9)	
	176					
	184					
40	(180)					
	181			23		
	207			17		
60	(194)			(20)		
	198	10	24	17	13	
	232	12	25	22	8	
80	(215)	(11)	(25)	(20)	(11)	
	236	9	28	24	8	
	242	13	29	32	8	
100	(239)	(11)	(29)	(28)	(8)	
	417	15	27	28	7	
	435	7	25	27	6	
200	(426)	(11)	(26)	(28)	(7)	
	586	10	23	37	7	
	538	8	28	45	10	
400	(562)	(9)	(26)	(41)	(9)	
	592	6*	22	46	9	
	579	5*	30	47	5	
600	(586)	(6*)	(26)	(47)	(7)	
	180*	0*	38	0*	7*	
	188*	0*	32	0*	5*	
800	(184*)	(0*)	(35)	(0*)	(6*)	
1000	(0*)	(0*)	(43)	(0*)	(0*)	
1200					(0*)	
2000			(38*)			
Judgement	+	-	-	+	-	
Specific Mutagenicity	1230			40.0		
Positive	2AA	2AA	2AA 20	2AA	2AA	
Control	(1006)	(288)	(1129)	(485)	(174)	