

Certificate of Analysis

Print Date: Sep 12th 2024

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Product Name: Catalog No.: 1157 Batch No.: 18

CAS Number: 51110-01-1 EC Number: 256-969-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Somatostatin

Batch Molecular Formula: $C_{76}H_{104}N_{18}O_{19}S_2$

Batch Molecular Weight: 1637.88

White lyophilised solid **Physical Appearance:**

Counter Ion: Acetate

Solubility: Soluble to 0.30 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Ala-Gly-Cys-Lys-Asn-Phe-Phe-Trp-Lys-Thr-

Phe-Thr-Ser-Cys

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity

Consistent with structure Mass Spectrum:

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	1.00	0.99	Lys	2.00	2.06
Arg			Met		
Asx	1.00	1.04	Phe	3.00	2.91
Cys	2.00	Not Detected	Pro		
Glx			Ser	1.00	0.94
Gly	1.00	1.06	Thr	2.00	2.05
His			Trp	1.00	Not Detected
lle			Tyr		
Leu			Val		

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Product Information

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Product Name: Somatostatin Catalog No.: 1157 18

CAS Number: 51110-01-1 EC Number: 256-969-7

Description:

Somatostatin is an endogenous peptide; inhibits the release of growth hormone, insulin and glucagon. Inhibits voltage-dependent calcium channels.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{76}H_{104}N_{18}O_{19}S_2$

Batch Molecular Weight: 1637.88

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ala-Gly-Cys-Lys-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 0.30 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: Acetate

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:

Alderton *et al* (1998) Differential effects of somatostatin and angiopeptin on cell proliferation. Br.J.Pharmacol. **124** 323. PMID: 9641549. **Ohmura** *et al* (1990) Somatostatin decreases the calcium inward current in guinea-pig atria. Br.J.Pharmacol. **99** 587. PMID: 1970502. **Dileepan** *et al* (1985) Somatostatin: a metabolic regulator. Life Sci. **37** 2335. PMID: 2867445.

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