**Proteins** 



# **Product** Data Sheet

# **Catestatin TFA**

Cat. No.: HY-P1271A

Molecular Formula:  $\mathsf{C}_{_{109}}\mathsf{H}_{_{174}}\mathsf{F}_{_{3}}\mathsf{N}_{_{37}}\mathsf{O}_{_{28}}\mathsf{S}$ 

Molecular Weight: 2539.84

Arg-Ser-Met-Arg-Leu-Ser-Phe-Arg-Ala-Arg-Gly-Tyr-Gly-Phe-Arg-Gly-Pro-Gly-Leu-Gln-L RSMRLSFRARGYGFRGPGLQL (TFA salt) Sequence:

**Sequence Shortening:** RSMRLSFRARGYGFRGPGLQL

Target: nAChR

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: Sealed storage, away from moisture

> Powder -80°C 2 years -20°C 1 year

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 20 mg/mL (7.87 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.3937 mL	1.9686 mL	3.9373 mL
	5 mM	0.0787 mL	0.3937 mL	0.7875 mL
	10 mM			

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS

Solubility: 7.14 mg/mL (2.81 mM); Clear solution; Need ultrasonic

## **BIOLOGICAL ACTIVITY**

Description

Catestatin TFA is a 21-amino acid residue, cationic and hydrophobic peptide. Catestatin TFA is an endogenous peptide that regulates cardiac function and blood pressure<sup>[1]</sup>. Catestatin TFA is a non-competitive nicotinic antagonist acting through nicotinic acetylcholine receptors (nAChRs) to inhibit catecholamine release<sup>[2]</sup>.

#### **REFERENCES**

[1]. Nitish R Mahapatra. Catestatin Is a Novel Endogenous Peptide That Regulates Cardiac Function and Blood Pressure. Cardiovasc Res. 2008 Dec 1;80(3):330-8.



Page 2 of 2 www.MedChemExpress.com