

## Certificate of Analysis

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**Product Name:** Sar-[D-Phe<sup>8</sup>]-des-Arg<sup>9</sup>-Bradykinin

**Catalog No.:** 3230

**Batch No.:** 6

CAS Number: 126959-88-4

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>47</sub> H <sub>66</sub> N <sub>12</sub> O <sub>11</sub>
<b>Batch Molecular Weight:</b>	975.11
<b>Physical Appearance:</b>	White lyophilised solid
<b>Net Peptide Content:</b>	71%
<b>Counter Ion:</b>	TFA
<b>Solubility:</b>	Soluble to 2 mg/ml in water
<b>Storage:</b>	Desiccate at -20°C
<b>Peptide Sequence:</b>	Sar-Arg-Pro-Pro-Gly-Phe-Ser-Pro-D-Phe

### 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 98.9% purity
<b>Mass Spectrum:</b>	Consistent with structure

### 3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala				Lys			
Arg	1.00		1.02	Met			
Asx				Phe	2.00		1.95
Cys				Pro	3.00		2.95
Glx				Ser	1.00		1.00
Gly	1.00		1.02	Thr			
His				Trp			
Ile				Tyr			
Leu				Val			

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

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**Description:**

Potent and selective bradykinin B<sub>1</sub> receptor agonist (EC<sub>50</sub> = 9.02 nM in rabbit aorta) that is resistant to aminopeptidase, kininase I and II (ACE) and neutral endopeptidase cleavage. Exhibits hypotensive and angiogenic activity *in vivo*.

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Batch Molecular Weight: 975.11

Physical Appearance: White lyophilised solid

**Peptide Sequence:**

Sar-Arg-Pro-Pro-Gly-Phe-Ser-Pro-D-Phe

**Storage:** Desiccate at -20°C**Solubility & Usage Info:**

Soluble to 2 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:** 71% (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:**

**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.

**Drapeau et al** (1993) Development and *in vivo* evaluation of metabolically resistant antagonists of B<sub>1</sub> receptors for kinins. *J.Pharmacol.Exp.Ther.* **266** 192. PMID: 8392550.

**Drapeau et al** (1991) Hypotensive effects of Lys-des-Arg<sup>9</sup>-Bradykinin and metabolically protected agonists of B<sub>1</sub> receptors for kinins. *J.Pharmacol.Exp.Ther.* **259** 997. PMID: 1662280.

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