

Human IGFI Protein

Cat. No. IGF-HM201



Description

Source	Recombinant Human IGFI Protein is expressed from HEK293 with hFc tag at the N-Terminus. It contains Gly49-Ala118.
Accession	P05019-1
Molecular Weight	The protein has a predicted MW of 33.18 kDa. Due to glycosylation, the protein migrates to 38-43 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 > 95% as determined by HPLC

Formulation and Storage

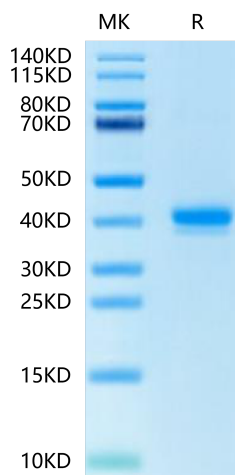
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months 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

The insulin family consists of insulin, insulin-like growth factor 1 (IGF-1), insulin-like growth factor 2 (IGF-2), their receptors (IR, IGF-1R and IGF-2R), and their binding proteins. Insulin-like growth factor I (IGF-I) is a polypeptide hormone produced mainly by the liver in response to the endocrine GH stimulus, but it is also secreted by multiple tissues for autocrine/paracrine purposes.

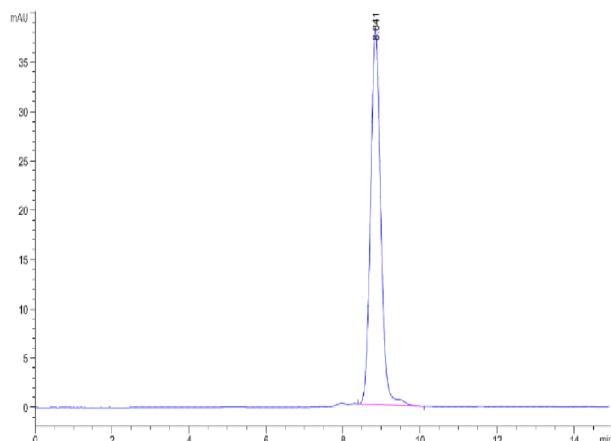
Assay Data

Tris-Bis PAGE



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

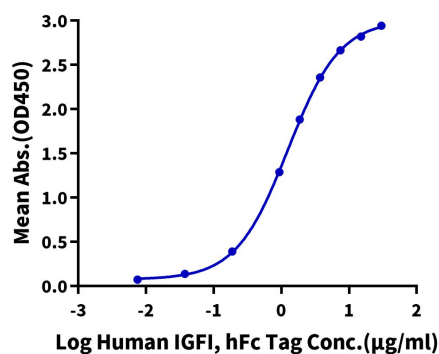
SEC-HPLC



The purity of Human IGFI is greater than 95% as determined by SEC-HPLC.

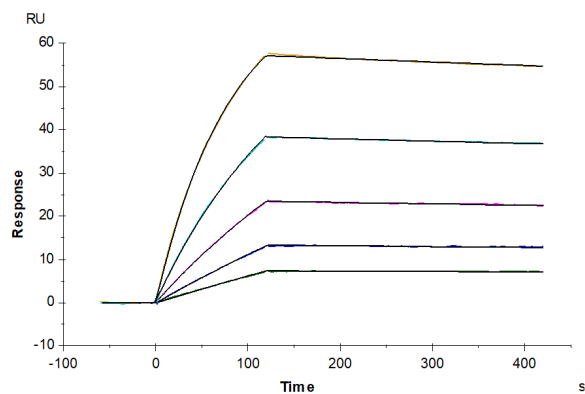
Assay Data

ELISA Data

Human IGFI, hFc Tag ELISA0.5 μ g Human IGF1R, His Tag Per Well

Immobilized Human IGF1R, His Tag at 5 μ g/ml (100 μ l/well) on the plate. Dose response curve for Human IGFI, hFc Tag with the EC50 of 1.25 μ g/ml determined by ELISA (QC Test).

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).