Tertiapin Q

Product name: Tertiapin Q
Synonyms:

Catalog #: 08TER001

Product description
Tertiapin has been isolated from the venom of the Honeybee Apis mellifera (African tarantula). Tertiapin-Q is an oxidation-resistant mutant of the wild-type tertiapin where Methione 13 has been replaced by a Glutamine. Tertiapin-Q blocks the inwardly rectifying Kᵢᵩ₁.₁ (ROMK1) and Kᵢᵩ₃.₁/₃.₄ (GIRK1/GIRK4 also known as IKACH) potassium channels with Kd values of around 2 nM and 8 nM respectively. Tertiapin-Q also inhibits calcium-activated large conductance BK potassium channels (Kᵢ₀₁.₁) in a concentration and voltage-dependent manner (iC₅₀ ~ 5 nM), in addition to inhibiting Kᵢᵩ₃.₁/₃.₂ (GIRK1/GIRK2) heteromultimer potassium channels with a Kd close to 270 nM. Tertiapin-Q can prevent dose-dependent acetylcholine(ACh)-induced atrioventricular blocks in mammalian hearts, as KCNJ3/KCNJ5 channels (also named I(KACh)), are activated by ACh found in mammalian myocytes.

Product specifications
Disulfide bonds: C₁₀₈H₁₇₉N₃₃O₂₄S₅
Length (aa): 18
Formula: C₇₉H₁₃₁N₃₁O₂₄S₄
Appearance: White lyophilized solid
Molecular Weight: 2456 Da
CAS number:
Source: Synthetic
Counterion: TFA salts
Solubility: Water or saline buffer, 5 mg/mL maximum (recommendation)

Formulation
Expiry date: One year
Use restrictions: For laboratory use only. Not for drug, household or other uses. Not for use in diagnostic or therapeutic procedures.

References
- Kanjhan, R., C et al. (2005) Tertiapin-Q blocks recombinant and native large conductance K+ channels in a use-dependent manner, J Pharmacol Exp Ther.