

GaTx2

GaTx2: Toxin Properties

GaTx2 (gating modifier of anion channels 2) was isolated from the venom of *Leiurus quinquestriatus hebraeus*. **GaTx2** is the most potent peptide inhibitor of ClC-2 chloride channel ever described. K_d value is close to 20 pM. **GaTx2** slows ClC-2 activation but without altering channel conductance. The effect is voltage-dependent. This inhibitory effect was highlighted on rabbit ClC-2 channels expressed in oocytes. It has no effect on ClC-0, ClC-1, ClC-3, ClC-4, CFTR, GABA_C, Xenopus Cl_{Ca}, Shaker B or Kv1.2 channels. Structurally, **GaTx2** is composed of two β-strands and one α-helix. This peptide is also called Leiuropeptide II. Bears 89, 93 and 96% identity with OdK1, neurotoxin PO1 and leiuropeptide III, respectively.

Product Specifications

AA sequence: H-Val-Ser-Cys³-Glu-Asp-Cys⁶-Pro-Asp-His-Cys¹⁰-Ser-Thr-Gln-Lys-Ala-Arg-Ala-Lys-Cys¹⁹-Asp-Asn-Asp-Lys-Cys²⁴-Val-Cys²⁶-Glu-Pro-Ile-OH (Disulfide bonds between Cys³-Cys⁶), Cys⁶-Cys²⁴, and Cys¹⁰-Cys²⁶)

Length (aa): 29

Formula: $C_{125}H_{199}N_{39}O_{47}S_6$

Molecular Weight: 3191.25 Da

Appearance: White lyophilized solid

Solubility: water and saline buffer

CAS number: not available

Source: Synthetic

