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## Product Catalog No. 230-00045

### Recombinant Human Insulin-like Growth Factor Binding Protein 6 (IGFBP-6)

#### Synonyms

IGFBP-6; IBP-6; IGF-binding protein 6; insulin-like growth factor-binding protein 6.

#### Description

The insulin-like growth factor binding proteins (IGFBP) is a large family including six high affinity IGF binding proteins and four low affinity binding proteins. The cysteine-rich IGFBPs play a role in lipoprotein assembly and dietary cholesterol absorption. In addition, IGF-binding proteins prolong the half-life of the IGFs, inhibit or stimulate the growth promoting effects of the IGFs on cell culture, and alter the interaction of IGFs with their cell surface receptors.

#### Source

- Recombinant protein, purified from *Escherichia coli*.
- Protein Accession No. AAH03507.

#### Preparation

The gene encoding the mature form of IGFBP-6 (Gly24-Gly240) without the signal peptide was cloned and expressed in *E. coli*. The recombinant IGFBP-6 protein was purified by proprietary chromatographic techniques.

#### Predicted Molecular Mass

~ 25 kDa.

#### Formulation

Recombinant human IGFBP-6 is lyophilized from a 0.2  $\mu$ m filtered phosphate-buffered saline (PBS) solution with the protein concentration of 0.5 mg/mL.

#### Purity

>95%, determined by SDS-PAGE and stained with Commassie blue. (See image below).



#### Stability & Storage

- Lyophilized product is stable at room temperature for 3 weeks, it is recommended to be stored desiccated below -20°C in a manual defrost freezer.
- **Reconstitution:** briefly spin the vial prior to opening to bring the contents to the bottom. It is recommended to reconstitute the lyophilized product with sterile PBS.
- Upon reconstituted, the protein should be stored at 4°C for one week. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA) and store at -20 or -80°C. **Please avoid repeated freeze-thaw cycles.**

#### References

- Shimasaki S, Gao L, Shimonaka M, et al. (1991) Isolation and molecular cloning of insulin-like growth factor-binding protein-6. *Mol. Endocrinol.* 5:938-948.
- Neumann GM, Marinaro JA, Bach LA. (1998) Identification of O-glycosylation sites and partial characterization of carbohydrate structure and disulfide linkages of human insulin-like growth factor binding protein 6. *Biochemistry* 37:6572-6585.
- Andress DL, Birnbaum RS. (1991) A novel human insulin-like growth factor binding protein secreted by osteoblast-like cells. *Biochem. Biophys. Res. Commun.* 176:213-218.
- Martin JL, Willetts KE, Baxter RC. (1990) Purification and properties of a novel insulin-like growth factor-II binding protein from transformed human fibroblasts. *J. Biol. Chem.* 265:4124-4130.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**