

# Certificate of Analysis

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**Product Name:** TT 232  
**CAS Number:** 147159-51-1

**Catalog No.:** 4639 **Batch No.:** 2

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>45</sub>H<sub>58</sub>N<sub>10</sub>O<sub>9</sub>S<sub>2</sub>  
**Batch Molecular Weight:** 947.13  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 73%  
**Counter Ion:** TFA  
**Solubility:** Soluble to 1 mg/ml in water  
**Storage:** Store at -20°C  
**Peptide Sequence:** D-Phe-Cys-Tyr-D-Trp-Lys-Cys-Thr-NH<sub>2</sub>

## 2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity  
**Mass Spectrum:** Consistent with structure

## 3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical		Actual	
Ala	Lys	1.00	0.96
Arg	Met		
Asx	Phe	1.00	1.00
Cys	Pro		
Glx	Ser		
Gly	Thr	1.00	1.04
His	Trp		
Ile	Tyr	1.00	1.01
Leu	Val		

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

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## Product Information

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CAS Number: 147159-51-1

### Description:

Peptide agonist for sst<sub>1</sub>/sst<sub>4</sub> somatostatin receptors. Somatostatin analog; inhibits tyrosine kinase activity in human colon tumor cell lines. Demonstrates an antiproliferative effect both in vitro and in vivo and induces apoptosis in a pancreatic tumor cell line. Does not inhibit growth hormone release or secretion.

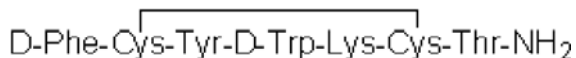
### Physical and Chemical Properties:

Batch Molecular Formula: C<sub>45</sub>H<sub>58</sub>N<sub>10</sub>O<sub>9</sub>S<sub>2</sub>

Batch Molecular Weight: 947.13

Physical Appearance: White lyophilised solid

### Peptide Sequence:



**Storage:** Store at -20°C

### Solubility & Usage Info:

Soluble to 1 mg/ml in water

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:** 73% (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:

**Elekes et al** (2008) Inhibitory effects of synthetic somatostatin receptor subtype 4 agonists on acute and chronic airway inflammation and hyperreactivity in the mouse. *Eur.J.Pharmacol.* **578** 313. PMID: 17961545.

**Tejeda et al** (2006) Evaluation of the antitumor efficacy of the somatostatin structural derivative TT-232 on different tumor models. *Anticancer Res.* **26** 3477. PMID: 17094470.

**Kéri et al** (1996) A tumor-selective somatostatin analog (TT-232) with strong in vitro and in vivo antitumor activity. *Proc.Natl.Acad.Sci.U.S.A.* **93** 12513. PMID: 8901613.

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