

Certificate of Analysis

www.tocris.com

Product Name: Urotensin II (human)

Catalog No.: 1642

Batch No.: 6

CAS Number: 251293-28-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆₄H₈₅N₁₃O₁₈S₂
Batch Molecular Weight: 1388.57
Physical Appearance: White lyophilised solid
Net Peptide Content: 82%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Desiccate at -20°C
Peptide Sequence: Glu-Thr-Pro-Asp-Cys-Phe-Trp-Lys-Tyr-Cys-Val

2. ANALYTICAL DATA

HPLC: Shows 98% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical			Actual		
Ala			Lys	1.00	0.99
Arg			Met		
Asx	1.00	1.00	Phe	1.00	1.00
Cys	2.00	Detected	Pro	1.00	1.02
Glx	1.00	0.98	Ser		
Gly			Thr	1.00	0.96
His			Trp	1.00	Detected
Ile			Tyr	1.00	1.00
Leu			Val	1.00	1.02

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

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

Product Name: Urotensin II (human)

Catalog No.: 1642

Batch No.: 6

CAS Number: 251293-28-4

Description:

Potent endogenous peptide agonist for the urotensin-II receptor (EC₅₀ = 0.1 nM). Displays arterio-selective vasoconstriction and vasodilatation in mammals in vitro and in vivo, effects which vary between species. Also has been shown to mediate bronchoconstriction.

Physical and Chemical Properties:

Batch Molecular Formula: C₆₄H₈₅N₁₃O₁₈S₂

Batch Molecular Weight: 1388.57

Physical Appearance: White lyophilised solid

Peptide Sequence:

Glu-Thr-Pro-Asp-Cys-Phe-Trp-Lys-Tyr-Cys-Val

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: 82% (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:

Maguire and Davenport (2002) Is urotensin-II the new endothelin? Br.J.Pharmacol **137** 579. PMID: 12381671.

Nothacker et al (1999) Identification of the natural ligand of an orphan G-protein-coupled receptor involved in the regulation of vasoconstriction. Nat.Cell.Biol. **1** 383. PMID: 10559967.

Coulouarn et al (1998) Cloning of the cDNA encoding the urotensin II precursor in frog and human reveals intense expression of the urotensin II gene in motoneurons of the spinal cord. Proc.Natl.Acad.Sci.U.S.A. **95** 15803. PMID: 9861051.

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

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