

# **Human Ghrelin**

**CATALOG #**: 4990-100 100 μg

4990-1000 1 mg

LOT #:

FORM: Lyophilized powder

SEQUENCE: GS(X)FLSPEHQRVQQRKESKKPPAKLQPR

X = serine modified with n-octanoic acid

MOL. WT. 3374.0

#### **RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in PBS containing at least 0.1% BSA to a concentration of 1.0 mg/ml. This stock solution should be aliquoted and stored at -20°C or -70°C for future use.

#### STORAGE CONDITIONS:

The lyophilized peptide is best-stored desiccated below 0°C. Reconstituted Ghrelin should be stored in working aliquots at -20°C or -70°C.

#### DESCRIPTION:

Ghrelin ('ghre' is the Proto-Indo-European root of the word 'grow') has been identified as the endogenous ligand for the GHS-R (growth hormone secretagogues receptor). Ghrelin is expressed in the stomach, small and large intestines, and brain regions that are involved in the regulation of food intake. Both ghrelin and GHS-R expression is also detected in the heart, suggesting that Ghrelin might have some cardiovascular effects. Ghrelin administration stimulates GH secretion but also causes weight gain by increase food intake. Mature human and rat Ghrelin (28 a.a.) are produced from a 117 amino acid precursor. Ghrelin has an unusual modification at Ser3 residue that is n-octanoylated and is essential for biological activity. Ghrelin is the first known example of a bioactive peptide modified by an acyl acid.

## **ACTIVITY:**

Biological activity of ghrelin has not been established. The peptide can be used in ELISA, as a positive control in Western blot analysis, or as a blocking peptide to block antibody activity.

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