

Certificate of Analysis

Print Date: Jul 27th 2023

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Product Name: Endothelin 2 (human) Catalog No.: 1164 Batch No.: 14

CAS Number: 123562-20-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{115}H_{160}O_{32}N_{26}S_4$

Batch Molecular Weight: 2547

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in DMSO

Storage: Store at -20°C

Peptide Sequence: Cys-Ser-Cys-Ser-Ser-Trp-Leu-Asp-Lys-Glu-

Cys-Val-Tyr-Phe-Cys-His-Leu-Asp-lle-Ile-Trp

2. ANALYTICAL DATA

HPLC: Shows 98.5% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

| Amino Acid | Theoretical | Actual | Amino Acid | Theoretical | Actual |
|------------|-------------|--------|------------|-------------|--------|
| Ala | | | Lys | 1.00 | 1.02 |
| Arg | | | Met | | |
| Asx | 2.00 | 2.08 | Phe | 1.00 | 1.02 |
| Cys | 4.00 | 1.97 | Pro | | |
| Glx | 1.00 | 1.01 | Ser | 3.00 | 2.07 |
| Gly | | | Thr | | |
| His | 1.00 | 0.99 | Trp | 2.00 | 0.11 |
| lle | 2.00 | 1.69 | Tyr | 1.00 | 0.93 |
| Leu | 2.00 | 1.99 | Val | 1.00 | 0.95 |

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



Product Information

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Product Name: Endothelin 2 (human) Catalog No.: 1164 14

CAS Number: 123562-20-9

Description:

Endothelin 2 (human) is an endogenous peptide found predominately in the kidney and intestine. Displays similar selectivity for ET_{B} and ET_{B} endothelin receptors.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₁₅H₁₆₀O₃₂N₂₆S₄

Batch Molecular Weight: 2547

Physical Appearance: White lyophilised solid

Peptide Sequence:

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in DMSO

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.

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:

Servitja *et al* (1998) Involvement of ET_A and ET_B receptors in the activation of phospholipase D by endothelins in cultured rat cortical astrocytes. Br.J.Pharmacol. *124* 1728. PMID: 9756390.

Inoue et al (1989) The human endothelin family: three structurally and pharmacologically distinct isopeptides predicted by three separate genes. Proc.Natl.Acad.Sci.U.S.A. **86** 2863. PMID: 2649896.

Yanagisawa and Masaski (1989) Molecular biology and biochemistry of the endothelins. TiPS 10 374. PMID: 2690429.

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