

Stromatoxin 1

Cat. No.:	HY-P5155
CAS No.:	741738-59-0
Molecular Formula:	C ₁₅₆ H ₂₃₇ N ₄₉ O ₄₈ S ₇
Molecular Weight:	3791.31
Sequence:	Asp-Cys-Thr-Arg-Met-Phe-Gly-Ala-Cys-Arg-Arg-Asp-Ser-Asp-Cys-Cys-Pro-His-Leu-Gly-Cys-Lys-Pro-Thr-Ser-Lys-Tyr-Cys-Ala-Trp-Asp-Gly-Thr-Ile-NH ₂ (Disulfide bridge: Cys2-Cys16, Cys9-Cys21, Cys15-Cys28)
Sequence Shortening:	DCTRMFGACRRDSDCCPHLGCKPTSKYCAWDGTI-NH ₂ (Disulfide bridge: Cys2-Cys16, Cys9-Cys21, Cys15-Cys28)
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	Stromatoxin 1 is an inhibitor of Potassium Channel, a peptide which can be isolated from tarantulas. Stromatoxin 1 selectively inhibits K(V)2.1, K(V)2.2, K(V)4.2, and K(V)2.1/9.3 channels. K(V)2.1 and K(V)2.2, but not K(V)4.2, channel subunits play a key role in opposing both myogenic and neurogenic urinary bladder smooth muscle (UBSM) contractions in rats ^[1] .
IC ₅₀ & Target	K(V)2.1, K(V)2.2, K(V)4.2, and K(V)2.1/9.3 ^[1]

REFERENCES

[1]. Chen M, et al. Voltage-gated K(+) channels sensitive to stromatoxin-1 regulate myogenic and neurogenic contractions of rat urinary bladder smooth muscle. Am J Physiol Regul Integr Comp Physiol. 2010 Jul;299(1):R177-84.

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

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