

# **Certificate of Analysis**

Print Date: Jul 15th 2024

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**Product Name: BQ-123** Catalog No.: 1188 Batch No.: 17

CAS Number: 136553-81-6

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{31}H_{42}N_6O_7$ 

**Batch Molecular Weight:** 611

White lyophilised solid **Physical Appearance:** 

**TFA** Counter Ion:

Solubility: Soluble to 0.40 mg/ml in water

Storage: Store at -20°C

Cyclo(D-Trp-D-Asp-Pro-D-Val-Leu) **Peptide Sequence:** 

2. ANALYTICAL DATA

HPLC: Shows 95.2 % purity Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

| Amino Acid   | Theoretical Actual  | Amino Acid T    | hagratical Actual |
|--------------|---------------------|-----------------|-------------------|
| Allillo Acid | i neoreticai Actuai | Allillio Acid I | neoretical Actua  |

| Ala |      |      | Lys |      |      |
|-----|------|------|-----|------|------|
| Arg |      |      | Met |      |      |
| Asx | 1.00 | 1.03 | Phe |      |      |
| Cys |      |      | Pro | 1.00 | 1.01 |
| Glx |      |      | Ser |      |      |
| Gly |      |      | Thr |      |      |
| His |      |      | Trp | 1.00 | 0.79 |
| lle |      |      | Tyr |      |      |
| Leu | 1.00 | 0.97 | Val | 1.00 | 0.98 |

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# **Product Information**

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Product Name: BQ-123 Catalog No.: 1188 17

CAS Number: 136553-81-6

### **Description:**

BQ-123 is a selective  $ET_A$  endothelin receptor antagonist ( $K_i$  values are 1.4 and 1500 nM at  $ET_A$  and  $ET_B$  receptors respectively). Reduces ischemia-induced ventricular arrhythmias in a rat model.

### **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{31}H_{42}N_6O_7$ 

Batch Molecular Weight: 611

Physical Appearance: White lyophilised solid

#### **Peptide Sequence:**

Cyclo(D-Trp-D-Asp-Pro-D-Val-Leu)

Storage: Store at -20°C

#### Solubility & Usage Info:

Soluble to 0.40 mg/ml in water

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  $\mu$ m filter to remove potential bacterial contamination whenever possible.

#### References:

**Agapitov and Haynes** (2002) Role of endothelin in cardiovascular disease. J.Renin Angiotensin Aldosterone Syst. **3** 1. PMID: 11984741.

**Makatani** *et al* (2000) Effect of a novel bifunctional endothelin receptor antagonist, IRL 3630A, on guinea pig respiratory mechanics. Eur.J.Pharmacol. *406* 139. PMID: 11011045.

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

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