

## 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** C<sub>147</sub>H<sub>245</sub>N<sub>45</sub>O<sub>42</sub>  
**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](#)

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