

## Muscarinic toxin 3

Cat. No.:	HY-P5846
CAS No.:	873336-87-9
Molecular Formula:	C <sub>319</sub> H <sub>489</sub> N <sub>89</sub> O <sub>97</sub> S <sub>8</sub>
Molecular Weight:	7379.35
Sequence:	Leu-Thr-Cys-Val-Thr-Lys-Asn-Thr-Ile-Phe-Gly-Ile-Thr-Thr-Glu-Asn-Cys-Pro-Ala-Gly-Gln-Asn-Leu-Cys-Phe-Lys-Arg-Trp-His-Tyr-Val-Ile-Pro-Arg-Tyr-Thr-Glu-Ile-Thr-Arg-Gly-Cys-Ala-Ala-Thr-Cys-Pro-Ile-Pro-Glu-Asn-Tyr-Asp-Ser-Ile-His-Cys-Cys-Lys-Thr-Asp-Lys-Cys-Asn-Glu (Disulfide bridge: Cys3-Cys24,Cys17-Cys42,Cys46-Cys57,Cys58-Cys63)
Sequence Shortening:	LTCVTKNTIFGITTENCYPAGQNLCKRWHYVIPRYTEITRGCAATCPIPENYDSIHCKTKDCNE (Disulfide bridge: Cys3-Cys24,Cys17-Cys42,Cys46-Cys57,Cys58-Cys63)
Target:	mAChR; Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

Description	Muscarinic toxin 3 (MT3) is a potent and non-competitive mAChR and adrenoceptors antagonist with pIC <sub>50</sub> s of 6.71, 8.79, 8.86, 7.57, 8.13, 8.49, <6.5, 7.29 against M <sub>1</sub> , M <sub>4</sub> , α <sub>1A</sub> , α <sub>1B</sub> , α <sub>1D</sub> , α <sub>2A</sub> , α <sub>2B</sub> and α <sub>2C</sub> receptors, respectively. Muscarinic toxin 3 displays prominent adrenoceptor activity <sup>[1]</sup> .
IC <sub>50</sub> & Target	pIC <sub>50</sub> : 8.79 (M <sub>4</sub> mAChR), 6.71 (M <sub>1</sub> mAChR), 8.86 (α <sub>1A</sub> -adrenoceptor), 8.49 (α <sub>2A</sub> -adrenoceptor), 8.13 (α <sub>1D</sub> -adrenoceptor), 7.57 (α <sub>1B</sub> -adrenoceptor), 7.29 (α <sub>2C</sub> -adrenoceptor), <6.5 (α <sub>2B</sub> -adrenoceptor) <sup>[1]</sup>

### REFERENCES

[1]. Näreoja K, et al. Adrenoceptor activity of muscarinic toxins identified from mamba venoms. Br J Pharmacol. 2011 Sep;164(2b):538-50.

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

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