

Scyllatoxin

Cat. No.:	HY-P3064
CAS No.:	142948-19-4
Molecular Formula:	C ₁₄₂ H ₂₃₇ N ₄₅ O ₃₉ S ₇
Molecular Weight:	3423.15
Sequence Shortening:	AFCNLRMCQLSCRSLLGKICIGDKCECVKH-NH2 (Disulfide bridge: Cys3-Cys21; Cys8-Cys26; Cys12-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	Scyllatoxin (Leiurotoxin I) is a peptide toxin, it can be isolated from the venom of the scorpion (Leiurus quinquestriatus hebraeus). Scyllatoxin is a blocker of small-conductance K _{Ca} (SK) channel. Scyllatoxin enhances both norepinephrine (NE) and epinephrine (Epi) release in vivo ^[1] .
In Vitro	For scyllatoxin, the Arg ₆ and Arg ₁₃ are essential for binding to the Ca ²⁺ -activated K ⁺ channel protein and for the functional effect of the toxin ^[1] . For scyllatoxin, His ₃₁ is important for the binding activity of the toxin and for the induction of contractions on taenia coli ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Scyllatoxin (2 μM) increases basal Epi release, the nerve stimulation-induced Epi release and the exogenous acetylcholine (Ach)-induced catecholamine release by microdialysis technique to the left adrenal medulla of anesthetized adult male Wistar rats ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Auguste P, et al. Scyllatoxin, a blocker of Ca(2+)-activated K+ channels: structure-function relationships and brain localization of the binding sites. *Biochemistry*. 1992 Jan 28;31(3):648-54.

[2]. Akiyama T, et al. Role of Ca2+-activated K+ channels in catecholamine release from in vivo rat adrenal medulla. *Neurochem Int*. 2010 Jan;56(2):263-9.

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

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