# abcam

# Product datasheet

# GsMTx-4, mechanosensitive and stretch-activated ion channel inhibitor ab141871

★★★★★ 1 Abreviews 29 References 2 Images

#### Overview

**Product name** GsMTx-4, mechanosensitive and stretch-activated ion channel inhibitor

**Description** Mechanosensitive and stretch-activated ion channel inhibitor

**CAS Number** 1209500-46-8

Chemical structure Gly-Cys-Leu-Glu-Phe-Trp-Trp-Lys-Cys-Asn-Pro-Asn-Asp-

Asp-Lys-Cys-Cys-Arg-Pro-Lys-Leu-Lys-Cys-Ser-Lys-Leu-

Phe-Lys-Leu-Cys-Asn-Phe-Ser-Phe-NH<sub>2</sub>

(Disulfide bridges: 2-17, 9-23 and 16-30)

#### **Properties**

Molecular weight 4095.85

**Molecular formula**  $C_{185}H_{273}N_{49}O_{45}S_6$ 

Sequence GCLEFWWKCNPNDDKCCRPKLKCSKLFKLCNFSF (Modifications: Phe-34 = C-terminal

amide, Disulfide bridges: 2-17, 9-23 and 16-30)

PubChem identifier 90488987

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 to 1mg/ml

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 month. 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.

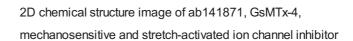
Source Grammostola rosea

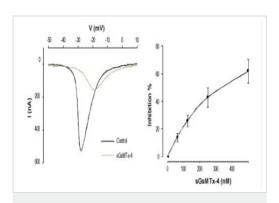
**Images** 

Gly-Cys-Leu-Glu-Phe-Trp-Trp-Lys-Cys-Asn-Pro-Asn-Asp-Asp-Lys-Cys-Cys-Arg-Pro-Lys-Leu-Lys-Cys-Ser-Lys-Leu-Phe-Lys-Leu-Cys-Asn-Phe-Ser-Phe-NH<sub>2</sub>

(Disulfide bridges: 2-17, 9-23 and 16-30)

Chemical Structure - GsMTx-4, mechanosensitive and stretch-activated ion channel inhibitor (ab141871)





Functional Studies - GsMTx-4, mechanosensitive and stretch-activated ion channel inhibitor (ab141871) GsMTx-4 (<u>ab141870</u>) inhibits Na $_{
m V}$ 1.7 channel currents expressed in *Xenopus* oocytes. Na $_{
m V}$ 1.7 currents were elicited by 100 ms voltage ramp from a holding potential of -100 mV to +30 mV, applied every 10 seconds using whole-cell voltage clamp technique. Left: Superimposed traces of Na $_{
m V}$ 1.7 currents before (black) and during (green) application of 500 nM GsMTx-4 (<u>ab141870</u>). Right: GsMTx-4 dose response inhibition of Na $_{
m V}$ 1.7 currents.

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

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