



# **Certificate of Analysis**

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Product Name: Litorin Catalog No.: 1916 Batch No.: 1

CAS Number: 55749-97-8

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{51}H_{68}N_{14}O_{11}S$ 

Batch Molecular Weight: 1085.25

Physical Appearance: White lyophilised solid

Net Peptide Content: 70%

**Solubility:** Soluble to 1 mg/ml in 0.25% acetic acid

Storage: Desiccate at -20°C

Peptide Sequence: Glp-Gln-Trp-Ala-Val-Gly-His-Phe-Met-NH<sub>2</sub>

2. ANALYTICAL DATA

HPLC: Shows >95% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala	1.00	1.00	Lys		
Arg			Met	1.00	0.96
Asx			Phe	1.00	1.03
Cys			Pro		
Glx	2.00	1.91	Ser		
Gly	1.00	1.06	Thr		
His	1.00	0.97	Trp	1.00	
lle			Tyr		
Leu			Val	1.00	1.00



# **Product Information**

Print Date: Jan 15th 2016

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CAS Number: 55749-97-8

## **Description:**

Amphibian bombesin-like peptide. Stimulates smooth muscle contraction, gastrin release, gastric acid and pancreatic secretion, and suppresses food intake in vivo.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>51</sub>H<sub>68</sub>N<sub>14</sub>O<sub>11</sub>S Batch Molecular Weight: 1085.25

Physical Appearance: White lyophilised solid

#### Peptide Sequence:

Glp-Gln-Trp-Ala-Val-Gly-His-Phe-Met-NH<sub>2</sub>

Storage: Desiccate at -20°C

# Solubility & Usage Info:

Soluble to 1 mg/ml in 0.25% acetic acid

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:** 70% (Remaining weight made up of counterions and residual water).

# 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 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:

Endean et al (1975) Parallel bioassay of bombesin and litorin, a bombesin-like peptide from the skin of *Litoria aurea*. Br.J.Pharmacol. 55 213. PMID: 1201379.

Kulkosky and Gibbs (1982) Litorin suppresses food intake in rats. Life Sci. 31 685. PMID: 6290821.

Lin et al (1995) Comparison of the peptide structural requirements for high affinity interaction with bombesin receptors. Eur.J.Pharmacol. **294** 55. PMID: 8788416.