

Certificate of Analysis

Print Date: Sep 29th 2025

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Product Name: BQ-3020 Catalog No.: 1189 Batch No.: 18

CAS Number: 143113-45-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{96}H_{140}N_{20}O_{25}S\\$

Batch Molecular Weight: 2006.35

White lyophilised solid **Physical Appearance:**

TFA Counter Ion:

Solubility: Soluble to 0.50 mg/ml in sodium bicarbonate (0.03M)

Storage: Store at -20°C

Ac-Leu-Met-Asp-Lys-Glu-Ala-Val-Tyr-**Peptide Sequence:**

Phe-Ala-His-Leu-Asp-Ile-Ile-Trp

2. ANALYTICAL DATA

HPLC: Shows 96.0% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	l Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala	2.00	1.97	Lys	1.00	0.99
Arg			Met	1.00	0.94
Asx	2.00	2.03	Phe	1.00	1.01
Cys			Pro		
Glx	1.00	1.01	Ser		
Gly			Thr		
His	1.00	0.89	Trp	1.00	Not Detected
lle	2.00	1.41	Tyr	1.00	1.00
Leu	2.00	2.02	Val	1.00	0.98

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

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Product Information

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Product Name: BQ-3020 Catalog No.: 1189 Batch No.: 18

CAS Number: 143113-45-5

Description:

BQ-3020 is a 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: $C_{96}H_{140}N_{20}O_{25}S$ 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: Store at -20°C

Solubility & Usage Info:

Soluble to 0.50 mg/ml in sodium bicarbonate (0.03M)

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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:

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.

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