

Certificate of Analysis

www.tocris.com

Product Name: PACAP 6-38

Catalog No.: 3236

Batch No.: 8

CAS Number: 143748-18-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₈₂ H ₃₀₀ N ₅₆ O ₄₅ S
Batch Molecular Weight:	4024.78
Physical Appearance:	White lyophilised solid
Counter Ion:	Acetate
Solubility:	Soluble to 2 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-Gly-Lys-Arg-Tyr-Lys-Gln-Arg-Val-Lys-Asn-Lys-NH ₂

2. ANALYTICAL DATA

HPLC:	Shows 98.0% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical			Actual		
Ala	3.00	2.89	Lys	7.00	6.97
Arg	4.00	3.81	Met	1.00	0.87
Asx	2.00	2.03	Phe	1.00	0.99
Cys			Pro		
Glx	2.00	2.03	Ser	2.00	1.88
Gly	1.00	1.06	Thr	1.00	0.99
His			Trp		
Ile			Tyr	4.00	4.04
Leu	2.00	2.07	Val	3.00	2.97

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: PACAP 6-38

Catalog No.: 3236

8

CAS Number: 143748-18-9

Description:

PACAP 6-38 is a potent and competitive pituitary adenylate cyclase-activating polypeptide receptor (PAC)₁ antagonist (IC₅₀ = 2 nM). Inhibits PACAP(1-27)-induced stimulation of adenylate cyclase (K_i = 1.5 nM). Antitumor activity in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈₂H₃₀₀N₅₆O₄₅S

Batch Molecular Weight: 4024.78

Physical Appearance: White lyophilised solid

Peptide Sequence:

Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-Gly-Lys-Arg-Tyr-Lys-Gln-Arg-Val-Lys-Asn-Lys-NH₂

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 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: 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.

References:

Kojro *et al* (2006) The neuropeptide PACAP promotes a-secretase pathway for processing Alzheimer amyloid precursor protein. *FASEB J.* **20** 512. PMID: 16401644.

Leyton *et al* (1998) PACAP(6-38) inhibits growth of prostate cancer cells. *Cancer Lett.* **125** 131. PMID: 9566707.

Robberecht *et al* (1992) Structural requirements for the occupancy of pituitary adenylate-cyclase-activating-peptide (PACAP) receptors and adenylate cyclase activation in human neuroblastoma NB-OK-1 cell membranes. Discovery of PACAP(6-38) as a potent antagonist. *Eur.J.Biochem.* **207** 239. PMID: 1321043.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956