bio-techne
TOCRIS

Print Date: Aug 9th 2024

Certificate of Analysis

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Product Name: **Pancreatic Polypeptide (human)** **Catalog No.: 1154** **Batch No.: 14**

CAS Number: 75976-10-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{185}H_{287}N_{53}O_{54}S_2$

Batch Molecular Weight: 4181.7

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 0.70 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Ala-Pro-Leu-Glu-Pro-Val-Tyr-Pro-Gly-Asp-Asn-Ala-Thr-Pro-Glu-Gln-Met-Ala-Gln-Tyr-Ala-Ala-Asp-Leu-Arg-Arg-Tyr-Ile-Asn-Met-Leu-Thr-Arg-Pro-Arg-Tyr-NH_2

2. ANALYTICAL DATA

HPLC: Shows 97.4 % purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala	5.00	4.82	Lys		
Arg	4.00	4.03	Met	2.00	2.00
Asx	4.00	4.04	Phe		
Cys			Pro	5.00	4.78
Glx	4.00	3.98	Ser		
Gly	1.00	1.02	Thr	2.00	1.99
His			Trp		
Ile	1.00	0.96	Tyr	4.00	3.95
Leu	3.00	3.05	Val	1.00	0.97

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Product Name: **Pancreatic Polypeptide (human)** **Catalog No.: 1154** **14**

CAS Number: 75976-10-2

Description:

Pancreatic Polypeptide (human) is an endogenous high affinity agonist for human NPY Y_4 receptor (K_i = 0.056 nM). Believed to play an important role in the function of the gastrointestinal tract.

Physical and Chemical Properties:

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Physical Appearance: White lyophilised solid

Peptide Sequence:

Ala-Pro-Leu-Glu-Pro-Val-Tyr-Pro-Gly-Asp-Asn-Ala-Thr-Pro-Glu-Gln-Met-Ala-Gln-Tyr-Ala-Ala-Asp-Leu-Arg-Arg-Tyr-Ile-Asn-Met-Leu-Thr-Arg-Pro-Arg-Tyr-NH_2

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 0.70 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.

References:

Gehlert (1998) Multiple receptors for the pancreatic polypeptide (PP-fold) family: physiological implications. Proc.Soc.Exp.Biol.Med. ***218*** 7. PMID: 9572148.

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.

Bard *et al* (1995) Cloning and functional expression of a human Y_4 subtype receptor for pancreatic polypeptide, neuropeptide Y, and peptide YY. J.Biol.Chem. ***270*** 26762. PMID: 7592911.