



# **Certificate of Analysis**

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**Product Name:** [D-Lys<sup>3</sup>]-GHRP-6 Catalog No.: 1922 Batch No.: 11

136054-22-3 CAS Number:

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{49}H_{63}N_{13}O_{6}$ 

930.12 **Batch Molecular Weight:** 

**Physical Appearance:** White lyophilised solid

**Net Peptide Content:** 75% Counter Ion: Acetate

Solubility: Soluble to 0.50 mg/ml in water

Store at -20°C Storage:

**Peptide Sequence:** His-D-Trp-D-Lys-Trp-D-Phe-Lys-NH<sub>2</sub>

2. ANALYTICAL DATA

HPLC: Shows 99.4% purity

Mass Spectrum: Consistent with structure

## 3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala			Lys	2.00	1.97
Arg			Met		
Asx			Phe	1.00	0.97
Cys			Pro		
Glx			Ser		
Gly			Thr		
His	1.00	1.06	Trp	2.00	Detected
lle			Tyr		
Leu			Val		

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# **Product Information**

Print Date: Feb 16th 2024

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Product Name: [D-Lys³]-GHRP-6 Catalog No.: 1922 11

CAS Number: 136054-22-3

#### **Description:**

[D-Lys³]-GHRP-6 is an antagonist at the ghrelin receptor (GHS-R1a) (IC $_{50}$  = 0.9  $\mu$ M). Also weakly binds to melanocortin receptors (K<sub>i</sub> = 26-120  $\mu$ M). Centrally active in vivo.

## **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{49}H_{63}N_{13}O_6$ Batch Molecular Weight: 930.12

Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

His-D-Trp-D-Lys-Trp-D-Phe-Lys-NH<sub>2</sub>

Storage: Store at -20°C

#### Solubility & Usage Info:

Soluble to 0.50 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:** 75% (Remaining weight made up of counterions and residual water).

Counter Ion: Acetate

# 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:

**Pinilla** *et al* (2003) Role of ghrelin in the control of GH secretion in prepubertal rats: interactions with excitatory amino acids. Neuroendocrinology **77** 83. PMID: 12624529.

**Traebert** *et al* (2002) Ghrelin acts on leptin-responsive neurones in the rat arcuate nucleus. J.Neuroendocrinol. *14* 580. PMID: 12121496.

**Schioth** *et al* (1997) Characterization of the binding of MSH-B, HP-228, GHRP-6 and 153N-6 to the human melanocortin receptor subtypes. Neuropeptides *31* 565. PMID: 9574823.

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