Product Data Sheet

Inhibitors

Screening Libraries

Proteins

sFTX-3.3

Cat. No.: HY-131942 CAS No.: 141997-14-0 Molecular Formula: $C_{12}H_{29}N_7O$

Molecular Weight: 287.4

Target: Calcium Channel

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

H_2N H_2 H_3 H_4 H_4

BIOLOGICAL ACTIVITY

Description	sFTX-3.3 is a Ca^{2+} channel antagonist with IC ₅₀ s of approximately 0.24 mM and 0.70 mM against P-type and N-type channels [1][2].	
IC ₅₀ & Target	P/Q-type calcium channel 0.24 mM (IC ₅₀)	N-type calcium channel 0.70 mM (IC ₅₀)
In Vitro	sFTX-3.3 (100 μ M) reduces the duration of the slow component of presynaptic calcium currents by about 50% of the control and also reduces presynaptic sodium current by approximately 20% of the control. sFTX-3.3 (100 μ M) reduces whole-cell sodium current recorded from SK.N.SH cells by approximately 15% ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Maria Elisa Calcagnotto, et al. An examination of calcium current function on heterotopic neurons in hippocampal slices from rats exposed to methylazoxymethanol. Epilepsia. 2003 Mar;44(3):315-21.

[2]. T M Norris, et al. Block of high-threshold calcium channels by the synthetic polyamines sFTX-3.3 and FTX-3.3. Mol Pharmacol. 1996 Oct;50(4):939-46.

[3]. M Fatehi, et al. Polyamine FTX-3.3 and polyamine amide sFTX-3.3 inhibit presynaptic calcium currents and acetylcholine release at mouse motor nerve terminals. Neuropharmacology. 1997 Feb;36(2):185-94.

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

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