

## ghrelin (C-18): sc-10368



The Power to Question

## BACKGROUND

Small synthetic molecules called growth-hormone secretagogues (GHSs) act through GSH-R to stimulate the release of GH from the pituitary. Ghrelin is an endogenous ligand for the growth hormone secretagogue receptor (GHS-R). Ghrelin and GHRH are involved in the regulation of GH release from the pituitary. GHRH exerts its action through high-affinity GHRH receptors (GHRH-R) present in the anterior pituitary. The acylated peptide of ghrelin specifically releases GH both *in vivo* and *in vitro* and is found in stomach tissue. GH plays a crucial role in stimulating and controlling the growth, metabolism and differentiation of many mammalian cell types by modulating the synthesis of multiple mRNA species. The gene encoding ghrelin maps to human chromosome 3p25.3.

## CHROMOSOMAL LOCATION

Genetic locus: GHRL (human) mapping to 3p25.3; Ghrl (mouse) mapping to 6 E3.

## SOURCE

ghrelin (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ghrelin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10368 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ghrelin (C-18) is recommended for detection of precursor and mature ghrelin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ghrelin (C-18) is also recommended for detection of precursor and mature ghrelin in additional species, including canine.

Suitable for use as control antibody for ghrelin siRNA (h): sc-39517, ghrelin siRNA (m): sc-39518, ghrelin shRNA Plasmid (h): sc-39517-SH, ghrelin shRNA Plasmid (m): sc-39518-SH, ghrelin shRNA (h) Lentiviral Particles: sc-39517-V and ghrelin shRNA (m) Lentiviral Particles: sc-39518-V.

Molecular Weight of ghrelin: 13 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

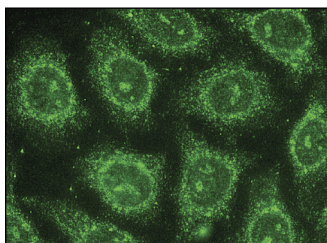
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



ghrelin (C-18): sc-10368. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

1. Caminos, J.E., et al. 2003. Cellular distribution and regulation of ghrelin messenger ribonucleic acid in the rat pituitary gland. *Endocrinology* 144: 5089-5097.
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3. Widmayer, P., et al. 2011. Altered expression of gustatory-signaling elements in gastric tissue of morbidly obese patients. *Int. J. Obes.* 36: 1353-1359.
4. Gallas, S., et al. 2011. Gastric electrical stimulation increases ghrelin production and inhibits catecholaminergic brainstem neurons in rats. *Eur. J. Neurosci.* 33: 276-284.
5. Huang, L., et al. 2011. Influence of fasting, Insulin and glucose on ghrelin in the dorsal vagal complex in rats. *J. Endocrinol.* 211: 257-262.
6. Janssen, S., et al. 2011. Bitter taste receptors and a-gustducin regulate the secretion of ghrelin with functional effects on food intake and gastric emptying. *Proc. Natl. Acad. Sci. USA* 108: 2094-2099.
7. Rak-Mardyta, A., et al. 2012. Expression of ghrelin and the ghrelin receptor in different stages of porcine corpus luteum development and the inhibitory effects of ghrelin on progesterone secretion, 3b-hydroxysteroid dehydrogenase (3b-honestly significant difference (HSD)) activity and protein expression. *Theriogenology* 77: 1505-1512.
8. Soares, V.M., et al. 2012. Early life overfeeding decreases acylated ghrelin circulating levels and upregulates GHSR1a signaling pathway in white adipose tissue of obese young mice. *Regul. Pept.* 174: 6-11.

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Try **ghrelin (2F4): sc-293422**, our highly recommended monoclonal alternative to ghrelin (C-18)