

Human IGFBP-3 Protein

Cat. No. IGF-HM103

Description

Source	Recombinant Human IGFBP-3 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gly28-Lys291.
Accession	AAH18962
Molecular Weight	The protein has a predicted MW of 29.8 kDa. Due to glycosylation, the protein migrates to 45-60 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Insulin-like growth factor binding protein-3 (IGFBP-3) is a p53 tumor suppressor-regulated protein and a major carrier for IGFs in circulation. Among six high-affinity IGFBPs, which are IGFBP-1 through 6, IGFBP-3 is the most extensively investigated IGFBP species with respect to its IGF/IGF-I receptor (IGF-IR)-independent biological actions beyond its endocrine/paracrine/autocrine role in modulating IGF action in cancer.

Assay Data

Tris-Bis PAGE

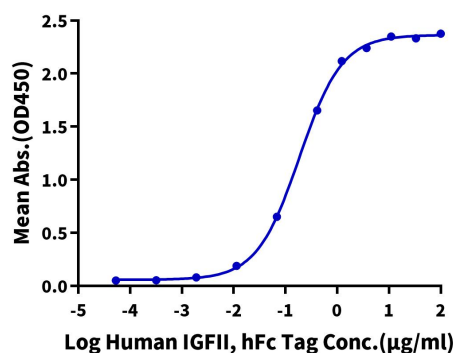


Human IGFBP-3 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Human IGFBP-3, His Tag ELISA

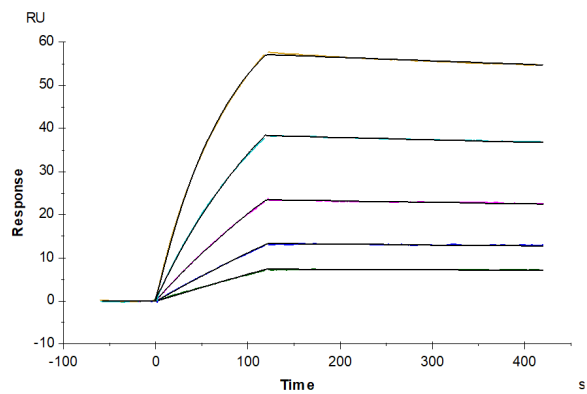
0.2 μg Human IGFBP-3, His Tag Per Well



Immobilized Human IGFBP-3, His Tag at 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) on the plate. Dose response curve for Human IGF-II, hFc Tag with the EC50 of 0.19 $\mu\text{g}/\text{ml}$ determined by ELISA (QC Test).

Assay Data

SPR Data



Human IGFBP-3, His Tag captured on CM5 Chip via anti-his antibody can bind Human IGFI, hFc Tag with an affinity constant of 2.32 nM as determined in SPR assay (Biacore T200).