

Certificate of Analysis

Print Date: Jun 9th 2023

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Catalog No.: 1606 Batch No.: 11 Product Name: **Astressin**

170809-51-5 CAS Number:

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{161}H_{269}N_{49}O_{42}$

Batch Molecular Weight: 3563.2

White lyophilised solid **Physical Appearance:**

TFA Counter Ion:

Solubility: Soluble to 1 mg/ml in 10% Acetic acid / water

Storage: Store at -20°C

D-Phe-His-Leu-Leu-Arg-Glu-Val-Leu-Glu-Nle-**Peptide Sequence:**

Ala-Arg-Ala-Glu-Gln-Leu-Ala-Gln-cyclo-(- y Glu-Ala-His-a-Lys)-Asn-Arg-Lys-Leu-Nie-Glu-lie-lie-NH2

2. ANALYTICAL DATA

HPLC: Shows 95.4% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

| Amino Acid | l Theoretical | Actual | Amino Acid | Theoretical | Actua |
|------------|---------------|--------|------------|-------------|-------|
| Ala | 4.00 | 3.89 | Lys | 2.00 | 2.00 |
| Arg | 3.00 | 3.01 | Met | | |
| Asx | 1.00 | 1.04 | Phe | 1.00 | 3.00 |
| Cys | | | Pro | | |
| Glx | 7.00 | 7.19 | Ser | | |
| Gly | | | Thr | | |
| His | 2.00 | 2.01 | Trp | | |
| lle | 2.00 | 1.83 | Tyr | | |
| Leu | 5.00 | 4.89 | Val | 1.00 | 0.96 |

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

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Product Information

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Product Name: Astressin Catalog No.: 1606 11

CAS Number: 170809-51-5

Description:

Astressin is a potent corticotropin-releasing factor (CRF) receptor antagonist (K_i values are 2, 1.5 and 1 nM at CRF₁, CRF_{2 α} and CRF_{2 β}). Reduces ACTH secretion, blocks delayed gastric emptying and is neuroprotective in vivo.

Physical and Chemical Properties:

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Batch Molecular Weight: 3563.2

Physical Appearance: White lyophilised solid

Peptide Sequence:

D-Phe-His-Leu-Leu-Arg-Glu-Val-Leu-Glu-Nle-Ala-Arg-Ala-Glu-Gln-Leu-Ala-Gln-cyclo-(- y Glu-Ala-His- s-Lys)-Asn-Arg-Lys-Leu-Nle-Glu-Ile-Ile-NH₂ Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 10% Acetic acid / 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.

Licensing Information:

Sold with the permission of the SALK Institute

References:

Martinez et al (1999) Peripheral injection of a new corticotropin-releasing factor (CRF) antagonist, astressin, blocks peripheral CRF- and abdominal surgery-induced delayed gastric emptying in rats. J.Pharmacol.Exp.Ther. 290 629. PMID: 10411571.

Perrin and Vale (1999) Corticotropin releasing factor receptors and their ligand family. Ann.N.Y.Acad.Sci. 885 312. PMID: 10816663.

Maecker *et al* (1997) Astressin, a novel and potent CRF antagonist, is neuroprotective in the hippocampus when administered after a seizure. Brain Res. **744** 166. PMID: 9030428.

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