

## Certificate of Analysis

**Product Name:** Neuromedin C (porcine)

**Catalog No.:** 1890

**Batch No.:** 1

CAS Number: 81608-30-2

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>50</sub> H <sub>73</sub> N <sub>17</sub> O <sub>11</sub> S
<b>Batch Molecular Weight:</b>	1120.29
<b>Physical Appearance:</b>	White lyophilised solid
<b>Net Peptide Content:</b>	82%
<b>Counter Ion:</b>	TFA
<b>Solubility:</b>	Soluble to 1 mg/ml in water
<b>Storage:</b>	Desiccate at -20°C
<b>Peptide Sequence:</b>	Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met-NH <sub>2</sub>

### 2. ANALYTICAL DATA

**HPLC:** Shows >95% purity

### 3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala	1.00	1.09	Lys				
Arg			Met	1.00	0.99		
Asx	1.00	1.08	Phe				
Cys			Pro				
Glx			Ser				
Gly	2.00	2.00	Thr				
His	2.00	1.95	Trp	1.00	0.35		
Ile			Tyr				
Leu	1.00	1.00	Val	1.00	1.05		

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

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CAS Number: 81608-30-2

**Description:**

Mammalian bombesin-like neuropeptide; first isolated from pig spinal cord. Stimulates rat uterine smooth muscle contraction, and gastrin and somatostatin secretion in vitro. Increases blood pressure and pancreatic exocrine secretion in dogs in vivo.

**Physical and Chemical Properties:**Batch Molecular Formula: C<sub>50</sub>H<sub>73</sub>N<sub>17</sub>O<sub>11</sub>S

Batch Molecular Weight: 1120.29

Physical Appearance: White lyophilised solid

**Peptide Sequence:**Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met-NH<sub>2</sub>**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:** 82% (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:**

**Minamino *et al*** (1984) Neuromedin C: a bombesin-like peptide identified in porcine spinal cord. *Biochem.Biophys.Res.Commun.* **119** 14. PMID: 6546686.

**Hosotani *et al*** (1985) Effect of synthetic neuromedin C, a decapeptide of gastrin-releasing peptide (GRP[18-27]), on blood flow and exocrine secretion of the pancreas in dogs. *Life Sci.* **36** 2429. PMID: 3892215.

**Madaus *et al*** (1989) Effect of gastrin-releasing peptide (GRP1-27), neuromedin-C (GRP18-27), and neuromedin-B on gastrin and somatostatin secretion from the rat stomach. *Z.Gastroenterol.* **27** 449. PMID: 2573979.

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