

Recombinant Bovine Growth Hormone Receptor

Cat. No. GHR-36B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Bovine Growth Hormone Binding Protein produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 237 amino acids and having a molecular mass of 28 kDa. Bovine GHBP is purified by proprietary chromatographic techniques.
Species	Bovine
Source	E.coli
Description	GHBP is a transmembrane receptor for growth hormone. Binding of growth hormone to the receptor leads to receptor dimerization and the activation of an intra- and intercellular signal transduction pathway leading to growth. A common alternate allele of this gene, called GHRd3, lacks exon three and has been well-characterized. Mutations in this gene have been associated with Laron syndrome, also known as the growth hormone insensitivity syndrome (GHIS), a disorder characterized by short stature. Other splice variants, including one encoding a soluble form of the protein (GHRtr), have been observed but have not been thoroughly characterized.
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Phe-Ser-Gly-Ser.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Formulation	The Protein was lyophilized from a concentrated (1mg/ml) solution with 0.0045mM NaHCO ₃ .
Solubility	It is recommended to reconstitute the lyophilized GHBP in sterile 18MΩ-cm H ₂ O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized Growth Hormone Binding Protein Bovine although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GHBP should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	GHR growth hormone receptor [Bos taurus]
Synonyms	GHR; growth hormone receptor; GHBP; serum binding protein; somatotropin receptor; growth hormone binding protein; GH receptor; Somatotropin receptor
Gene ID	280805
mRNA Refseq	NM_176608
Protein Refseq	NP_788781
UniProt ID	O46600
Pathway	Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction; Cytokine-cytokine receptor interaction

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Function

growth hormone receptor activity; peptide hormone binding; phosphate binding; protein binding; protein homodimerization activity; receptor activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA