

Certificate of Analysiswww.tocris.com**Product Name:** Ac-RYYRWK-NH₂**Catalog No.:** 1387**Batch No.:** 2

CAS Number: 200959-47-3

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₄₉ H ₆₉ N ₁₅ O ₉
Batch Molecular Weight:	1012.17
Physical Appearance:	White lyophilised solid
Net Peptide Content:	80%
Solubility:	Soluble to 1 mg/ml in water
Storage:	Desiccate at -20°C
Peptide Sequence:	Ac-Arg-Tyr-Tyr-Arg-Trp-Lys-NH ₂

2. ANALYTICAL DATA**HPLC:** Shows >95% purity**3. AMINO ACID ANALYSIS DATA**

	Amino Acid Theoretical	Actual	Amino Acid Theoretical	Actual
Ala			Lys	1.00
Arg	2.00	2.05	Met	0.96
Asx			Phe	
Cys			Pro	
Glx			Ser	
Gly			Thr	
His			Trp	1.00
Ile			Tyr	2.00
Leu			Val	1.85

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

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Product Information

Product Name: Ac-RYYRWK-NH₂**Catalog No.:** 1387**Batch No.:** 2

CAS Number: 200959-47-3

Description:

Potent, selective partial agonist peptide for the NOP receptor ($K_i = 0.71$ nM). Selective over μ , δ and κ opioid receptors ($IC_{50} > 4000$ nM). Increases food intake in vivo.

Physical and Chemical Properties:Batch Molecular Formula: C₄₉H₆₉N₁₅O₉

Batch Molecular Weight: 1012.17

Physical Appearance: White lyophilised solid

Peptide Sequence:Ac-Arg-Tyr-Tyr-Arg-Trp-Lys-NH₂**Storage:** Desiccate at -20°C**Solubility & Usage Info:**

Soluble to 1 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: 80% (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:

Dooley *et al* (1997) Binding and *in vitro* activities of peptides with high affinity for the nociceptin/orphanin FQ receptor, ORL₁. *J.Pharmacol.Exp.Ther.* **283** 735. PMID: 9353393.

Ho *et al* (2000) Characterization of the ORL₁ receptor on adrenergic nerve in the rat anococcygeus. *Br.J.Pharmacol.* **131** 349. PMID: 10991930.

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