



# **Certificate of Analysis**

www.tocris.com

Product Name: Cortistatin-8 Catalog No.: 3033 Batch No.: 1

CAS Number: 485803-62-1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{47}H_{68}N_{12}O_9S_2$ 

Batch Molecular Weight: 1009.25

Physical Appearance: lyophilised solid

Net Peptide Content: 66%

Counter Ion: Trifluoroacetate

**Solubility:** Soluble to 2 mg/ml in 20% acetonitrile

Storage: Desiccate at -20°C

Peptide Sequence:

Pro-Cys-Phe-D-Trp-Lys-Thr-Cys-Lys-NH<sub>2</sub>

2. ANALYTICAL DATA

HPLC: Shows >98% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual	Amino Acid	Theoretical	Actua
Ala	Lys	2.00	2.02
Arg	Met		
Asx	Phe	1.00	0.99
Cys	Pro	1.00	0.99
Glx	Ser		
Gly	Thr		
His	Trp		
lle	Tyr		
Leu	Val		



## **Product Information**

Print Date: Jan 15th 2016

www.tocris.com

Product Name: Cortistatin-8 Catalog No.: 3033 Batch No.: 1

CAS Number: 485803-62-1

#### **Description:**

Synthetic cortistatin analog that lacks the ability to bind somatostatin receptors but retains ghrelin receptor binding. Acts as a ghrelin receptor antagonist; counteracts the response of ghrelin on gastric acid secretion.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>47</sub>H<sub>68</sub>N<sub>12</sub>O<sub>9</sub>S<sub>2</sub> Batch Molecular Weight: 1009.25 Physical Appearance: lyophilised solid

#### Peptide Sequence:

Pro-Cys-Phe-D-Trp-Lys-Thr-Cys-Lys-NH<sub>2</sub>

Storage: Desiccate at -20°C

#### Solubility & Usage Info:

Soluble to 2 mg/ml in 20% acetonitrile

Net Peptide Content: 66% (Remaining weight made up of

counterions and residual water).

Counter Ion: Trifluoroacetate

# 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 µm filter to remove potential bacterial contamination whenever possible.

#### References:

Luque et al (2006) Cortistatin mimics somatostatin by inducing a dual, dose-dependent stimulatory and inhibitory effect on growth hormone secretion in somatotropes. J.Mol.Endocrinol. 36 547. PMID: 16720722.

**Sibilia** *et al* (2006) Evidence for a role of the GHS-R<sub>1a</sub> receptors in ghrelin inhibition of gastric acid secretion in the rat. J.Neuroendocrinol. *18* 122. PMID: 16420281.

**Prodam** et al (2008) Cortistatin-8, a synthetic cortistatin-derived ghrelin receptor ligand, does not modify the endocrine responses to acylated ghrelin or hexarelin in humans. Neuropeptides **42** 89. PMID: 18061663.