

Product datasheet

Dendrotoxin-K, K_v1.1 blocker ab141795

2 Images

Overview

Product name	Dendrotoxin-K, K _v 1.1 blocker
Description	Highly selective, potent K _v 1.1 blocker
Biological description	Highly selective, potent K _v 1.1 blocker. Exclusively blocks the single cloned K _v 1.1 channels as opposed to dendrotoxins I, α, β and γ (Asc 1791 , 1792 , 1793 and 1794). Differentially blocks heteromers of K _v 1.1/1.χ with variable affinity in different neuronal subtypes.
Purity	> 98%
CAS Number	119128-61-9
Chemical structure	Ala-Ala-Lys-Tyr-Cys-Lys-Leu-Pro-Leu-Arg-Ile-Gly-Pro-Cys-Lys-Arg-Lys-Ile-Pro-Ser-Phe-Tyr-Tyr-Lys-Trp-Lys-Ala-Lys-Gln-Cys-Leu-Pro-Phe-Asp-Tyr-Ser-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Arg-Phe-Lys-Thr-Ile-Glu-Glu-Cys-Arg-Arg-Thr-Cys-Val-Gly

Properties

Molecular weight	6560.00
Molecular formula	C ₂₉₄ H ₄₆₂ N ₈₄ O ₇₅ S ₆
Sequence	AAKYCKLPLRIGPCKRKIPSFYKWKAKQCLPFDYSGCGGNANRFKTIIECRRTC VG (Modifications: Disulfide bonds: 5-55, 14-38, 30-51)
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in water
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one week. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
Source	<i>Dendroaspis polylepis polylepis (Black mamba).</i>

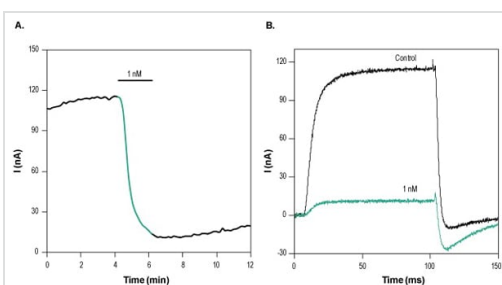
Images

Ala-Ala-Lys-Tyr-Cys-Lys-Leu-Pro-Leu-Arg-Ile-Gly-Pro-Cys-Lys-Arg-Lys-Ile-Pro-Ser-Phe-Tyr-Tyr-Lys-Trp-Lys-Ala-Lys-Gln-Cys-Leu-Pro-Phe-Asp-Tyr-Ser-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Arg-Phe-Lys-Thr-Ile-Glu-Glu-Cys-Arg-Arg-Thr-Cys-Val-Gly

Chemical Structure - Dendrotoxin-K, KV1.1 blocker

(ab141795)

2D chemical structure image of ab141795, Dendrotoxin-K, KV1.1 blocker



Functional Studies - Dendrotoxin-K, KV1.1 blocker

(ab141795)

Dendrotoxin-K inhibits KV1.1 channel currents heterologously expressed in *Xenopus* oocytes.

A. Time course at plateau of Dendrotoxin-K (ab141795) action on KV1.1 currents. Current amplitude at plateau was plotted as a function of time. Membrane potential was held at -80 mV and oocytes were stimulated by a 100 ms voltage ramp to -10 mV. 1 nM Dendrotoxin-K (applied for 2 min, green) were perfused during the period marked by the bar, (as indicated) and showed 70-80% inhibition of control current. B. Superimposed traces of channel current in the absence (black) and presence (green) of 1 nM Dendrotoxin-K (taken from experiment in A).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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