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DATASHEET

GsMTx4

Product overview

Name	GsMTx4
Cat No	HB1161
Alternative names	M-TRTx-Gr1a, M-theraphotoxin-Gr1a
Biological action	Inhibitor
Purity	>95%
Description	Piezo and TRP mechanosensitive channels inhibitor

Biological Data

Biological description Gating modifier peptide from spider venom which selectively inhibits mechanosensitive ion channels such as Piezo and TRP.

It is commonly used in the study mechanosensitive channels function in physiology and pathology.

It has also recently been reported to inhibit a stretch-activated BK channel (SAKcaC) and TACAN, a mechanosensitive ion channel involved in pain regulation.

Solubility & Handling

Storage instructions	-20 °C
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-Gly-DL-Cys(1)-DL-Leu-DL-Glu-DL-Phe-DL-Trp-DL-Trp-DL-Lys-DL-Cys(2)-DL-Asn-DL-Pro-DL-Asn-DL-Asp-DL-Asp-DL-Lys-DL-Cys(3)-DL-Cys(1)-DL-Arg-DL-Pro-DL-Lys-DL-Leu-DL-Lys-DL-Cys(2)-DL-Ser-DL-Lys-DL-Leu-DL-Phe-DL-Lys-DL-Leu-DL-Cys(3)-DL-Asn-DL-Phe-DL-Ser-DL-Phe-NH ₂
Molecular Weight	4095.86
Chemical structure	
Molecular Formula	C ₁₈₅ H ₂₇₃ N ₄₉ O ₄₅ S ₆
CAS Number	1209500-46-8
PubChem identifier	90488987
SMILES	[H]NCC(=O)N[C@@H]1CSSC[C@@H]2NC(=O)[C@@H]3CSSC[C@@H](NC(=O)[C@@H](CC(C)C)NC(=O)[C@@H](CCCCN)NC(=O)[C@@H](CC4=CC=CC=C4)NC(=O)[C@@H](CC(C)C)NC(=O)[C@@H](CCCCN)NC(=O)[C@@H](CO)NC(=O)[C@@H](CSCC[C@@H](NC(=O)[C@@H](CCCCN)NC(=O)[C@@H](CC4=CNC5=C4C=CC=C5)NC(=O)[C@@H](CC4=CC=CC=C4)NC(=O)[C@@H](CCC(O)=O)NC(=O)[C@@H](CC(C)C)NC1=O)C(=O)N[C@@H](CC(N)=O)C(=O)N1CCC[C@@H]1C(=O)N[C@@H](CC(N)=O)C(=O)N[C@@H](CC(O)=O)C(=O)N[C@@H](CC(O)=O)C(=O)N[C@@H](CCCCN)C(=O)N3)NC(=O)[C@@H](CCCCN)NC(=O)[C@@H](CC(C)C)NC(=O)[C@@H](CCCCN)NC(=O)[C@@H]1CCCC1C(=O)[C@@H](CCNC(N)=N)NC2=O)C(=O)N[C@@H](CC(N)=O)C(=O)N[C@@H](CC1=CC=CC=C1)C(=O)N[C@@H](CO)C(=O)N[C@@H](CC1=CC=CC=C1)C(N)=O
InChiKey	WVDNTWXIIKNMHY-UHFFFAOYSA-N

References

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