

Recombinant Human GHR Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50374

Size: 10ug, 100ug

Protein Name: Growth hormone receptor (GH receptor) (Somatotropin receptor) [Cleaved into: Growth hormone-binding protein (GH-binding protein) (GHBP) (Serum-binding protein)]

Synonym: GHR

UniProt ID: P10912

UniProt Link: www.uniprot.org/uniprotkb/P10912/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 638 AA

Molecular Weight: 72 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDLWQLLLTLALAGSSDAFSGSEATAAILS RAPWSLQSVNPGLKTNSSKEPKFTKCRSPERETFSC
HTDEVHHGTKNLGPIQLFYTRRNTQEWTQEWKECPDYVSAGENSCYFNSSFTSIWIPYCIKLT
SNG GTVDEKCFVDEIVQPDPIALNWTLLNVSLTGIHADIQVRWEAPRNADIQKGWMVLEYELQYKEVN
ETKWKMMDPILTTSPVYSLKVDKEYEVRVRSKQRNSGNYGEFSEVLYVTLPQMSQFTCEEDFYFP
WLLIIIFGIFGLTVMLFVFLFSKQQRIKMLILPPVPVPIKIGIDPDLLKEGKLEEVNTILAIHDSYKPEFHS
DDSWVEFIELDIDEPDEKTEESDTRLLSSDHEKSHSNLGVKDGDSGRTSCCEPDILETDFNANDIHE
GTSEVAQPQRLKGEADLLCLDQKNQNNSPYHDACPATQQPSVIAEKNKPQLPTEGAESTHQAA
HIQLSNPSSLSNIDFYAQVSDITPAGSVVLSPGQKNKAGMSQCDMHPEMVSLCQENFLMDNAYFCE
ADAKKCIPVAPHIKVESHIQPSLNQEDIYITTESLTAAAGRPGTGEHVPGSEMPVPDYTSIHIVQSPQG
LILNATALPLPDKEFLSSCGYVSTDQLNKIMP

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Growth hormone receptor (GH receptor) (Somatotropin receptor) [Cleaved into: Growth hormone-binding protein (GH-binding protein) (GHBP) (Serum-binding protein)] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Receptor for pituitary gland growth hormone (GH1) involved in regulating postnatal body growth (PubMed:1549776, PubMed:2825030, PubMed:8943276). On ligand binding, couples to the JAK2/STAT5 pathway (PubMed:1549776, PubMed:15690087, PubMed:2825030, PubMed:8943276).; [Growth hormone-binding protein]: The soluble form (GHBP) acts as a reservoir of growth hormone in plasma and may be a modulator/inhibitor of GH signaling.; [Isoform 2]: Up-regulates the production of the soluble Growth hormone-binding protein form (GHBP) and acts as a negative inhibitor of growth hormone signaling.

Subcellular Localization: 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.; [Isoform 2]: Cell membrane ; Single-pass type I membrane protein . Note=Remains fixed to the cell membrane and is not internalized.; [Growth hormone-binding protein]: Secreted . Note=Complexed to a substantial fraction of circulating GH.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.