

Aminoguanidine bicarbonate

(アミノグアニジンビカーボナート)

Experimental Data-1

(B9801-1/2)

Chemical Name	: <u>Aminoguanidine bicarbonate</u>
Synonym	: <u>Aminoguanidium hydrogen carbonate</u> <u>Carbonic acid, compound with hydrazinecarboximidamide(1:1)</u> <u>重碳酸アミノグアニジン</u>
Molecular Weight	: 136.11
Melting Point	: 170-172°C[Ardrich]
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: $\text{CH}_6\text{N}_4 \cdot \text{CH}_2\text{O}_3$
Chemical Structure	
CAS No.	: 2582-30-1
MITI No.	: (2)-2884
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: AX01
Purity	: >99%
Vehicle	: DMSO

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 _{uvrA/p} KM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(134)	(128)	(9)	(7)	(54)	(76)	(18)	(21)	(6)	(9)
1 .22	149 105 (127)	137 136 (137)	10 3 (7)	10 8 (9)	34 60 (47)	86 82 (84)	8 15 (12)	26 20 (23)	2 6 (4)	11 11 (11)
4 .88	129 128 (129)	152 133 (143)	9 6 (8)	7 5 (6)	47 57 (52)	82 81 (82)	11 13 (12)	17 23 (20)	6 10 (8)	10 13 (12)
19 .5	117 87 (102)	143 122 (133)	5 9 (7)	5 7 (6)	67 66 (67)	93 77 (85)	17 20 (19)	22 20 (21)	7 6 (7)	9 6 (8)
78 .1	130 152 (141)	127 123 (125)	9 5 (7)	5 9 (7)	62 72 (67)	108 67 (88)	13 15 (14)	13 17 (15)	6 5 (6)	7 10 (9)
313	164 133 (149)	129 143 (136)	11 8 (10)	5 11 (8)	64 57 (61)	84 89 (87)	16 7 (12)	17 16 (17)	8 7 (8)	8 6 (7)
1250	148 148 (148)	124 124 (124)	7 5 (6)	6 7 (7)	60 67 (64)	77 90 (84)	14 16 (15)	26 28 (27)	3 5 (4)	7 6 (7)
5000	166 149 (158)	157 127 (142)	10 11 (11)	8 7 (8)	70 61 (66)	78 61 (70)	15 15 (15)	31 15 (23)	5 3 (4)	10 9 (10)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (589)	2-AA (1122)	NaN_3 (457)	2-AA (248)	AF-2 (600)	2-AA (665)	AF-2 (506)	2-AA (460)	9-AA (416)	2-AA (145)

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Experimental Data-2

(B9801-2/2)

Conc. μ 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+
	(131)	(119)	(10)	(10)	(58)	(83)	(16)	(23)	(9)	(11)
313	128	136	8	7	46	82	16	17	6	7
	155	116	11	13	59	87	18	21	9	13
	(142)	(126)	(10)	(10)	(53)	(85)	(17)	(19)	(8)	(10)
625	112	122	13	11	52	83	13	20	9	9
	128	107	10	11	67	91	16	23	5	13
	(120)	(115)	(12)	(11)	(60)	(87)	(15)	(22)	(7)	(11)
1250	121	113	7	9	68	83	20	16	8	11
	115	131	11	10	39	78	17	22	10	7
	(118)	(122)	(9)	(10)	(54)	(81)	(19)	(19)	(9)	(9)
2500	120	117	13	10	67	94	13	24	7	11
	116	116	14	6	60	83	17	23	6	8
	(118)	(117)	(14)	(8)	(64)	(89)	(15)	(24)	(7)	(10)
5000	149	137	18	13	53	100	14	29	11	11
	126	142	11	14	70	90	13	31	10	8
	(138)	(140)	(15)	(14)	(62)	(95)	(14)	(30)	(11)	(10)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (625)	2-AA (980)	NaN ₃ (436)	2-AA (264)	AF-2 (839)	2-AA (833)	AF-2 (514)	2-AA (461)	9-AA (408)	2-AA (155)