

Certificate of Analysis

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Product Name: Lys-[Des-Arg⁹]Bradykinin

Catalog No.: 3225

Batch No.: 5

CAS Number: 71800-36-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅₀H₇₃N₁₃O₁₁
Batch Molecular Weight: 1032.21
Physical Appearance: White lyophilised solid
Net Peptide Content: 83%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Desiccate at -20°C
Peptide Sequence: Lys-Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe

2. ANALYTICAL DATA

HPLC: Shows 95.9% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala			Lys	1.00	1.00
Arg	1.00	1.00	Met		
Asx			Phe	2.00	2.00
Cys			Pro	3.00	2.99
Glx			Ser	1.00	0.72
Gly	1.00	1.01	Thr		
His			Trp		
Ile			Tyr		
Leu			Val		

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

Product Name: Lys-[Des-Arg⁹]Bradykinin**Catalog No.:** 3225**Batch No.:** 5

CAS Number: 71800-36-7

Description:

Endogenous potent and highly selective bradykinin B₁ receptor agonist (K_i values are 0.12 and > 30000 nM at human B₁ and B₂ receptors respectively). Hypotensive agent that reduces peripheral vascular resistance in vivo. 16-fold more potent than [Des-Arg⁹]Bradykinin (Cat No. 3005).

Physical and Chemical Properties:Batch Molecular Formula: C₅₀H₇₃N₁₃O₁₁

Batch Molecular Weight: 1032.21

Physical Appearance: White lyophilised solid

Peptide Sequence:

Lys-Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe

Storage: Desiccate 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.

Net Peptide Content: 83% (Remaining weight made up of counterions and residual water).**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 as 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 µm filter to remove potential bacterial contamination whenever possible.

References:

Drapeau *et al* (1991) Hypotensive effects of Lys-des-Arg⁹-Bradykinin and metabolically protected agonists of B₁ receptors for kinins. *J.Pharmacol.Exp.Ther.* **259** 997. PMID: 1662280.

Regoli *et al* (2001) Classification of kinin receptors. *Biol.Chem.* **382** 31. PMID: 11258668.

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

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