## abcam

### Product datasheet

# Iberiotoxin, high-conductance K+ channel blocker ab120379

6 References 2 Images

Overview

Product name | Iberiotoxin, high-conductance K+ channel blocker

**Description** Selective blocker of the high-conductance, Ca<sup>2+</sup>-activated K<sup>+</sup> channel

**Biological description** Selective blocker of the high-conductance, Ca<sup>2+</sup>-activated K<sup>+</sup> channel. Originally isolated from the

scorpion *Mesobuthus tamulus*. Specifically blocks K<sub>Ca</sub>1.1 (Slo) channels (K<sub>i</sub> approx. 1 nM).

**CAS Number** 129203-60-7

Chemical structure GIp-Phe-Thr-Asp-Val-Asp-Cys-Ser-Val-Ser-Lys-GIu-Cys-Trp-Ser-Val-Cys-

Lys-Asp-Leu-Phe-Gly-Val-Asp-Arg-Gly-Lys-Cys-Met-Gly-Lys-Lys-Cys-Arg-

Cys-Tyr-Gln (Disulfide bridges: 7-28, 13-33 and 17-35)

**Properties** 

Molecular weight 4230.86

Sequence XFTDVDCSVSKECWSVCKDLFGVDRGKCMGKKCRCYQ (Modifications: X-1 = Glp; Disulfide

bonds: 7-28, 13-33, 17-35)

PubChem identifier 16132435

**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 $^{\circ}$ 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  $\frac{1}{2} \int_{\mathbb{R}^{n}} \left( \frac{1}{2} \int$ 

temperature for at least 1 hour.

Toxic, refer to SDS for further information.

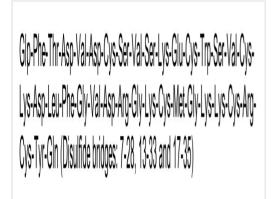
Need more advice on solubility, usage and handling? Please visit our frequently asked

questions (FAQ) page for more details.

**Source** Synthetic

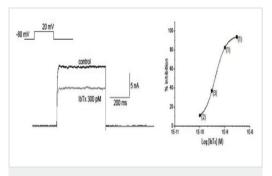
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#### **Images**



Chemical Structure - Iberiotoxin, high-conductance K+ channel blocker (ab120379)

2D chemical structure image of ab120379, lberiotoxin, high-conductance K+ channel blocker



Functional Studies - Iberiotoxin, high-conductance K+ channel blocker (ab120379)

HEK293 cells plated for 48 hours and then transfected with rat Slo27 for 24 hours. Currents from whole-cell recordings, with 1  $\mu$ M Ca<sup>2+</sup> in the electrode solution. Cells voltage-clamped at -80 mV, with currents activated by 500 ms depolarization to +20 mV. Concentration-inhibition relationship produces an IC<sub>50</sub> of 412 pM.

(Number of experimental determinations shown in brackets).

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

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