

Tamapin TFA

Cat. No.:	HY-P5154A	
Molecular Formula:	$C_{146}H_{238}N_{44}O_{41}S_6 \cdot xC_2HF_3O_2$	
Sequence:	Ala-Phe-Cys-Asn-Leu-Arg-Arg-Cys-Glu-Leu-Ser-Cys-Arg-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ile-Gly-Glu-Glu-Cys-Lys-Cys-Val-Pro-Tyr-NH ₂ (Disulfide bridge: Cys3-Cys21, Cys8-Cys26, Cys12-Cys28)	AFCNLRRCELSCRSLGKIGKIGEECKVPY-NH ₂ (Disulfide bridge: Cys3-Cys21, Cys8-Cys26, Cys12-Cys28) (TFA salt)
Sequence Shortening:	AFCNLRRCELSCRSLGKIGKIGEECKVPY-NH ₂ (Disulfide bridge: Cys3-Cys21, Cys8-Cys26, Cys12-Cys28)	
Target:	Potassium Channel	
Pathway:	Membrane Transporter/Ion Channel	
Storage:	Sealed storage, away from moisture and light	
	Powder	-80°C 2 years -20°C 1 year
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)	

SOLVENT & SOLUBILITY

In Vitro	DMSO : ≥ 50 mg/mL * " \geq " means soluble, but saturation unknown.
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BIOLOGICAL ACTIVITY

Description	Tamapin TFA is a venom peptide, targeting to small conductance Ca(2+)-activated K(+) (SK) channels. Tamapin TFA is a selective blocker of SK2 (Potassium Channel). Tamapin TFA inhibits SK channel-mediated currents in pyramidal neurons of the hippocampus. Tamapin TFA can be isolated from the Indian red scorpion (Mesobuthus tamulus) ^[1] .
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REFERENCES

[1]. Pedarzani P, et al. Tamapin, a venom peptide from the Indian red scorpion (Mesobuthus tamulus) that targets small conductance Ca²⁺-activated K⁺ channels and afterhyperpolarization currents in central neurons. J Biol Chem. 2002 Nov 29;277(48):46101-9.

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

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