Tap1a

Cat. No.:	HY-P5865
Molecular Formula:	$C_{174}H_{258}N_{52}O_{55}S_7$
Molecular Weight:	4182.68
Sequence:	Asp-Asp-Cys-Leu-Gly-Met-Phe-Ser-Ser-Cys-Asp-Pro-Asn-Asn-Asp-Lys-Cys-Cys-Pro-Asn-Arg-Lys-Cys-Ser-Arg-Lys-Asp-Gln-Trp-Cys-Lys-Tyr-Gln-Leu-Trp (Disulfide bridge:Cys3-Cys18, Cys10-Cys23, Cys17-Cys30)
Sequence Shortening:	DDCLGMFSSCDPNNDKCCPNRKCSRKDQWCKYQLW (Disulfide bridge:Cys3-Cys18, Cys10-Cys23, Cys17-Cys30)
Target:	Sodium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Tap1a (Theraphotoxin-Tap1a) is a spider venom peptide that inhibits sodium channels with IC_{50}s of 80 nM and 301 nM against $Na_V1.7$ and $Na_V1.1$, respectively. Tap1a shows analgesic effects[1].
IC_{50} & Target	IC50: 80 nM ($Na_V1.7$), 301 nM ($Na_V1.1$)[1]

REFERENCES

[1]. Hu H, et al. Engineering of a Spider Peptide via Conserved Structure-Function Traits Optimizes Sodium Channel Inhibition In Vitro and Anti-Nociception In Vivo. Front Mol Biosci. 2021 Sep 21;8:742457.

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