

GHR (L-15): sc-10354

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., Sobrier, M.L., Duquesnoy, P., Duriez, B., Goossens, M. and Amselem, S. 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., Amit, T., Mansur, M., Bar-Am, O., Youdim, M.B. and Hochberg, Z. 1996. Regulation of cellular rabbit growth hormone (GH) receptor and GH-binding protein generation *in vitro*. *Endocrinology* 137: 3977-3985.
3. Iida, K., Takahashi, Y., Kaji, H., Nose, O., Okimura, Y., Abe, H. and Chihara, K. 1998. Growth hormone (GH) insensitivity syndrome with high serum GH-binding protein levels caused by a heterozygous splice site mutation of the GH receptor gene producing a lack of intracellular domain. *J. Clin. Endocrinol. Metab.* 83: 531-537.
4. Ross, R.J. 1999. The GH receptor and GH insensitivity. *Growth Horm. IGF Res.* 9: 42-45.
5. Amit, T., Youdim, M.B. and Hochberg, Z. 2000. Clinical review 112: Does serum growth hormone (GH) binding protein reflect human GH receptor function? *J. Clin. Endocrinol. Metab.* 85: 927-932.

CHROMOSOMAL LOCATION

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

SOURCE

GHR (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-10354 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

GHR (L-15) is recommended for detection of GHR of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 precursor GHR: 110 kDa.

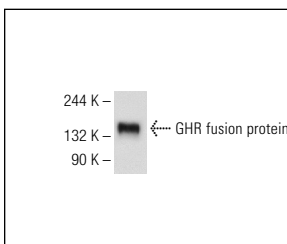
Molecular Weight of glycosylated mature GHR: 140 kDa.

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

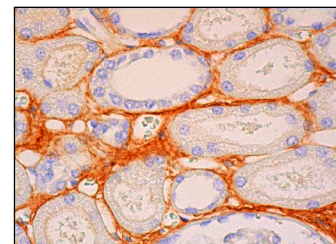
RECOMMENDED SECONDARY REAGENTS

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



GHR (L-15): sc-10354. Western blot analysis of rat recombinant GHR fusion protein.



GHR (L-15): sc-10354. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing extracellular staining.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **GHR (B-10): sc-137185** or **GHR (B-12): sc-137184**, our highly recommended monoclonal alternatives to GHR (L-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GHR (B-10): sc-137185**.