

Certificate of Analysis

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Product Name: Neuropeptide Y (porcine)

Catalog No.: 1173

Batch No.: 12

CAS Number: 83589-17-7

1. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------|---|
| Batch Molecular Formula: | C ₁₉₀ H ₂₈₇ N ₅₅ O ₅₇ |
| Batch Molecular Weight: | 4254 |
| Physical Appearance: | White lyophilised solid |
| Counter Ion: | Trifluoroacetate |
| Solubility: | Soluble to 0.80 mg/ml in water |
| Storage: | Store at -20°C |
| Peptide Sequence: | Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu- Asp-Ala-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr- Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu- Ile-Thr-Arg-Gln-Arg-Tyr-NH ₂ |

2. ANALYTICAL DATA

| | |
|-------------------------------------|---------------------------|
| HPLC: | Shows 96.3% purity |
| Mass Spectrum: | Consistent with structure |
| Solubility (H₂O): | 0.8mg/mL |

3. AMINO ACID ANALYSIS DATA

| Amino Acid | | Theoretical | Actual | Amino Acid | | Theoretical | Actual |
|------------|------|-------------|--------|------------|------|-------------|--------|
| Ala | 4.00 | 3.82 | Lys | 1.00 | 0.98 | | |
| Arg | 4.00 | 3.89 | Met | | | | |
| Asx | 5.00 | 5.53 | Phe | | | | |
| Cys | | | Pro | 4.00 | 3.92 | | |
| Glx | 3.00 | 3.08 | Ser | 2.00 | 1.42 | | |
| Gly | 1.00 | 0.97 | Thr | 1.00 | 0.83 | | |
| His | 1.00 | 1.00 | Trp | | | | |
| Ile | 2.00 | 1.92 | Tyr | 5.00 | 4.79 | | |
| Leu | 3.00 | 3.12 | Val | | | | |

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

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Product Name: Neuropeptide Y (porcine)

Catalog No.: 1173

Batch No.: 12

CAS Number: 83589-17-7

Description:

Neuropeptide Y (porcine) is a widely distributed endogenous neuropeptide involved in the control of food intake, sexual behavior and blood pressure. Control Peptide also available.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₉₀H₂₈₇N₅₅O₅₇

Batch Molecular Weight: 4254

Physical Appearance: White lyophilised solid

Peptide Sequence:

Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-
Asp-Ala-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr-
Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-
Ile-Thr-Arg-Gln-Arg-Tyr-NH₂

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 0.80 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.

Counter Ion: Trifluoroacetate

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:

Michel *et al* (1998) XVI. International Union of Pharmacology recommendations for the nomenclature of neuropeptide Y, peptide YY, and pancreatic polypeptide receptors. *Pharmacol.Rev.* **50** 143. PMID: 9549761.

Allen *et al* (1987) Molecular structure of mammalian neuropeptide Y: analysis by molecular cloning and computer-aided comparison with crystal structure of avian homologue. *Proc.Natl.Acad.Sci.U.S.A.* **84** 2532. PMID: 3031687.

Minth *et al* (1984) Cloning, characterization, and DNA sequence of a human cDNA encoding neuropeptide tyrosine. *Proc.Natl.Acad.Sci.U.S.A.* **81** 4577. PMID: 6589611.

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