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DATASHEET

Somatostatin

Product overview

Name Somatostatin
Cat No HB3088
Biological description Overview

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.

Alternative names SS, SST, SOM, GHIH, GHRIH, SRIF, SRIH
Biological action Peptide
Purity >95%
Description Regulatory neuropeptide

Solubility & Handling

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 AGCKNFFWKFTTSC (modifications: Disulfide bridge between 3 - 14)
Molecular Weight 1637.88
Chemical structure 
Molecular Formula C₇₆H₁₀₄N₁₈O₁₉S₂
Sequence (one letter) AGCKNFFWKFTTSC
Modifications Disulfide bridge between 3 - 14
CAS Number 51110-01-1
PubChem identifier 16129681
SMILES CC(C1C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(CSSCC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)NC(C(=O)N1)CCCCN)CC2=CNC3=CC=CC=C32)CC4=CC=CC=C4)CC5=CC=CC=C5)CC(=O)N)CCCCN)NC(=O)CNC(=O)C(C)N)C(=O)O)CO)C(C)O)CC6=CC=CC=C6)O
InChiKey NHXLMOGPVYXJNR-UHFFFAOYSA-N
MDL number MFCD00076762
Protein length 14

References

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Patel YC (1999) Front Neuroendocrinol 20(3)
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