

Certificate of Analysis

Print Date: Dec 5th 2024

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Product Name: Stressin I Catalog No.: 1608 Batch No.: 11

CAS Number: 935739-46-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀₃H₃₃₇N₅₇O₅₆

Batch Molecular Weight: 4472.24

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Ac-Pro-Pro-IIe-Ser-Leu-Asp-Leu-Thr-D-Phe-

His-Leu-Leu-Arg-Glu-Val-Leu-Glu-NIe-Ala-Arg-Ala-Glu-Gln-Leu-Ala-Gln-Gln-cyclo-(-γ-Glu-His-Ser-ε-Lγs)-Arg-Lγs-Leu-NIe-Glu-IIe-IIe-NH₂

2. ANALYTICAL DATA

HPLC: Shows 96.2% purity

Mass Spectrum: Consistent with structure



Product Information

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Description:

Stressin I is a potent and selective corticotropin releasing factor receptor-1 (CRF₁) agonist (K_i values are 1.5 and 224 nM for CRF₁ and CRF₂ receptors respectively). Increases ACTH levels and increases faecal pellet output in vivo following i.p. administration.

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Peptide Sequence:

Ac-Pro-Pro-He-Ser-Leu-Asp-Leu-Thr-D-Phe-His-Leu-Leu-Arg-Glu-Val-Leu-Glu-NIe-Ala-Arg-Ala-Glu-Gln-Leu-Ala-Gln-Gln-cyclo-(-γ-Glu-His-Ser-ε-Lys)-Arg-Lys-Leu-NIe-Glu-He-He-NH₂ 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 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.

Licensing Information:

Sold with the permission of the SALK Institute

References:

Bruchas et al (2009) CRF1-R activation of the dynorphin/kappa opioid system in the mouse basolateral amygdala mediates anxiety-like behavior. PLoS One. **4** e8528. PMID: 20052275.

Rivier et al (2007) Stressin₁-A, a potent cortico. releasing factor receptor 1 (CRF₁)-selective peptide agonist. J.Med.Chem. **50** 1668. PMID: 17335188.

Rivier et al (2002) Receptor-selective cortico. releasing factor analogs. Endocrin.Soc.Abstr. P2-50.

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