BioVision

rev 03/14

For research use only

GHBP, human recombinant

CATALOG #:	4972-10	10 µg
	4972-50	50 µg
	4972-1000	1 mg

ALTERNATE NAMES: GHR, GHBP, GH receptor, Growth hormone binding protein, Somatotropin receptor

SOURCE: E.Coli

PURITY: ≥95% by SDS–PAGE and gel-filtration analysis

MOL. WEIGHT: 30.3 kDa (19-256 aa + N-terminal poly-his tag)

FORMULATION: Lyophilized from a 4 mg/ml solution of the protein in 50 mM Tris, 100 mM NaCl, pH 8.0.

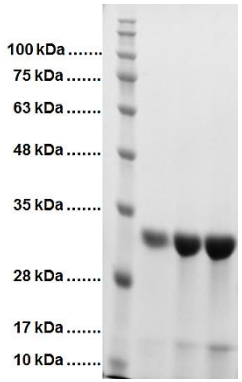
Reconstitution: Centrifuge the vial prior to opening. Reconstitute in sterile water to ≥ 100 µg/ml.

STORAGE CONDITIONS: The lyophilized human GHBP is best-stored desiccated at or below -20 °C. Reconstituted GHBP should be stored in working aliquots at -20°C. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA).

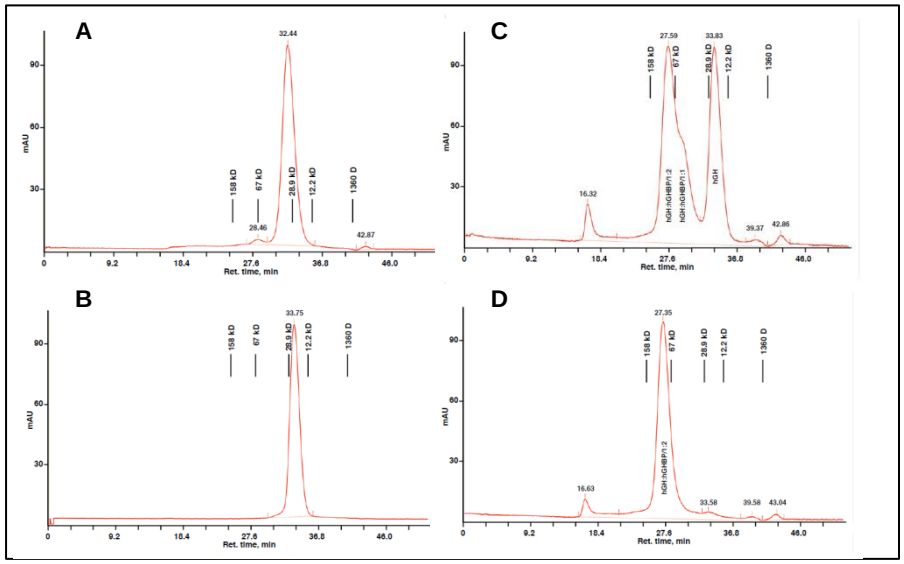
DESCRIPTION: GHBP is a transmembrane receptor for growth hormone. Binding of growth hormone to the receptor leads to receptor dimerization and the activation of an intra- and intercellular signal transduction pathway leading to growth. A common alternate allele of this gene, called GHRd3, lacks exon 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. Human Recombinant GHBP expressed from E. coli is a single, non-glycosylated, polypeptide chain containing 237 amino acids and having a molecular mass of 30.3 kDa. GHBP is purified by proprietary chromatographic techniques.

Biological Activity: GHBP is fully biologically active as evidenced by its ability of forming 2:1 complex with human growth hormone (HGH).

FOR RESEARCH USE ONLY! Not to be used in humans.



SDS-PAGE (12%) of h-GHBP:
1: Protein Marker
2: h-GHBP (5 µg)
3: h-GHBP (10 µg)
4: h-GHBP (15 µg)



SEC analysis of (A) h-GHBP, (B) h-GH along with their (C) (1:1) and (D) (2:1) mixtures in 20 mM potassium phosphate pH 6.8 were performed using a Superdex 200 HR 10/30 column at 0.5 ml/min in 50 mM Tris and 0.25 M NaCl pH 7.5.
As evidenced by formation of the hetero-dimer and hetero-trimer complexes h-GHBP is fully active (Wada *et. al*., Mol Endocrinol., **1998** Jan;12(1):146-56).

RELATED PRODUCTS:

- Growth Hormone, chicken recombinant **(Cat. No. 4771-50, -500)**
- Growth Hormone, human recombinant **(Cat. No. 4769-100, -500, -1000, -5000)**
- Growth Hormone, murine recombinant **(Cat. No. 4770-50, -1000)**
- GH (Growth Hormone) Antibody **(Cat. No. 5769-100)**
- GHRH, human recombinant **(Cat # 4784-500)**

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