

Ssm spooky toxin

Cat. No.:	HY-P5925
Molecular Formula:	C ₂₇₀ H ₄₁₃ N ₆₉ O ₇₉ S ₄
Molecular Weight:	6017.84
Sequence:	Glu-Val-Ile-Lys-Lys-Asp-Thr-Pro-Tyr-Lys-Lys-Arg-Lys-Phe-Pro-Tyr-Lys-Ser-Glu-Cys-Leu-Lys-Ala-Cys-Ala-Thr-Ser-Phe-Thr-Gly-Gly-Asp-Glu-Ser-Arg-Ile-Gln-Glu-Gly-Lys-Pro-Gly-Phe-Phe-Lys-Cys-Thr-Cys-Tyr-Phe-Thr-Thr-Gly (Disulfide bridge: Cys20-Cys46, Cys24-Cys48)
Sequence Shortening:	EVIKKDTPYKRRKFPYKSECLKACATSFTGGDESRIQEGKPGFFKCTCYFTTG (Disulfide bridge: Cys20-Cys46, Cys24-Cys48)
Target:	Potassium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Ssm Spooky Toxin from <i>Scolopendra mutilans</i> , exhibits lethal toxicity in hematological and respiratory systems by potentially inhibiting KCNQ (voltage-gated potassium channel family 7) channels, with IC ₅₀ of 2.8 μM, 5.26 μM and 0.1-0.3 M for Kv7.4, Kv1.3, and Shal channel, respectively. Ssm Spooky Toxin inhibits cytokine generation by specifically acting on the KV1.3 channel in T cells. Ssm Spooky Toxin plays an essential role in the centipede's circulatory system ^{[1] [2][3]} .	
IC₅₀ & Target	Kv1.3 5.26±0.56 μM (IC ₅₀)	KV7.4 2.8±0.25 μM (IC ₅₀)

REFERENCES

- [1]. Canwei Du, et al. Centipede KCNQ Inhibitor SsTx Also Targets KV1.3. *Toxins* (Basel). 2019 Feb; 11(2): 76.
- [2]. Shilong Yang, et al. Target switch of centipede toxins for antagonistic switch. *Sci Adv.* 2020 Aug 7;6(32):eabb5734.
- [3]. Anna Luo, et al. Centipede Venom: A Potential Source of Ion Channel Modulators. *Int J Mol Sci.* 2022 Jun 26;23(13):7105.

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