

Certificate of Analysis

Print Date: Sep 3rd 2024

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Product Name: 2-Furoyl-LIGRLO-amide Catalog No.: 3015 Batch No.: 10

CAS Number: 729589-58-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{36}H_{63}N_{11}O_8$ Batch Molecular Weight: 777.96

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: 2-Furoyl-Leu-IIe-Gly-Arg-Leu-Orn-NH₂

2. ANALYTICAL DATA

HPLC: Shows 97.0% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual Amino Acid Theoretical Actual

Ala			Lys
Arg	1.00	1.01	Met
Asx			Phe
Cys			Pro
Glx			Ser
Gly	1.00	1.00	Thr
His			Trp
lle	1.00	1.07	Tyr
Leu	2.00	1.92	Val

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



Product Information

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Product Name: 2-Furoyl-LIGRLO-amide Catalog No.: 3015 10

CAS Number: 729589-58-6

Description:

2-Furoyl-LIGRLO-amide is a potent and selective PAR_2 receptor agonist (pD_2 = 7.0). Causes a dose-dependent relaxation of murine femoral arteries.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₆H₆₃N₁₁O₈ Batch Molecular Weight: 777.96

Physical Appearance: White lyophilised solid

Peptide Sequence:

2-Furoyl-Leu-Ile-Gly-Arg-Leu-Orn-NH₂

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 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.

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 μ m filter to remove potential bacterial contamination whenever possible.

References:

Olianas *et al* (2007) Proteinase-activated receptors 1 and 2 in rat olfactory system: layer-specific regulation of multiple signaling pathways in the main olfactory bulb and induction of neurite retraction in olfactory sensory neurons. Neuroscience **146** 1289. PMID: 17434682.

Alshurafa *et al* (2004) A protease activated receptor-2 (PAR-2) activating peptide, tc-LIGRLO-NH₂, induces protease release from mast cells: role in TNF degradation. BMC Pharmacol. *4* 12. PMID: 15265236.

McGuire et al (2004) 2-Furoyl-LIGRLO-amide: a potent and selective proteinase-activated receptor 2 agonist. J.Pharmacol.Exp.Ther. 309 1124. PMID: 14976230.

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