

GHR Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP16661a

Specification

GHR Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P10912</u>

GHR Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2690

Other Names

Growth hormone receptor, GH receptor, Somatotropin receptor, Growth hormone-binding protein, GH-binding protein, GHBP, Serum-binding protein, GHR

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GHR Antibody (N-term) Blocking Peptide - Protein Information

Name GHR

Function

Receptor for pituitary gland growth hormone involved in regulating postnatal body growth. On ligand binding, couples to the JAK2/STAT5 pathway (By similarity). Isoform 2 up-regulates the production of GHBP and acts as a negative inhibitor of GH signaling.

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 various tissues with high expression in liver and skeletal muscle. Isoform 4 is predominantly expressed in kidney, bladder, adrenal gland and brain stem. Isoform 1 expression in placenta is predominant in chorion and decidua. Isoform 4 is highly expressed in placental villi. Isoform 2 is expressed in lung, stomach and muscle. Low levels in liver



GHR Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

GHR Antibody (N-term) Blocking Peptide - Images

GHR Antibody (N-term) Blocking Peptide - Background

This gene encodes a protein that is a transmembranereceptor for growth hormone. Binding of growth hormone to thereceptor leads to receptor dimerization and the activation of anintra- and intercellular signal transduction pathway leading togrowth. A common alternate allele of this gene, called GHRd3, lacksexon three and has been well-characterized. Mutations in this genehave been associated with Laron syndrome, also known as the growthhormone insensitivity syndrome (GHIS), a disorder characterized byshort stature. Other splice variants, including one encoding asoluble form of the protein (GHRtr), have been observed but havenot been thoroughly characterized. In humans and rabbits, but notrodents, growth hormone binding protein (GHBP) is generated byproteolytic cleavage of the extracellular ligand-binding domainfrom the mature growth hormone receptor protein. The preciselocation of this cleavage site has not been determined for thehuman protein.

GHR Antibody (N-term) Blocking Peptide - References

Canzian, F., et al. Hum. Mol. Genet. 19(19):3873-3884(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Giavoli, C., et al. Eur. J. Endocrinol. 163(3):361-368(2010)Alvarez-Nava, F., et al. J. Pediatr. Endocrinol. Metab. 23(8):773-782(2010)Lisitskaia, K.V., et al. Mol. Gen. Mikrobiol. Virusol. 2, 34-37 (2010) :