

Recombinant Human Insulin-Like Growth Factor Binding Protein-1 (rh IGFBP-1)

Synonyms: IBP-1, IGF-Binding Protein 1, AFBP, PP12, IGF-BP25, hIGFBP-1.

Introduction: IGFBP-1 is a member of the insulin-like growth factor binding protein (IGFBP) family and encodes a protein with an IGFBP domain and a thyroglobulin type-I domain. The protein binds both insulin-like growth factors (IGFs) I and II and circulates in the plasma. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors. Alternate transcriptional splice variants encoding different isoforms have been characterized.

Description: Recombinant human IGFBP-1 is a single, glycosylated, polypeptide chain containing 218 amino acids and having a molecular mass of 25.3 kDa. rh IGFBP-1 is purified by proprietary chromatographic techniques.

Source: *Human amniotic fluid*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: The protein was lyophilized with 10 mM HCL.
The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IGFBP-1 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IGFBP-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IGFBP-1 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.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Biological Activity: Inhibition of IGF-I stimulated proliferation of NUC-1 cels: IC₅₀ ~ 100 ng/ml.
Inhibition of serum-induced stimulation of DNA synthesis in chick embryo fibroblast primary culteres: IC₅₀ (1% serum) ~ 300 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11343800
<i>medium</i>	20 µg	Cat.N°	11343804

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