

α -Conotoxin PeIA

Cat. No.:	HY-P5146
CAS No.:	866876-88-2
Molecular Formula:	C ₆₅ H ₉₈ N ₂₂ O ₂₁ S ₄
Molecular Weight:	1651.87
Sequence:	Gly-Cys-Cys-Ser-His-Pro-Ala-Cys-Ser-Val-Asn-His-Pro-Glu-Leu-Cys-NH ₂ (Disulfide bridge: Cys2-Cys8, Cys3-Cys16)
Sequence Shortening:	GCCSHPACSVNHPELC-NH ₂ (Disulfide bridge: Cys2-Cys8, Cys3-Cys16)
Target:	nAChR; Calcium Channel; GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

α -Conotoxin PeIA is an analgesic α -conotoxin. α -Conotoxin PeIA inhibits the $\alpha 6\beta 4$, $\alpha 9\alpha 10$ and $\alpha 3\beta 2$ nAChR. α -Conotoxin PeIA is also a potent inhibitor of N-type calcium channel via GABAB receptor activation^{[1][2][3]}.

REFERENCES

- [1]. Daly NL, et al. Structure and activity of alpha-conotoxin PeIA at nicotinic acetylcholine receptor subtypes and GABA(B) receptor-coupled N-type calcium channels. J Biol Chem. 2011 Mar 25;286(12):10233-7.
- [2]. Hone AJ, et al. Molecular determinants of α -conotoxin potency for inhibition of human and rat $\alpha 6\beta 4$ nicotinic acetylcholine receptors. J Biol Chem. 2018 Nov 16;293(46):17838-17852.
- [3]. Bony AR, et al. Analgesic α -conotoxins modulate native and recombinant GIRK1/2 channels via activation of GABAB receptors and reduce neuroexcitability. Br J Pharmacol. 2022 Jan;179(1):179-198.

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

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