1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: $C_{190}H_{286}N_{54}O_{56}$
   Batch Molecular Weight: 4223
   Physical Appearance: White lyophilised solid
   Net Peptide Content: 80%
   Counter Ion: TFA salt
   Solubility: Soluble to 1 mg/ml in 0.25% acetic acid
   Storage: Desiccate at -20°C
   Peptide Sequence: Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Glu-Glu-Arg-Pro-Leu-Pro-Tyr-Leu-Thr-Arg-Pro-Arg-Tyr-NH₂

2. ANALYTICAL DATA

   HPLC: Shows 97.2% purity
   Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

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<tr>
<th>Amino Acid</th>
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<th>Actual</th>
<th>Amino Acid</th>
<th>Theoretical</th>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Product Name:** [Leu$^{31}$,Pro$^{34}$]-Neuropeptide Y (porcine)

**CAS Number:** 125580-28-1

**Description:**
High affinity neuropeptide Y Y$_1$ receptor agonist (K$_i$ = 0.54 nM). Also shows affinity for Y$_2$ receptors.

**Physical and Chemical Properties:**
- Batch Molecular Formula: C$_{196}$H$_{298}$N$_{54}$O$_{56}$
- Batch Molecular Weight: 4223
- 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-Leu-Thr-Arg-Pro-Arg-Tyr-NH$_2$

**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**
Soluble to 1 mg/ml in 0.25% acetic acid

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:** 80% (Remaining weight made up of counterions and residual water).

**Counter Ion:** TFA salt

**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:**