

Growth Hormone Receptor Active Protein | GHR active protein

Growth Hormone Receptor Protein, Mouse, Recombinant (His Tag)

CATALOG #
AAA258123

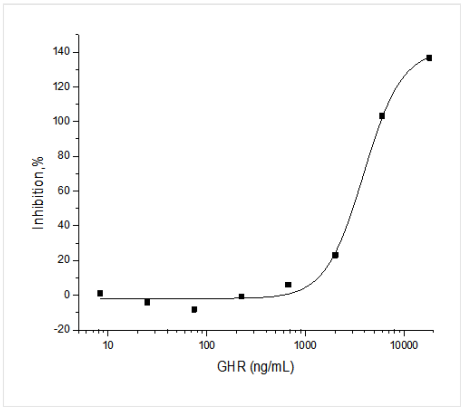
HOST
HEK293 Cells

PRODUCT SYNONYMS

Growth Hormone Receptor; Growth Hormone Receptor Protein; Mouse; Recombinant (His Tag); Mouse Growth Hormone Receptor/GHR/GHBP Protein (His Tag); GHBP Protein; GHR/BP Protein; growth hormone receptor; GHR active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Gln27 3
Species	Mouse
Activity	Measured by its ability to inhibit proliferation of INS-1 cells induced by human growth hormone. The ED50 for this effect is 2-8ug/mL in the presence of 50ng/mL human growth hormone.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Thr 25
Tag	C-His
Protein Construction	A DNA sequence encoding the extracellular domain of mouse GHR (NP_034414.2)(Met 1-Gln 273) was fused with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its ability to inhibit proliferation of INS-1 cells induced by human growth hormone.
The ED50 for this effect is 2-8ug/mL in the presence of 50 ng/mL human growth hormone.

ADDITIONAL INFORMATION

Related Product Information for GHR active protein	Background: Growth hormone receptor, also known as GH receptor and GHR, is a single-pass type I membrane protein which belongs to the type I cytokine receptor family and type 1 subfamily. GHR contains one fibronectin type-III domain. Growth hormone receptor/GHR is expressed in various tissues with high expression in liver and skeletal muscle. Isoform 4 of GHR is predominantly expressed in kidney, bladder, adrenal gland and brain stem. Isoform 1 expression of GHR in placenta is predominant in chorion and decidua. Isoform 4 is highly expressed in placental villi. Isoform 2 of GHR is expressed in lung, stomach and muscle. Growth hormone receptor/GHR is a receptor for pituitary gland growth hormone. It is involved in regulating postnatal body growth. On ligand binding, it couples to the JAK2/STAT5 pathway. Isoform 2 of GHR up-regulates the production of GHBP and acts as a negative inhibitor of GH signaling. Defects in GHR are a cause of Laron syndrome (LARS) which is a severe form of growth hormone insensitivity characterized by growth impairment, short stature, dysfunctional growth hormone receptor, and failure to generate insulin-like growth factor I in response to growth hormone. Defects in GHR may also be a cause of idiopathic short stature autosomal (ISSA) which is defined by a subnormal rate of growth.
References	Leung DW. et al., 1987, Nature. 330:537-43. Sobrier M-L. et al., 1997, J Clin Endocrinol Metab. 82: 435-7. Enberg B. et al., 2000, Eur J Endocrinol. 143: 71-6. Pantel J. et al., 2000, J Biol Chem. 275: 18664-9. Jorge AAL. et al., 2004, Clin Endocrinol. (Oxf.) 60: 36-40.

NCBI AND UNIPROT INFORMATION

NCBI GI #	114520600
NCBI GeneID	14600
NCBI Accession #	NP_034414.2
NCBI GenBank Nucleotide #	NM_010284.3
Molecular Weight	34,105 Da
NCBI Official Full Name	growth hormone receptor isoform 1
NCBI Official Synonym Full Names	growth hormone receptor
NCBI Official Symbol	Ghr
NCBI Official Synonym Symbols	GHBP; GHR/BP
NCBI Protein Information	growth hormone receptor

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

