

## APETx2 TFA

Cat. No.:	HY-P1346A
Molecular Formula:	C <sub>198</sub> H <sub>281</sub> F <sub>3</sub> N <sub>54</sub> O <sub>62</sub> S <sub>6</sub>
Molecular Weight:	4675.02
Sequence:	Gly-Thr-Ala-Cys-Ser-Cys-Gly-Asn-Ser-Lys-Gly-Ile-Tyr-Trp-Phe-Tyr-Arg-Pro-Ser-Cys-Pro-Thr-Asp-Arg-Gly-Tyr-Thr-Gly-Ser-Cys-Arg-Tyr-Phe-Leu-Gly-Thr-Cys-Cys-Thr-Pro-Ala-Asp (Disulfide bridge:Cys4-Cys37;Cys6-Cys30;Cys20-Cys38) <small>GTACSCGNSKGIYWFYRPSCTDRGYTGSCRYFLGTCCTPAD (Disulfide bridge:Cys4-Cys37;Cys6-Cys30;Cys20-Cys38) (TFA salt)</small>
Sequence Shortening:	GTACSCGNSKGIYWFYRPSCTDRGYTGSCRYFLGTCCTPAD (Disulfide bridge:Cys4-Cys37;Cys6-Cys30;Cys20-Cys38)
Target:	Sodium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the COA.

## BIOLOGICAL ACTIVITY

Description	APETx2 TFA, a sea anemone peptide from <i>Anthopleura elegantissima</i> , is a selective and reversible ASIC3 inhibitor, with an IC <sub>50</sub> of 63 nM. APETx2 directly inhibits the ASIC3 channel by acting at its external side. APETx2 could reverses acid-induced and inflammatory pain <sup>[1][2]</sup> .
In Vivo	APETx2 (i.t. or i.m. application, 0.022 to 2.2 μM) resulted in a potent and complete reversal of established mechanical hypersensitivity in the complete Freund's adjuvant (CFA) inflammatory pain model <sup>[2]</sup> .

## REFERENCES

- [1]. Sylvie Diochot, et al. A New Sea Anemone Peptide, APETx2, Inhibits ASIC3, a Major Acid-Sensitive Channel in Sensory Neurons. *EMBO J.* 2004 Apr 7;23(7):1516-25.
- [2]. Jerzy Karczewski, et al. Reversal of Acid-Induced and Inflammatory Pain by the Selective ASIC3 Inhibitor, APETx2. *Br J Pharmacol.* 2010 Oct;161(4):950-60.

**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