SANTA CRUZ BIOTECHNOLOGY, INC.

GHR (S-19): sc-10355

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GHR (growth hormone receptor) binds growth hormone (GH), which is produced by the anterior pituitary and regulates body growth and other metabolic processes. GHR is an integral membrane protein and a member of the cytokine receptor family. A common characteristic of the cytokine receptor family is having soluble forms of the protein. The soluble form of GHR is GH-binding protein (GHBP), which is generated by the proteolytic cleavage of the extracellular domain of GHR. Reduced levels of GHBP are associated with GH insensitivity syndrome (GHIS). GHR has been shown to be transcribed via at least two different promoters, resulting in GHR 1A and GHR 1B. Both GHR 1A and 1B are expressed in liver, whereas GHR 1B is also expressed in muscle, uterus, and ovary tissues.

REFERENCES

1. Dastot, F., et al. 1996. Alternatively spliced forms in the cytoplasmic domain of the human growth hormone (GH) receptor regulate its ability to generate a soluble GH-binding protein. Proc. Natl. Acad. Sci. USA 93: 10723-10728.
2. Bick, T., et al. 1996. Regulation of cellular rabbit growth hormone (GH) receptor and GH-binding protein generation *in vitro*. Endocrinology 137: 3977-3985.

CHROMOSOMAL LOCATION

Genetic locus: Ghr (mouse) mapping to 15 A1.

SOURCE

GHR (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GHR of mouse 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-10355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GHR (S-19) is recommended for detection of GHR of mouse and rat 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 GHR siRNA (m): sc-40016, GHR shRNA Plasmid (m): sc-40016-SH and GHR shRNA (m) Lentiviral Particles: sc-40016-V.

Molecular Weight of GHR precursor: 110 kDa.

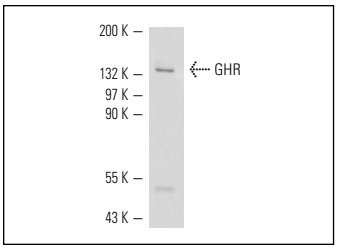
Molecular Weight of glycosylated mature GHR: 140 kDa.

Positive Controls: rat liver extract: sc-2395, Sol8 cell lysate: sc-2249 or L8 cell lysate: sc-3807.

STORAGE

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

DATA



GHR (S-19): sc-10355. Western blot analysis of GHR expression in rat liver tissue extract.

SELECT PRODUCT CITATIONS

1. Gat-Yablonski, G., et al. 2008. Nutrition-induced catch-up growth at the growth plate. J. Pediatr. Endocrinol. Metab. 21: 879-893.
2. Tang, H., et al. 2011. Changes in growth hormone (GH), GH receptor, and GH signal transduction in hippocampus of congenital hypothyroid rats. J. Neurosci. Res. 89: 248-255.
3. Bogazzi, F., et al. 2011. Cardiac extrinsic apoptotic pathway is silent in young but activated in elder mice overexpressing bovine GH: interplay with the intrinsic pathway. J. Endocrinol. 210: 231-238.
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RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.