

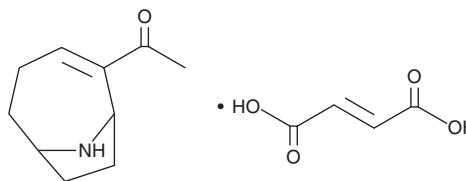
PRODUCT INFORMATION



(±)-Anatoxin A (fumarate)

Item No. 14609

CAS Registry No.: 1219922-30-1
Formal Name: 1-(9-azabicyclo[4.2.1]non-2-en-2-yl)-ethanone, 2-butenedioate
MF: $C_{10}H_{15}NO \cdot C_4H_4O_4$
FW: 281.3
Purity: $\geq 95\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(±)-Anatoxin A (fumarate) is supplied as a solid. A stock solution may be made by dissolving the (±)-anatoxin A (fumarate) in water. The solubility of (±)-anatoxin A (fumarate) in water is approximately 50 mM. We do not recommend storing the aqueous solution for more than one day.

Description

(±)-Anatoxin A is a bicyclic amine isolated from the blue-green alga *A. aquae* that displays high affinity for nicotinic acetylcholine receptors ($K_d = 0.1-0.2 \mu M$).¹ It binds $\alpha 4\beta 2$ - and $\alpha 7$ -type nicotinic receptors with K_i values of 1.3 nM and 1.8 μM , respectively, and stimulates [³H]-dopamine release from striatal synaptosomes with an EC_{50} value of 134 nM.²

References

1. Aronstam, R.S. and Witkop, B. Anatoxin-a interactions with cholinergic synaptic molecules. *Proc. Natl. Acad. Sci. USA* **78(7)**, 4639-4643 (1981).
2. Sharples, C.G., Kaiser, S., Soliakov, L., *et al.* UB-165: A novel nicotinic agonist with subtype selectivity implicates the $\alpha 4\beta 2$ subtype in the modulation of dopamine release from rat striatal synaptosomes. *J. Neurosci.* **20(8)**, 2783-2791 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM