

# ghrelin (H-40): sc-50297

## 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 (H-40) is a rabbit polyclonal antibody raised against amino acids 21-60 mapping at the N-terminus 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.

## 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.

## APPLICATIONS

ghrelin (H-40) 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 (H-40) is also recommended for detection of precursor and mature ghrelin in additional species, including canine and porcine.

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.

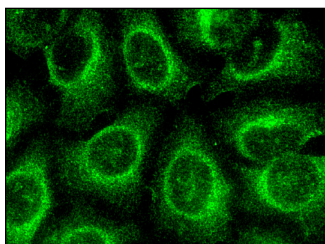
Molecular Weight of ghrelin: 13 kDa.

Positive Controls: mouse liver extract: sc-2256.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ghrelin (H-40): sc-50297. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Ishikawa, T., et al. 2007. Ghrelin expression in human testis and serum testosterone level. *J. Androl.* 28: 320-324.
- Fischer, T., et al. 2008. Reassessment of sst2 somatostatin receptor expression in human normal and neoplastic tissues using the novel rabbit monoclonal antibody UMB-1. *J. Clin. Endocrinol. Metab.* 93: 4519-4524.
- O'Brien, M., et al. 2010. Ghrelin in the human myometrium. *Reprod. Biol. Endocrinol.* 8: 55.
- Zhao, X., et al. 2012. Underlying mechanism of *Aconitum lizhong* acting on experimental hypothermia with indigestion in rats: role of ghrelin. *Evid. Based Complement. Alternat. Med.* 2012: 542461.
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- Kraus, D., et al. 2015. Ghrelin promotes oral tumor cell proliferation by modifying GLUT1 expression. *Cell. Mol. Life Sci.* E-published.

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Try **ghrelin (2F4): sc-293422**, our highly recommended monoclonal alternative to ghrelin (H-40).