

DATASHEET

Ghrelin (rat)

Product overview

Name Ghrelin (rat)
Cat No HB2942
Biological description Overview

Ghrelin is an endogenous ghrelin (GHS) receptor agonist and is an orexigenic hormone.

Uses & applications

It stimulates growth hormone release from the pituitary gland and is involved in a range of biological activities.

For example, it stimulates appetite and food intake and regulates of growth hormone and insulin secretion.


Additionally, it is involved in glucose and energy homeostasis, gastrointestinal motility, cardioprotection and neurogenesis.

Biological action Peptide
Purity >95%
Description Endogenous hormone. Ghrelin receptor agonist.

Solubility & Handling

Storage instructions -20 °C (desiccate)
Solubility overview Soluble in water (1 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 GSSFLSPEHQKAQQRKESKKPPAKLQPR (Ser-3 = Ser(n-octanoyl))
Molecular Weight 3314.83
Chemical structure 
Molecular Formula C₁₄₇H₂₄₅N₄₅O₄₂
Sequence (one letter) GSSFLSPEHQKAQQRKESKKPPAKLQPR
Sequence (three letter) Gly-Ser-Ser-Phe-Leu-Ser-Pro-Glu-His-Gln-Lys-Ala-Gln-Gln-Arg-Lys-Glu-Ser-Lys-Lys-Pro-Pro-Ala-Lys-Leu-Gln-Pro-Arg
Modifications Ser-3 = Ser(n-octanoyl)
CAS Number 258338-12-4
PubChem identifier 44134734
SMILES CCCCCCCC(=O)N(C(CO)C(=O)NC(CC1=CC=CC=C1)C(=O)NC(CC(C)C)C(=O)NC(CO)C(=O)N2C CCC2C(=O)NC(CCC(=O)O)C(=O)NC(CC3=CNC=N3)C(=O)NC(CCC(=O)N)C(=O)NC(CCCCN)C(=O)NC(C)C(=O)NC(CCC(=O)N)C(=O)NC(CCC(=O)N)C(=O)NC(CCCN(C=N)N)C(=O)NC(CCCCN)C(=O)NC(CCC(=O)O)C(=O)NC(CO)C(=O)NC(CCCCN)C(=O)NC(CCCCN)C(=O)N4CCCC4C(=O)N5C CCC5C(=O)NC(C)C(=O)NC(CCCCN)C(=O)NC(CC(C)C)C(=O)NC(CCC(=O)N)C(=O)N6CCCC6C(=O)NC(CCCN(C=N)N)C(=O)O)C(=O)C(CO)NC(=O)CN
InChiKey YQVMHOLUYGAYNG-UHFFFAOYSA-N
Protein length 29

References

An Integrative Review on Role and Mechanisms of Ghrelin in Stress, Anxiety and Depression

Bali A *et al* (2016) *Curr Drug Targets* 17(5)

PubMedID [25981609](#)

Ghrelin: much more than a hunger hormone

Pradhan G *et al* (2013) *Curr Opin Clin Nutr Metab Care* 16(6)

PubMedID [24100676](#)

Ghrelin: integrative neuroendocrine peptide in health and disease

Wu JT *et al* (2004) *Ann Surg* 239(4)

PubMedID [15024307](#)
