

Certificate of Analysis

Product Name: K-(D-1-Nal)-FwLL-NH₂

Catalog No.: 5830

Batch No.: 1

CAS Number: 1394288-22-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₅₁ H ₆₇ N ₉ O ₆
Batch Molecular Weight:	902.13
Physical Appearance:	White lyophilised solid
Net Peptide Content:	79%
Counter Ion:	TFA
Solubility:	Soluble to 2 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	Lys-(D-1-Nal)-Phe-D-Trp-Leu-Leu-NH ₂

2. ANALYTICAL DATA

HPLC:	Shows 98.7% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys	1.00	1.00
Arg			Met		
Asx			Phe	1.00	1.00
Cys			Pro		
Glx			Ser		
Gly			Thr		
His			Trp		
Ile			Tyr		
Leu	2.00	1.99	Val		

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

Product Name: K-(D-1-Nal)-FwLL-NH₂**Catalog No.:** 5830**Batch No.:** 1

CAS Number: 1394288-22-2

Description:

High affinity and potent ghrelin receptor inverse agonist (K_i values are 4.9 and 31 nM in COS7 and HEK293T cells, respectively). Blocks ghrelin receptor-mediated G_q- and G₁₃-dependent signaling pathways.

Physical and Chemical Properties:Batch Molecular Formula: C₅₁H₆₇N₉O₆

Batch Molecular Weight: 902.13

Physical Appearance: White lyophilised solid

Peptide Sequence:Lys-(D-1-Nal)-Phe-D-Trp-Leu-Leu-NH₂**Storage:** Store at -20°C**Solubility & Usage Info:**

Soluble to 2 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: 79% (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:

M'Kadmi et al (2015) Agonism, antagonism, and inverse agonism bias at the ghrelin receptor signaling. *J.Biol.Chem.* **290** 27021. PMID: 26363071.

Els et al (2012) An aromatic region to induce a switch between agonism and inverse agonism at the ghrelin receptor. *J.Med.Chem.* **55** 7437. PMID: 22920150.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956