

α -Conotoxin MII

Cat. No.:	HY-P1365
CAS No.:	175735-93-0
Molecular Formula:	C ₆₇ H ₁₀₃ N ₂₃ O ₂₂ S ₄
Molecular Weight:	1710.94
Sequence:	Gly-Cys-Cys-Ser-Asn-Pro-Val-Cys-His-Leu-Glu-His-Ser-Asn-Leu-Cys-NH ₂ (Disulfide bridge:Cys2-Cys8;Cys3-Cys16)
Sequence Shortening:	GCCSNPVCHLEHSNLC-NH ₂ (Disulfide bridge:Cys2-Cys8;Cys3-Cys16)
Target:	nAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description	α -Conotoxin MII (α -CTxMII), a 16-amino acid peptide from the venom of the marine snail <i>Conus magus</i> , potently blocks nicotinic acetylcholine receptors (nAChRs) composed of $\alpha 3\beta 2$ subunits, with an IC ₅₀ of 0.5 nM. α -Conotoxin MII (α -CTxMII) potently blocks $\beta 3$ -containing neuronal nicotinic receptors ^{[1][2][3]} .
IC ₅₀ & Target	IC ₅₀ : 0.5 nM ($\alpha 3\beta 2$) ^[1] .
In Vitro	α -Conotoxin MII (0.5-3.5 nM) blocks ACh responses in oocytes expressing $\alpha 3\beta 2$ nicotinic acetylcholine receptors ^{[1][2]} .

REFERENCES

- [1]. G E Cartier, et al. A New Alpha-Conotoxin Which Targets alpha3beta2 Nicotinic Acetylcholine Receptors. *J Biol Chem.* 1996 Mar 29;271(13):7522-8.
- [2]. S C Harvey, et al. Determinants of Specificity for Alpha-Conotoxin MII on alpha3beta2 Neuronal Nicotinic Receptors. *Mol Pharmacol.* 1997 Feb;51(2):336-42.
- [3]. J M McIntosh, et al. Conus Peptides: Novel Probes for Nicotinic Acetylcholine Receptor Structure and Function. *Eur J Pharmacol.* 2000 Mar 30;393(1-3):205-8.

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