

Product Name: Galanin (1-15) (porcine, rat)

Catalog No.: 1450

Batch No.: 4

CAS Number: 112747-70-3

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇₂H₁₀₅N₁₉O₂₀
Batch Molecular Weight: 1556.74
Physical Appearance: White lyophilised solid
Net Peptide Content: 78%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Desiccate at -20°C
Peptide Sequence: Gly-Trp-Thr-Leu-Asn-Ser-Ala-Gly-Tyr-Leu-
 Leu-Gly-Pro-His-Ala

2. ANALYTICAL DATA

HPLC: Shows 97% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala		2.00	1.84	Lys			
Arg				Met			
Asx		1.00	1.02	Phe			
Cys				Pro	1.00		1.01
Glx				Ser	1.00		0.97
Gly		3.00	2.97	Thr	1.00		1.05
His		1.00	0.99	Trp			
Ile				Tyr	1.00		1.03
Leu		3.00	2.70	Val			

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

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Description:

N-terminal galanin fragment. In contrast to the full length (1-29) peptide, mediates central cardiovascular effects, perhaps by binding to a novel receptor type.

Physical and Chemical Properties:

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Batch Molecular Weight: 1556.74

Physical Appearance: White lyophilised solid

Peptide Sequence:

Gly-Trp-Thr-Leu-Asn-Ser-Ala-Gly-Tyr-Leu-
Leu-Gly-Pro-His-Ala

Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 1 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:

Amiranoff et al (1989) Structural requirements for galanin action in the pancreatic β cell line rin m 5F. *Eur.J.Pharmacol.* **163** 205. PMID: 2472967.

Xu et al (1999) Electrophysiological evidence for a hyperpolarizing, galanin (1-15)-selective receptor on hippocampal CA3 pyramidal neurons. *Proc.Natl.Acad.Sci.USA* **96** 14583. PMID: 10588748.

Narvaez et al (2000) The galanin receptor antagonist M40 blocks the central cardiovascular actions of the galanin N-terminal fragment (1-15). *Eur.J.Pharmacol.* **399** 197. PMID: 10884520.

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