1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{112}H_{198}N_{34}O_{31}S_{2}$
Batch Molecular Weight: 2581.13
Physical Appearance: White lyophilised solid
Net Peptide Content: 77%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 95% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

<table>
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<tr>
<th>Amino Acid</th>
<th>Theoretical</th>
<th>Actual</th>
<th>Amino Acid</th>
<th>Theoretical</th>
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Product Name: HNGF6A
Catalog No.: 5154  
Batch No.: 1

Description:
Humanin analog; increases glucose stimulated insulin secretion and glucose metabolism in vivo and in vitro. Also enhances glucose sensing in βTC3 cells and lowers blood glucose in Zucker diabetic fatty rats. Prevents endothelial dysfunction and delays progression of atherosclerosis in vivo. Protects neurons from NMDA-induced toxicity.

Physical and Chemical Properties:
Batch Molecular Formula: \(\text{C}_{112}\text{H}_{198}\text{N}_{34}\text{O}_{31}\text{S}_{2}\)
Batch Molecular Weight: 2581.13
Physical Appearance: White lyophilised solid

Peptide Sequence:
Met-Ala-Pro-Arg-Gly-Ala-Ser-Cys-Leu-Leu-Leu-Leu-Thr-Gly-Glu-Ile-Asp-Leu-Pro-Val-Lys-Arg-Arg-Ala

Storage: Store at -20°C

Solubility & Usage Info:
Soluble to 1 mg/ml in water
This product is supplied as a lyophilised solid and may be very hard to visualise. 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: 77% (Remaining weight made up of counterions and residual water).

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 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: