

# Anti-GHR Antibody

Catalog # ABO11035

#### Specification

## Anti-GHR Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Rabbit IgG polyclonal antibody for Growt

P16882 Rabbit Mouse, Rat Polyclonal Lyophilized

**WB** 

Rabbit IgG polyclonal antibody for Growth hormone receptor(GHR) detection. Tested with WB in Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-GHR Antibody - Additional Information

Gene ID 14600

**Other Names** Growth hormone receptor, GH receptor, Somatotropin receptor, Growth hormone-binding protein, GH-binding protein, GHBP, Serum-binding protein, Ghr

Calculated MW 72783 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Mouse, Rat<br>

Subcellular Localization

Cell membrane; Single-pass type I membrane protein. On growth hormone binding, GHR is ubiquitinated, internalized, down-regulated and transported into a degradative or non-degradative pathway. .

**Tissue Specificity** Expressed in all tissues tested including, liver, heart, adipose tissue, mammary gland, testes, ovary, brain, kidney and muscle. Highest levels in liver.

**Protein Name** Growth hormone receptor(GH receptor)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of mouse Growth hormone



receptor(231-247aa DKEHEVRVRSRQRSFEK), identical to the related rat sequence.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the type I cytokine receptor family. Type 1 subfamily.

#### **Anti-GHR Antibody - Protein Information**

Name Ghr

Function

Receptor for pituitary gland growth hormone involved in regulating postnatal body growth. On ligand binding, couples to, and activates the JAK2/STAT5 pathway (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Note=On growth hormone binding, GHR is ubiquitinated, internalized, down-regulated and transported into a degradative or non- degradative pathway. [Growth hormone-binding protein]: Secreted. Note=Complexed to a substantial fraction of circulating GH.

**Tissue Location** Expressed in all tissues tested including, liver, heart, adipose tissue, mammary gland, testes, ovary, brain, kidney and muscle. Highest levels in liver

#### **Anti-GHR Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-GHR Antibody - Images



2 8 9 1 3 4 5 6 7 130KD • 100KD -70KD -55KD-35KD-25KD-15KD -

Anti-GHR antibody, ABO11035, Western blottingAll lanes: Anti GHR (ABO11035) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Kidney Tissue Lysate at 50ugLane 3: Rat Spleen Tissue Lysate at 50ugLane 4: Rat Intestine Tissue Lysate at 50ugLane 5: Mouse Spleen Tissue Lysate at 50ugLane 6: Mouse Testis Tissue Lysate at 50ugLane 7: Mouse Liver Tissue Lysate at 50ugLane 8: Mouse Kidney Tissue Lysate at 50ugLane 9: Mouse Intestine Tissue Lysate at 50ugPredicted bind size: 72KDObserved bind size: 72KD

#### Anti-GHR Antibody - Background

The GHR locus to human chromosome 5p13.1-p12 and to mouse chromosome 15. Additionally, its gene has 9 exons that encode the receptor and several additional exons in the 5-prime untranslated region. The coding exons span at least 87 kb. GHR consists of an extracellular domain of 246 amino acids, a single transmembrane domain, and a cytoplasmic domain. Exons 3 to 7 encode the extracellular domain. There are 2 isoforms of GHR in humans, generated by retention or exclusion of exon 3 during splicing: a full-length isoform and an isoform that lacks exon 3(d3GHR). Furthermore, the two isoforms of GHR are expressed in the placenta and appeared to be due to alternative splicing. In cirrhosis, there is a state of acquired GH resistance, as defined by high circulating GH levels with low IGF1 levels. Moreover, Mutations in the GHR gene have been demonstrated as the cause of Laron syndrome , also known as the growth hormone insensitivity syndrome(GHIS).