

PRODUCT INFORMATION



Tertiapin LQ (trifluoroacetate salt)

Item No. 37496

Formal Name: 2,2'-((2S,5S,8R,11S,14S,17S,20R,25R,28S,31S,34S,37S,40S,42aS,49S,52R)-11-((1H-indol-3-yl)methyl)-20-((2-(((S)-6-amino-1-(((S)-1,6-diamino-1-oxohexan-2-yl)amino)-1-oxohexan-2-yl)amino)-2-oxoethyl)carbamoyl)-5-(3-amino-3-oxopropyl)-14,17-bis(4-aminobutyl)-52-((S)-2-((S)-2-aminopropanamido)-4-methylpentanamido)-34,37,40-tri((S)-sec-butyl)-31-(3-guanidinopropyl)-2-isobutyl-3,6,9,12,15,18,26,29,32,35,38,41,42,48,51-pentadeca-oxodotetracontahydro-1H,24H-25,8-(epimin-oethanoiminopropanodithiomethano)pyrrolo[1,2-x][1,2]dithia[5,8,11,14,17,20,23,24,29,32,35,38,41]tridecaazacyclotetracontine-28,49-diyl)diacetamide, trifluoroacetate salt

Synonym: TPNLQ

Peptide Sequence: ALCNCNRHIIPLQCWKKCGKK-NH₂

MF: C₁₀₆H₁₇₉N₃₃O₂₄S₄ • XCF₃COOH

FW: 2,428.0

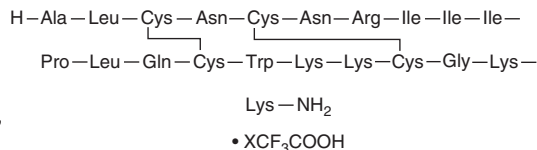
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

Tertiapin LQ (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the tertiapin LQ (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Tertiapin LQ is a peptide derivative of the honeybee venom peptide tertiapin and an inhibitor of inwardly rectifying potassium (K_{ir}) channels.^{1,2} It inhibits heteromultimeric potassium channels composed of G protein-activated inward rectifier potassium channel 1 (GIRK1) and GIRK4, also known as K_{ir}3.1 and K_{ir}3.4, respectively, as well as the inward-rectifier potassium channel 1 (K_{ir}1.1). *In vivo*, tertiapin LQ suppresses the Purkinje cell pause response to a conditional stimulus in ferrets.²

References

1. Ye, W., Chang, R.B., Bushman, J.D., *et al.* The K⁺ channel K_{IR}2.1 functions in tandem with proton influx to mediate sour taste transduction. *Proc. Natl. Acad. Sci. USA* **113**(2), E229-E238 (2016).
2. Johansson, F. and Hesslow, G. Kir3 channel blockade in the cerebellar cortex suppresses performance of classically conditioned Purkinje cell responses. *Sci. Rep.* **10**(1), 15654 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM