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DATASHEET Somatostatin

Product overview

Name	
Cat No	
Biological description	

Somatostatin HB3088 <u>Overview</u>

The somatostatin peptide is distributed in many locations including the CNS, PNS, endocrine pancreas and the gut.

It exerts inhibitory effects on various organs and is involved in various physiological and pathophysiological processes.

Uses and applications

Somatostatin regulates endocrine, autocrine and paracrine function and controls secretion of various hormones (growth, pituitary, pancreatic and gastrointestinal hormones etc.).

It also acts as a neurotransmitter and is localized in a subset of interneurons. It is involved in synaptic plasticity, neuronal activity and memory formation. It acts both pre- and postsynaptically to affect excitability and neuronal responses. SS, SST, SOM, GHIH, GHRIH, SRIF, SRIH Peptide >95% Regulatory neuropeptide

Solubility & Handling

Alternative names

Biological action

Purity

Description

Storage instructions	-20°C
Solubility overview	Soluble in water (0.3 mg/ml)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not
	for human or veterinary use

Chemical Data

Chemical name Molecular Weight	AGCKNFFWKTFTSC (modifications: Disulfide bridge between 3 - 14) 1637.88
Chemical structure	
Molecular Formula	C ₇₆ H ₁₀₄ N ₁₈ O ₁₉ S ₂
Sequence (one letter)	AGCKNFFWKTFTSC
Modifications	Disulfide bridge between 3 - 14
CAS Number	51110-01-1
PubChem identifier	16129681
SMILES	$\label{eq:ccc} \begin{array}{l} CC(C1C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC)CC)))))) \\ = O(C(=O)NC(C(=O)N1)CCCCN)CC2 \\ = CC(C(=O)N1)CCCCN)CC(=O)C(C(O)N1)C(=O)COCC)C(C)O(CC6) \\ = CC(C(=O)N1)CCCCN)CC(=O)C(C(O)N1)C(=O)COCCC)C(C)O(CC6) \\ = CC(C(=O)N1)CCCCN)CC(=O)C(C(O)N1)C(=O)COCCC)C(C)O(CC6) \\ = CC(C(=O)CCC)CCCCCCC)C(C(O)CC6)CCCCCCCCCCCCCCCC$
InChiKey	NHXLMOGPVYXJNR-UHFFFAOYSA-N
MDL number	MFCD00076762
Protein length	14

References

Somatostatin: Likely the most widely effective gastrointestinal hormone in the human body

Huang XQ (1997) World J Gastroenterol 3(4) **PubMedID** 27053863

Somatostatin and its receptors in the development of the endocrine pancreas

Ballian N *et al* (2006) Pancreas 33(1) **PubMedID** 16804406

A review of the use of somatostatin analogs in oncology

Keskin O *et al* (2013) Onco Targets Ther 6 **PubMedID** 23667314

Somatostatin and its receptor family

 Patel YC (1999) Front Neuroendocrinol 20(3)

 PubMedID
 10433861