

Product Name: CGRP 8-37 (human)

Catalog No.: 1181

Batch No.: 8

CAS Number: 119911-68-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃₉H₂₃₀N₄₄O₃₈
Batch Molecular Weight: 3125.64
Physical Appearance: White lyophilised solid
Net Peptide Content: 78%
Counter Ion: TFA
Solubility: Soluble to 0.50 mg/ml in water
Storage: Desiccate at -20°C
Peptide Sequence: Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Val-Lys-Asn-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂

2. ANALYTICAL DATA

HPLC: Shows 97.5% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	2.00	2.02	Lys	2.00	2.01
Arg	2.00	2.13	Met		
Asx	3.00	3.06	Phe	2.00	2.44
Cys			Pro	1.00	0.93
Glx			Ser	3.00	2.86
Gly	4.00	4.03	Thr	2.00	1.91
His	1.00	0.96	Trp		
Ile			Tyr		
Leu	3.00	3.02	Val	5.00	3.96

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

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Description:

Peptide antagonist for CGRP₁ receptors.

Physical and Chemical Properties:

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Peptide Sequence:

Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-
Arg-Ser-Gly-Gly-Val-Val-Lys-Asn-Asn-Phe-
Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂

Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 0.50 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.

Net Peptide Content: 78% (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:

Poyner (1995) Pharmacology of receptors for calcitonin gene-related peptide and amylin. *TIPS* **16** 424. PMID: 8578616.

Poyner et al (1998) Structural determinants for binding to CGRP receptors expressed by human SK-N-MC and Col 29 cells: studies with chimeric and other peptides. *Br.J.Pharmacol.* **124** 1659. PMID: 9756381.

Wisskirchen et al (1998) Pharmacological characterization of CGRP receptors mediating relaxation of the rat pulmonary artery and inhibition of twitch responses of the rat vas deferens. *Br.J.Pharmacol.* **123** 1673. PMID: 9605575.

Nakamura et al (1998) Calcitonin gene-related peptide as a GH secretagogue in human and rat pituitary somatotrophs. *Brain Res.* **807** 203. PMID: 9757038.

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