

Certificate of Analysis

www.tocris.com

Product Name: BQ-3020
CAS Number: 143113-45-5

Catalog No.: 1189 **Batch No.:** 13

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉₆H₁₄₀N₂₀O₂₅S
Batch Molecular Weight: 2006.35
Physical Appearance: White lyophilised solid
Net Peptide Content: 81%
Counter Ion: TFA
Solubility: Soluble to 0.50 mg/ml in sodium bicarbonate (0.03M)
Storage: Desiccate at -20°C
Peptide Sequence: Ac-Leu-Met-Asp-Lys-Glu-Ala-Val-Tyr-
Phe-Ala-His-Leu-Asp-Ile-Ile-Trp

2. ANALYTICAL DATA

HPLC: Shows 96.1% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	2.00	1.89	Lys	1.00	1.00
Arg			Met	1.00	0.99
Asx	2.00	2.10	Phe	1.00	1.02
Cys			Pro		
Glx	1.00	1.10	Ser		
Gly			Thr		
His	1.00	1.06	Trp	1.00	Detected
Ile	2.00	1.31	Tyr	1.00	0.99
Leu	2.00	1.97	Val	1.00	1.03

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: BQ-3020

Catalog No.: 1189

Batch No.: 13

CAS Number: 143113-45-5

Description:

Highly potent and selective ET_B endothelin receptor agonist (K_i values are 0.18 and 970 nM at human ET_B and ET_A receptors respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C₉₆H₁₄₀N₂₀O₂₅S

Batch Molecular Weight: 2006.35

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ac-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 0.50 mg/ml in sodium bicarbonate (0.03M)

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: 81% (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:

Ihara et al (1995) [³H]-BQ-123, a highly specific and reversible radioligand for the endothelin ET_A receptor subtype. *Eur.J.Pharmacol.* **274** 1. PMID: 7768260.

Reynolds et al (1995) Pharmacological differences between rat and human endothelin B receptors. *Biochem.Biophys.Res.Commun.* **209** 506. PMID: 7733918.

Ekelund et al (1994) Effects of selective ET_B-receptor stimulation on arterial, venous and capillary functions in cat skeletal muscle. *Br.J.Pharmacol.* **112** 887. PMID: 7921617.

Sakamoto et al (1993) Distinct subdomains of human endothelin receptors determine their selectivity to endothelin_A-selective antagonist and endothelin_B-selective agonists. *J.Biol.Chem.* **268** 8547. PMID: 8473300.

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