1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{166}\text{H}_{274}\text{N}_{46}\text{O}_{53}\text{S}_{2} \)

Batch Molecular Weight: 3827

Physical Appearance: White lyophilised solid

Net Peptide Content: 83%

Counter Ion: Acetate

Solubility: Soluble to 1 mg/ml in 0.1% TFA

Storage: Desiccate at -20°C


2. ANALYTICAL DATA

HPLC: Shows 95.3% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

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<tr>
<th>Amino Acid</th>
<th>Theoretical</th>
<th>Actual</th>
<th>Amino Acid</th>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: α-helical CRF 9-41
CAS Number: 90880-23-2

**Description:**
Corticotropin-releasing factor receptor antagonist (Kᵢ values are 17, 5 and 0.97 at human CRF₁, rat CRF₂a and mouse CRF₂β receptors respectively).

**Physical and Chemical Properties:**
Batch Molecular Formula: C₁₆₆H₂₇₄N₄₆O₉₅S₂
Batch Molecular Weight: 3827
Physical Appearance: White lyophilised solid

**Peptide Sequence:**
Asp-Leu-Thr-Phe-His-Leu-Leu-Arg-Glu-Met-Leu-Glu-Met-Ala-Lys-Ala-Glu-Gln-Glu-Ala-Glu Gin Ala Ala Leu Asn Arg Leu Leu Leu-Glu-Glu-Ala-NH₂

**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**
Soluble to 1 mg/ml in 0.1% TFA
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:** 83% (Remaining weight made up of counterions and residual water).

**Counter Ion:** Acetate

**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.

**Licensing Information:**
Sold with the permission of the SALK Institute

**References:**


Swerdlow et al (1989) Potentiation of acoustic startle by corticotropin-releasing factor (CRF) and by fear are both reversed by α-helical CRF (9-41). Neuropsychopharmacology 2 285. PMID: 2610824.