LKT Laboratories, Inc.

Apamin

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Product Information

Product ID A6002
CAS No. 24345-16-2
Chemical Name

H-Cys-Asn-Cys-Lys-Ala-Pro-Glu-Thr-Ala-Leu-Cys-Ala-Arg-Arg-Cys-Gln-Gln-His-NH_2 (Cys1-Cys11, Cys3-Cys15)

Synonym

Formula $C_{79}H_{131}N_{31}O_{24}S_4$
Formula Wt. 2027.37
Melting Point
Purity ≥95%
Solubility Soluble in water (1 mg/mL).

Bulk quanitites available upon request

Product ID	Size
A6002	0.5 mg
A6002	1 mg
A6002	2.5 mg

Store Temp -20˚C
Ship Temp Ambient
Description Apamin is a peptide bee venom toxin that acts as an antagonist at K+ channels. Apamin inhibits small- and intermediate-conductance Ca2+-activated K+ (SK2/3, IK) channels; it blocks the pore region, preventing K+ ion transport and lowering the threshold for action potential development. Apamin exhibits neuroprotective and cognition enhancing benefits, improving visiospatial learning deficits in animal models undergoing a water maze task in an in vivo model of neurofibromatosis 1.

References

Dalaklioglu S, Ozbey G. Role of different types of potassium channels in the relaxation of corpus cavernosum induced by resveratrol. Pharmacogn Mag. 2014 Jan;10(37):47-52. PMID: 24696545.

Kallarackal AJ, Simard JM, Bailey AM. The effect of apamin, a small conductance calcium activated potassium (SK) channel blocker, on a mouse model of neurofibromatosis 1. Behav Brain Res. 2013 Jan 15;237:71-5. PMID: 22983217.

Lamy C, Goodchild SJ, Weatherall KL, et al. Allosteric block of KCa2 channels by apamin. J Biol Chem. 2010 Aug 27;285 (35):27067-77. PMID: 20562108.