



# **Certificate of Analysis**

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Product Name: BigLEN (mouse) Catalog No.: 6304 Batch No.: 1

CAS Number: 501036-69-7

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{78}H_{130}N_{24}O_{22}$ 

Batch Molecular Weight: 1756.03

Physical Appearance: White lyophilised solid

Net Peptide Content: 75%
Counter Ion: TFA

**Solubility:** Soluble to 2 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Leu-Glu-Asn-Pro-Ser-Pro-Gln-Ala-Pro-Ala-

Arg-Arg-Leu-Leu-Pro-Pro

2. ANALYTICAL DATA

HPLC: Shows 98.2% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual	Amaina Aaid Tha anatiaal Aatual
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Ala	2.00	1.89	Lys		
Arg	2.00	2.04	Met		
Asx	1.00	0.99	Phe		
Cys			Pro	5.00	4.90
Glx	2.00	1.97	Ser	1.00	1.03
Gly			Thr		
His			Trp		
lle			Tyr		
Leu	3.00	3.07	Val		

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



# **Product Information**

Print Date: Mar 12th 2024

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Product Name: BigLEN (mouse) Catalog No.: 6304 1

CAS Number: 501036-69-7

### **Description:**

BigLEN (mouse) is a GPR171 agonist. ProSAAS-derived neuropeptide. Regulates food intake in mice. Inhibits the release of glutamate onto parvocellular neurons of the paraventricular nucleus in a process dependent upon activation of postsynaptic G proteins.

#### **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{78}H_{130}N_{24}O_{22}$ Batch Molecular Weight: 1756.03

Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

Leu-Glu-Asn-Pro-Ser-Pro-Gln-Ala-Pro-Ala-Arg-Arg-Leu-Leu-Pro-Pro Storage: Store at -20°C

# Solubility & Usage Info:

Soluble to 2 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.

**Net Peptide Content:** 75% (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 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  $\mu$ m filter to remove potential bacterial contamination whenever possible.

#### References:

Mack et al (2019) Neuropeptide PEN and its receptor GPR83: distribution, signaling, and regulation. ACS Chem.Neurosci. 10 1884. PMID: 30726666.

Wardman et al (2011) ProSAAS-derived peptides are colocalized with neuropeptide Y and function as neuropeptides in the regulation of food intake. PLoS One 6 e28152. PMID: 22164236.

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