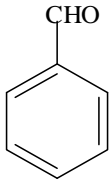


Chemical Name	; <u>Benzaldehyde</u>
	; <u>Benzoic aldehyde</u>
	<u>Benzoic acid aldehyde</u>
	<u>ベンゾイックアルデヒド</u>
Molecular Weight	; 106.12
Melting Point	; -26°C[Aldrich]
Boiling Point	; 178-179°C[Aldrich]
Flashing Point	; 63°C[Aldrich]
Molecular Formula	; C <sub>7</sub> H <sub>6</sub> O
Chemical Structure	
CAS No.	; 100-52-7
MITI No.	; (3)-1142
ML No.	; -
Specified Chemical Substances	; -
Source of Substance	; Tokyo Kasei Kogyo Co., Ltd.
Lot No.	; ACM4033
Purity	; 98.0%
Vehicle	; DMSO

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 <sub>uvrA</sub> /pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 146 )	( 179 )	( 11 )	( 13 )	( 36 )	( 59 )	( 20 )	( 27 )	( 6 )	( 8 )
1 .22	134 153 ( 144 )	180 169 ( 175 )	9 14 ( 12 )	13 11 ( 12 )	40 31 ( 36 )	63 67 ( 65 )	15 22 ( 19 )	22 31 ( 27 )	2 6 ( 4 )	5 10 ( 8 )
4 .88	124 164 ( 144 )	173 215 ( 194 )	14 11 ( 13 )	9 16 ( 13 )	29 43 ( 36 )	49 55 ( 52 )	14 22 ( 18 )	30 23 ( 27 )	9 2 ( 6 )	9 7 ( 8 )
19 .5	141 124 ( 133 )	204 170 ( 187 )	15 8 ( 12 )	15 11 ( 13 )	40 38 ( 39 )	64 44 ( 54 )	24 21 ( 23 )	20 22 ( 21 )	6 6 ( 6 )	11 9 ( 10 )
78 .1	158 153 ( 156 )	200 183 ( 192 )	15 6 ( 11 )	13 10 ( 12 )	39 48 ( 44 )	61 53 ( 57 )	11 15 ( 13 )	23 38 ( 31 )	5 5 ( 5 )	7 11 ( 9 )
313	131 136 ( 134 )	174 155 ( 165 )	14 9 ( 12 )	7 13 ( 10 )	33 33 ( 33 )	59 69 ( 64 )	22 22 ( 22 )	21 31 ( 26 )	3 2 ( 3 )	6 5 ( 6 )
1250	114 121 ( 118 )	120 * 113 * ( 117 *)	5 8 ( 7 )	6 11 ( 9 )	30 39 ( 35 )	54 51 ( 53 )	13 23 ( 18 )	33 * 32 * ( 33 *)	3 3 ( 3 )	11 6 ( 9 )
5000	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)	0 * 0 * ( 0 *)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 619 )	2-AA ( 1335 )	NaN <sub>3</sub> ( 459 )	2-AA ( 314 )	AF-2 ( 1043 )	2-AA ( 987 )	AF-2 ( 452 )	2-AA ( 491 )	9-AA ( 524 )	2-AA ( 197 )

\* Growth inhibition was observed.

Experimental Data-2

(B9822-2/2)

Conc. $\mu$ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 132 )	( 148 )	( 9 )	( 9 )	( 44 )	( 50 )	( 14 )	( 21 )	( 8 )	( 9 )
19 .5		162 166 ( 164 )						32 30 ( 31 )		
39 .1		184 194 ( 189 )						29 24 ( 27 )		
78 .1	146 122 ( 134 )	174 167 ( 171 )	7 7 ( 7 )	13 7 ( 10 )	47 31 ( 39 )	41 53 ( 47 )	8 11 ( 10 )	20 18 ( 19 )	6 3 ( 5 )	13 5 ( 9 )
156	112 129 ( 121 )	177 167 ( 172 )	8 5 ( 7 )	13 14 ( 14 )	38 48 ( 43 )	44 38 ( 41 )	9 17 ( 13 )	32 23 ( 28 )	6 5 ( 6 )	11 8 ( 10 )
313	120 127 ( 124 )	160 164 ( 162 )	7 5 ( 6 )	13 7 ( 10 )	40 40 ( 40 )	38 45 ( 42 )	7 16 ( 12 )	22 18 ( 20 )	7 3 ( 5 )	5 8 ( 7 )
625	131 109 ( 120 )	151 157 ( 154 )	8 9 ( 9 )	10 9 ( 10 )	46 33 ( 40 )	51 48 ( 50 )	11 20 ( 16 )	29 26 ( 28 )	5 3 ( 4 )	8 9 ( 9 )
1250	108 104 ( 106 )	128 * 142 * ( 135 *)	11 8 ( 10 )	13 9 ( 11 )	45 34 ( 40 )	62 56 ( 59 )	18 15 ( 17 )	21 * 15 * ( 18 *)	7 6 ( 7 )	6 2 ( 4 )
2500	0 * 0 * ( 0 * )		0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )		0 * 0 * ( 0 * )	0 * 0 * ( 0 * )
5000	0 * 0 * ( 0 * )		0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )	0 * 0 * ( 0 * )		0 * 0 * ( 0 * )	0 * 0 * ( 0 * )
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 707 )	2-AA ( 1343 )	NaN <sub>3</sub> ( 500 )	2-AA ( 313 )	AF-2 ( 1187 )	2-AA ( 1019 )	AF-2 ( 406 )	2-AA ( 466 )	9-AA ( 616 )	2-AA ( 180 )