

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

Apamin

Product overview

Name	Apamin
Cat No	HB1051
Biological action	Inhibitor
Purity	>80%
Description	Potent, selective K _{Ca} 2 channel subfamily inhibitor

Biological Data

Biological description	Potent, selective K _{Ca} 2 channel subfamily inhibitor (IC ₅₀ values are 3.3 nM and 83 pM for hK _{Ca} 2.1 and rK _{Ca} 2.2 channels respectively). Found in the venom of <i>Apis mellifera</i> bee. Blood brain barrier permeable. Displays anti-inflammatory properties.
-------------------------------	--

Solubility & Handling

Storage instructions	-20°C (desiccate)
Solubility overview	Soluble in water (1 mg/ml)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Molecular Weight	2027.34
Chemical structure	
Molecular Formula	C ₇₉ H ₁₃₁ N ₃₁ O ₂₄ S ₄
CAS Number	24345-16-2
PubChem identifier	16133797
SMILES	[H]N[C@H]1C5SSC[C@@H]2NC(=O)[C@H](CC(C)C)NC(=O)[C@H](C)NC(=O)[C@@H](NC(=O)[C@H](CCC(O)=O)NC(=O)[C@@H]3CCCN3C(=O)[C@H](C)NC(=O)[C@H](CCCCN)NC(=O)[C@H](C)NC(=O)[C@H](C)NC(=O)[C@@H](NC(=O)[C@H](CCCNC(N)=N)NC(=O)[C@H](CCCNC(N)=N)NC(=O)[C@H](C)NC2=O)C(=O)N[C@@H](CCC(N)=O)C(=O)N[C@@H](CCC(N)=O)C(=O)N[C@@H](CC2=CNC=N2)C(N)=O)NC(=O)[C@H](CC(N)=O)NC1=O)[C@@H](C)O
InChiKey	YVIIHEKJCKCXOB-STYWVVQQA-N

References

Pharmacological characterization of small-conductance Ca(2+)-activated K(+) channels stably expressed in HEK 293 cells.

Strøbaek D *et al* (2000) Br J Pharmacol 129(5)

PubMedID [10696100](#)

Behavioral effects of apamin, a selective inhibitor of the SK(Ca)-channel, in mice and rats.

van der Staay FJ *et al* (1999) Neurosci Biobehav Rev 23(8)

PubMedID [10643819](#)

The Protective Effect of Apamin on LPS/Fat-Induced Atherosclerotic Mice.

Kim SJ *et al* (2012) Evid Based Complement Alternat Med 2012

PubMedID [22645626](#)

Apamin.

Habermann E (1984) Pharmacol Ther 25(2)

PubMedID [6095335](#)
