

DATASHEET

BAM (8-22)

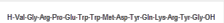
Product overview

Name	BAM (8-22)
Cat No	HB2922
Biological description	<p>BAM (8-22) is a product of the opioid precursor proenkephalin A. It is a potent activator of Mas-related GPCR (MRGPRs): MRGPRC C11 and hMRGPRX1.</p> <p>BAM (8-22) does not contain the met-enkephalin motif (unlike BAM-22P) and therefore lacks affinity for opioid receptors.</p>
Biological action	Active in vivo. Produces itch and nociceptive sensations.
Purity	Activator
Description	>95%
	Product of proenkephalin A. MRGPRs activator.

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	1971.22
Chemical structure	
Molecular Formula	C ₉₁ H ₁₂₇ N ₂₅ O ₂₃ S
Sequence (one letter)	VGRPEWWMQKRYG
Sequence (three letter)	Val-Gly-Arg-Pro-Glu-Trp-Trp-Met-Asp-Tyr-Gln-Lys-Arg-Tyr-Gly
CAS Number	412961-36-5
PubChem identifier	16158367
SMILES	<chem>CC(C)[C@@H](C(=O)NCC(=O)N[C@@H](CCCNC(=N)N)C(=O)N1CCC[C@H]1C(=O)N[C@@H](C(=O)O)C(=O)N[C@@H](CC2=CNC3=CC=CC=C32)C(=O)N[C@@H](CC4=CNC5=CC=CC=C54)C(=O)N[C@@H](CCSC)C(=O)N[C@@H](CC(=O)O)C(=O)N[C@@H](CC6=CC=C(C=C6)O)C(=O)N[C@@H](CCC(=O)N)C(=O)N[C@@H](CCCCN)C(=O)N[C@@H](CCCNC(=N)N)C(=O)N[C@@H](C7=CC=C(C=C7)O)C(=O)NCC(=O)O)N</chem>
InChiKey	GOEYECACIBFJGZ-NPAGUKBMSA-N
Protein length	15

References

BAM8-22 peptide produces itch and nociceptive sensations in humans independent of histamine release.

Sikand et al (2011) J Neurosci 31(20)

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Targeting human Mas-related G protein-coupled receptor X1 to inhibit persistent pain.

Li et al (2017) Proc Natl Acad Sci U S A. 114(10)

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Mas-related G-protein-coupled receptors inhibit pathological pain in mice.

Guan et al (2010) Proc Natl Acad Sci U S A. 107(36)

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