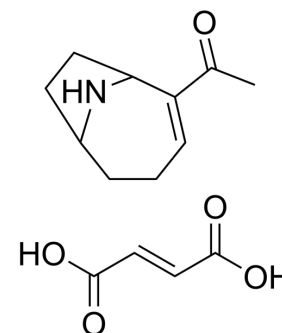


(±)-Anatoxin A fumarate

| | |
|--------------------|--|
| Cat. No.: | HY-N2326 |
| CAS No.: | 1219922-30-1 |
| Molecular Formula: | C ₁₄ H ₁₉ NO ₅ |
| Molecular Weight: | 281.3 |
| Target: | nAChR |
| Pathway: | Membrane Transporter/Ion Channel; Neuronal Signaling |
| Storage: | 4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 14.07 mg/mL (50.02 mM)
* "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 3.5549 mL | 17.7746 mL | 35.5492 mL |
| | 5 mM | 0.7110 mL | 3.5549 mL | 7.1098 mL |
| | 10 mM | 0.3555 mL | 1.7775 mL | 3.5549 mL |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

(±)-Anatoxin A fumarate is a natural alkaloid isolated from freshwater cyanobacterium. (±)-Anatoxin A fumarate is a potent nicotinic receptor agonist and exhibits K_i values of 1.25 nM and 1.84 μM for binding to putative α4β2-type nAChR and α7-type nAChR in rat brain membranes, respectively. (±)-Anatoxin A fumarate stimulates [³H]-dopamine release from rat striatal synaptosomes (EC₅₀=134 nM)^[1].

IC₅₀ & Target

K_i: 1.25 nM (α4β2 receptor)
K_i: 1.84 μM (α7 receptor)^[1]

REFERENCES

[1]. P Thomas, et al. (+)-Anatoxin-a is a potent agonist at neuronal nicotinic acetylcholine receptors. J Neurochem. 1993 Jun;60(6):2308-11.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA