



## PRODUCT DATA SHEET

**Product:** Des-Acyl Ghrelin (Rat)

**Cat. No:** BC-348 (0.1 mg)

**Synonyms:**

Des-Octanoylated Ghrelin Trifluoroacetate Form

**Sequence:**

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

**Formula:**

$C_{139}H_{231}N_{45}O_{41}$

**Molecular Weight:**

3188.6

**Description:**

Food intake is regulated by numerous peptidic factors. Among them is ghrelin, which bears the specific octanoylated Ser at position 3 as a post-translationally modified residue 1. In studies of the endogenous form(s) of ghrelin, two major peptides were found to exist in tissues and plasma, which are ghrelin itself and des-octanoylated ghrelin (des-acyl ghrelin). The growth hormone (GH) releasing activity of ghrelin through GH secretagogue receptor (GHSR) was abrogated by removal of the octanoyl group. The following aspects of Ghrelin function have been discovered by utilizing either rat or human peptide: des-acyl ghrelin may

- i) Affect the insulin and glucose level in the body.
- ii) Be an anorexic peptide through corticotropin-releasing factor type 2 receptor activation upon i.p. administration.
- iii) Be an orexigenic peptide.

Recently it has been described that stimulation of food intake is observed upon i.c.v. injection of the peptide, and that this effect is generated through the orexin A neuron. This effect was determined to be afforded through a target protein other than GHSR. As is obvious from these recent findings, functional roles of des-acyl ghrelin in the regulation of food consumption seem to be largely conflicting. Therefore, further studies using synthetic des-acyl ghrelin are required to reach concrete conclusions about the actual role of des-acyl ghrelin in the body.

**Format:**

Powder

**Preparation:**

Without removing the cap, inject 340  $\mu$ L of distilled water into the vial using a calibrated syringe. Dissolve the contents thoroughly. This will provide a 0.1 mM solution.

**Storage and Stability:**

Powder: Store the undissolved peptide at  $-20^{\circ}\text{C}$ .  
Solution: Prepare 100-200  $\mu$ L aliquots and freeze at  $-20^{\circ}\text{C}$ . The aqueous solution should be used within two weeks.

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.