SANTA CRUZ BIOTECHNOLOGY, INC.

GHS-R1 (D-16): sc-10362

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GHS-R1 (growth hormone secretagogue receptor type 1) is a G protein-coupled receptor. Due to alternative splicing GHS-R exists in two isoforms designated GHS-R1a and GHS-R1b. GHS-R1a is the full length mature protein, and GHS-R1b has a distinct amino acid sequence between residues 266-289 and is missing residues 290-366. GHS-R1a binds synthetic peptidyl and nonpeptidyl growth hormone secretagogues (GHS), which stimulate growth hormone (GH) release. The binding of GHS to GHS-R1a is magnesium dependent, inhibited by GTP-γ-S, and not displaced by the two hypothalamic hormones, growth hormone releasing hormone (GHRH) and somatostatin. This suggests that the interaction between GHS and GHS-R1a is distinct from GH regulation via GHRH and somatostatin and there exists a natural growth hormone regulator specific for GHS-R1a. GHS-R1a is primarily expressed in the hypothalamus and pituitary, and expression has been shown to be elevated in pituitary adenoma tissue.

CHROMOSOMAL LOCATION

Genetic locus: GHSR (human) mapping to 3q26.31; Ghsr (mouse) mapping to 3 A3.

SOURCE

GHS-R1 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GHS-R1 of rat 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-10362 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

GHS-R1 (D-16) is recommended for detection of GHS-R1a and GHS-R1b 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).

Suitable for use as control antibody for GHS-R1 siRNA (h): sc-40017, GHS-R1 siRNA (m): sc-40018, GHS-R1 shRNA Plasmid (h): sc-40017-SH, GHS-R1 shRNA Plasmid (m): sc-40018-SH, GHS-R1 shRNA (h) Lentiviral Particles: sc-40017-V and GHS-R1 shRNA (m) Lentiviral Particles: sc-40018-V.

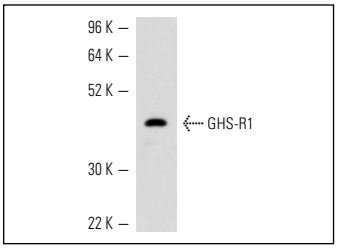
Molecular Weight of GHS-R1: 44 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GHS-R1 (D-16): sc-10362. Western blot analysis of GHS-R1 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Dominguez, B., et al. 2007. Ghrelin and GHRP-6 enhance electrical and secretory activity in GC somatotropes. Biochem. Biophys. Res. Commun. 358: 59-65.
2. Chen, Y.T., et al. 2010. Ghrelin improves lipopolysaccharide-induced gastrointestinal motility disturbances: roles of nitric oxide and prostaglandin E2. Shock 33: 205-212.
3. Díaz-Lezama, N., et al. 2010. Ghrelin inhibits proliferation and increases T-type Ca^{2+} channel expression in PC-3 human prostate carcinoma cells. Biochem. Biophys. Res. Commun. 403: 24-29.
4. Komori, T., et al. 2010. Regulation of ghrelin signaling by a leptin-induced gene, negative regulatory element-binding protein, in the hypothalamic neurons. J. Biol. Chem. 285: 37884-37894.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **GHS-R1 (E-7): sc-374515**, our highly recommended monoclonal alternative to GHS-R1 (D-16).