



# **Certificate of Analysis**

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Product Name: Lys-Bradykinin Catalog No.: 3227 Batch No.: 2

CAS Number: 342-10-9 EC Number: 206-438-0

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{56}H_{85}N_{17}O_{12}$ 

**Batch Molecular Weight:** 1188.39

Physical Appearance: White lyophilised solid

Net Peptide Content: 75% Counter Ion: TFA

**Solubility:** Soluble to 5 mg/ml in water

Storage: Desiccate at -20°C

Peptide Sequence: Lys-Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-Arg

2. ANALYTICAL DATA

HPLC: Shows 96.9% purity

Mass Spectrum: Consistent with structure

### 3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys	1.00	0.96
Arg	2.00	1.89	Met		
Asx			Phe	2.00	1.92
Cys			Pro	3.00	3.11
Glx			Ser	1.00	0.86
Gly	1.00	1.00	Thr		
His			Trp		
lle			Tyr		
Leu			Val		



# **Product Information**

Print Date: Jan 13th 2016

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#### **Description:**

Endogenous bradykinin receptor agonist that displays some selectivity for the  $B_2$  receptor ( $K_i$  values are 2.54 and 0.63 nM at human  $B_1$  and  $B_2$  receptors respectively). Hypotensive agent that reduces peripheral vascular resistance in vivo. Twice as potent as bradykinin (Cat No. 3004) in vivo.

### **Physical and Chemical Properties:**

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Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

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

Storage: Desiccate at -20°C

## Solubility & Usage Info:

Soluble to 5 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:** 75% (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 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:

Regoli and Barabe (1980) Pharmacology of bradykinin and related kinins. Pharmacol.Rev. 32 1. PMID: 7015371.

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

**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.