

# Certificate of Analysis

**Product Name:** A 71915  
CAS Number: 132956-87-7

**Catalog No.:** 6715 **Batch No.:** 5

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>69</sub>H<sub>116</sub>N<sub>26</sub>O<sub>15</sub>S<sub>2</sub>  
**Batch Molecular Weight:** 1613.95  
**Physical Appearance:** White lyophilised solid  
**Counter Ion:** TFA  
**Solubility:** Soluble to 1 mg/ml in water  
**Storage:** Store at -20°C  
**Peptide Sequence:** Arg-Cys-Cha-Gly-Gly-Arg-Ile-Asp-Arg-Ile-  
└───┬───┘  
D-Tic-Arg-Cys-NH<sub>2</sub>

## 2. ANALYTICAL DATA

**HPLC:** Shows 96.7% purity  
**Mass Spectrum:** Consistent with structure

## 3. AMINO ACID ANALYSIS DATA

	Amino Acid Theoretical		Actual	
Ala				Lys
Arg	4.00	3.81		Met
Asx	1.00	1.04		Phe
Cys	2.00	Detected		Pro
Glx				Ser
Gly	2.00	1.98		Thr
His				Trp
Ile	2.00	1.98		Tyr
Leu				Val

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

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**5**

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**Description:**

A 71915 is a highly potent and competitive natriuretic peptide receptor A (NPRA) antagonist ( $pK_i = 9.18$ ). Reduces brain natriuretic peptide (BNP, Cat. No. 3522)-induced scratching in mice.

**Physical and Chemical Properties:**

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Physical Appearance: White lyophilised solid

**Peptide Sequence:**

Arg-Cys-Cha-Gly-Gly-Arg-Ile-Asp-Arg-Ile-

└───┬───┘  
D-Tic-Arg-Cys-NH<sub>2</sub>

**Storage:** Store at -20°C

**Solubility & Usage Info:**

Soluble to 1 mg/ml in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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 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:**

**Kiguchi *et al*** (2016) Spinal functions of B-type natriuretic peptide, gastrin-releasing peptide, and their cognate receptors for regulating itch in mice. *J.Pharmacol.Exp.Ther.* **356** 596. PMID: 26669425.

**Moro *et al*** (2004) Functional and pharmacological characterization of the natriuretic peptide-dependent lipolytic pathway in human fat cells. *J.Pharmacol.Exp.Ther.* **308** 984. PMID: 14634036.

**Delporte *et al*** (1992) Discovery of a potent atrial natriuretic peptide antagonist for ANPA receptors in the human neuroblastoma NB-OK-1 cell line. *Eur.J.Pharmacol.* **224** 183. PMID: 1334838.

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