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

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

customercare-usa@hellobio.com

DATASHEET

ω-Conotoxin MVIIC

Product overview

Name	ω-Conotoxin MVIIC
Cat No	HB1219
Biological action	Blocker
Purity	>99%
Special requirements	As this product is a toxin, customers are required to complete a short end user declaration when ordering. Our customer care team will be happy to help you with this.
Description	This is a home office notifiable schedule 5 toxin. N-, P- and Q-type voltage-dependent Ca^{2+} channel blocker

Biological Data

Biological description	$Ca_v2.1$ (P/Q-type) and $Ca_v2.2$ (N-type) voltage-dependent Ca^{2+} channel blocker. Peptide neurotoxin.

Solubility & Handling

Storage instructions	-20°C (desiccate)
Solubility overview	Soluble in water (1mg/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

Chemical name	H-Cys(1)-Lys-Gly-Lys-Gly-Ala-Pro-Cys(2)-Arg-Lys-Thr-Met-Tyr-Asp-Cys(3)-Cys(1)-Ser-Gly-Ser-Cys(2)-Gly-Arg-Arg-Gly-Lys-Cys(3)-NH2
Molecular Weight	2749
Chemical structure	
Molecular Formula	$C_{106}H_{178}N_{40}O_{32}S_7$
CAS Number	147794-23-8
PubChem identifier	56841670
SMILES	C[C@H]1C(=O)N2CCC[C@H]2C(=O)N[C@H]3CSSC[C@H]4C(=O)NCC(=O)N[C@H](C(=O)N[C@H](C(=O)NCC(=O)N[C@H](C(=O)N[C@@H](CSSC[C@@H](C(=O)N[C@@H](CSSC[C@@H](C(=O)N[C@H](C(=O)NCC(=O)N[C@H](C(=O)NCC(=O)N1)CCCCN)CCCCN)N)C(=O)N[C@H](C(=O)NCC(=O)N[C@H](C(=O)N4)CO)CO)NC(=O)[C@@H](NC(=O)[C@@H](NC(=O)[C@@H](NC(=O)[C@@H](NC(=O)[C@@H](NC(=O)[C@@H](NC3=O)CCCNC(=N)N)CCCCN)[C@@H](C)O)CCSC)CC5=CC=C(C=C5)O)CC(=O)O)C(=O)N)CCCCN)CCCNC(=N)N)CCCNC(=N)N
InChi	InChI=1S/C106H178N40O32S7/c1-53-103(178)146-36-15-23-75(146)101(176)144-74-52-185-183-49-71-89(164)126-43-79(154)130-62(21-13-34-120-105(115)116)90(165)133-60(20-12-33-119-104(113)114)87(162)124-42-78(153)129-61(18-6-10-31-109)91(166)140-70(83(112)158)48-
InChiKey	FHVUTHWUIUXZBY-QLANQDRJSA-N
MDL number	MFCD00214640

References

Omega-conotoxin MVIIC attenuates neuronal apoptosis in vitro and improves significant recovery after spinal cord injury in vivo in rats.

Oliveira KM *et al* (2014) Int J Clin Exp Pathol 7(7)
PubMedID 25120731

Identification of three subunits of the high affinity omega-conotoxin MVIIC-sensitive Ca2+ channel.

Liu H *et al* (1996) J Biol Chem 271(23)
PubMedID 8662888

Inhibition of calcium channels in rat central and peripheral neurons by omega-conotoxin MVIIC.

McDonough et al (1996) J Neurosci 16(8)
PubMedID 8786437