

Certificate of Analysis

Product Name: CGRP (rat)

Catalog No.: 1161

Batch No.: 27

CAS Number: 83651-90-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆₂H₂₆₂N₅₀O₅₂S₂
Batch Molecular Weight: 3807
Physical Appearance: White lyophilised solid
Counter Ion: TFA
Solubility: Soluble to 0.80 mg/ml in water
Storage: Store at -20°C
Peptide Sequence:
 Ser-Cys-Asn-Thr-Ala-Thr-Cys-Val-Thr-His-
 Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-
 Gly-Val-Val-Lys-Asp-Asn-Phe-Val-Pro-Thr-
 Asn-Val-Gly-Ser-Glu-Ala-Phe-NH₂

2. ANALYTICAL DATA

HPLC: Shows 95.2% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala	3.00	2.92	Lys	1.00	1.02		
Arg	2.00	2.02	Met				
Asx	4.00	4.02	Phe	2.00	2.02		
Cys	2.00	0.90	Pro	1.00	1.00		
Glx	1.00	1.02	Ser	4.00	3.06		
Gly	4.00	3.97	Thr	4.00	3.46		
His	1.00	1.02	Trp				
Ile			Tyr				
Leu	3.00	2.98	Val	5.00	4.52		

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

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Description:

CGRP (rat) is an endogenous neuropeptide; potent vasodilator which also exerts cardiovascular, pro-inflammatory and metabolic effects.

Physical and Chemical Properties:

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

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 0.80 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 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:

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

Salim *et al* (1998) Calcitonin gene-related peptide potentiates nicotinic acetylcholine receptor-operated slow Ca²⁺ mobilization at mouse muscle endplates. *Br.J.Pharmacol.* **125** 277. PMID: 9786499.

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

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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