

Certificate of Analysis

Print Date: Jul 22nd 2022

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Product Name: [Phe⁸Ψ(CH-NH)-Arg⁹]-Bradykinin Catalog No.: 3229 Batch No.: 5

CAS Number: 118122-39-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{50}H_{75}N_{15}O_{10}$ Batch Molecular Weight: 1046.23

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-ψ(CH-NH)-Arg

2. ANALYTICAL DATA

HPLC: Shows 98.0% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino	Acid'	Theoretical	Actual	Amino A	cid Theo	retical A	ctual
AIIIIIO	ACIU	rneorenca	HCLUAL	AIIIII A	iciu i neo	HELLCALA	CLUAI

Ala			Lys	
Arg	2.00	0.99	Met	
Asx			Phe	2.00
Cys			Pro	3.00
Glx			Ser	1.00
Gly	1.00	1.02	Thr	
His			Trp	
lle			Tyr	
Leu			Val	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Product Information

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CAS Number: 118122-39-7

Description:

[Phe⁸Ψ(CH-NH)-Arg⁹]-Bradykinin is a selective bradykinin B_2 receptor agonist that is resistant to carboxypeptidase cleavage. 5-fold more potent and exhibits a more prolonged duration of action than bradykinin (Cat No. 3004) in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{50}H_{75}N_{15}O_{10}$ Batch Molecular Weight: 1046.23

Physical Appearance: White lyophilised solid

Peptide Sequence:

Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-ψ(CH-NH)-Arg

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in water

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 μ m filter to remove potential bacterial contamination whenever possible.

References:

Leeb-Lundberg *et al* (2005) International union of pharmacology. XLV. Classification of the kinin receptor family: from molecular mechanisms to pathophysiological consequences. Pharmacol.Rev. *57* 27. PMID: 15734727.

Marceau et al (2002) Kinin receptors: functional aspects. Int.Immunopharmacol. 2 1729. PMID: 12489786.

Drapeau *et al* (1988) [Phe⁸Ψ(CH₂-NH)Arg⁹]bradykinin, a B₂ receptor selective agonist which is not broken down by either kininase I or kininase II. Eur.J.Pharmacol. *155* 193. PMID: 2907489.

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