

Certificate of Analysis

Product Name: [Ala^{1,3,11,15}]-Endothelin

Catalog No.: 1197

Batch No.: 5

CAS Number: 121204-87-3

1. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------|---------------------------------------------------------------------------------------------|
| Batch Molecular Formula: | C ₁₀₉ H ₁₆₃ O ₃₂ N ₂₅ S |
| Batch Molecular Weight: | 2368 |
| Physical Appearance: | White lyophilised solid |
| Net Peptide Content: | 82.9% |
| Counter Ion: | TFA |
| Solubility: | Soluble to 1 mg/ml in water |
| Storage: | Desiccate at -20°C |
| Peptide Sequence: | Ala-Ser-Ala-Ser-Ser-Leu-Met-Asp-Lys-Glu- Ala-Val-Tyr-Phe-Ala-His-Leu-Asp-Ile-Ile- Trp |

2. ANALYTICAL DATA

| | |
|-----------------------|---------------------------|
| HPLC: | Shows 98.1% purity |
| Mass Spectrum: | Consistent with structure |

3. AMINO ACID ANALYSIS DATA

| Amino Acid | | Theoretical | Actual | Amino Acid | | Theoretical | Actual |
|------------|------|-------------|--------|------------|------|-------------|--------|
| Ala | 4.00 | 4.00 | Lys | 1.00 | 0.92 | | |
| Arg | | | Met | 1.00 | 1.27 | | |
| Asx | 2.00 | 2.23 | Phe | 1.00 | 0.86 | | |
| Cys | | | Pro | | | | |
| Glx | 1.00 | 0.83 | Ser | 3.00 | 3.21 | | |
| Gly | | | Thr | | | | |
| His | 1.00 | 0.89 | Trp | | | | |
| Ile | | | Tyr | 1.00 | 0.85 | | |
| Leu | 2.00 | 2.10 | Val | 1.00 | 0.85 | | |

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

Product Name: [Ala^{1,3,11,15}]-Endothelin

Catalog No.: 1197

Batch No.: 5

CAS Number: 121204-87-3

Description:

Selective ET_B endothelin receptor agonist (IC₅₀ values are 0.33 and 2200 nM for displacing [¹²⁵I]-ET-1 from ET_B and ET_A receptors respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C₁₀₉H₁₆₃O₃₂N₂₅S

Batch Molecular Weight: 2368

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ala-Ser-Ala-Ser-Ser-Leu-Met-Asp-Lys-Glu-
Ala-Val-Tyr-Phe-Ala-His-Leu-Asp-Ile-Ile-
Trp

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: 82.9% (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:

Nakamichi et al (1992) Different distribution of endothelin receptor subtypes in pulmonary tissues revealed by the novel selective ligands BQ-123 and [Ala^{1,3,11,15}]ET1. *Biochem.Biophys.Res.Commun.* **182** 144. PMID: 1310013.

Panek et al (1992) Endothelin and structurally related analogs distinguish between endothelin receptor subtypes. *Biochem.Biophys.Res.Commun.* **183** 566. PMID: 1312833.

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