

Human IGF1 Protein

Cat. No. IGF-HM201



Description

Source	Recombinant Human IGF1 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 Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

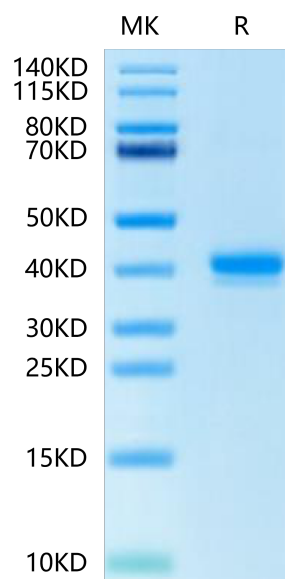
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

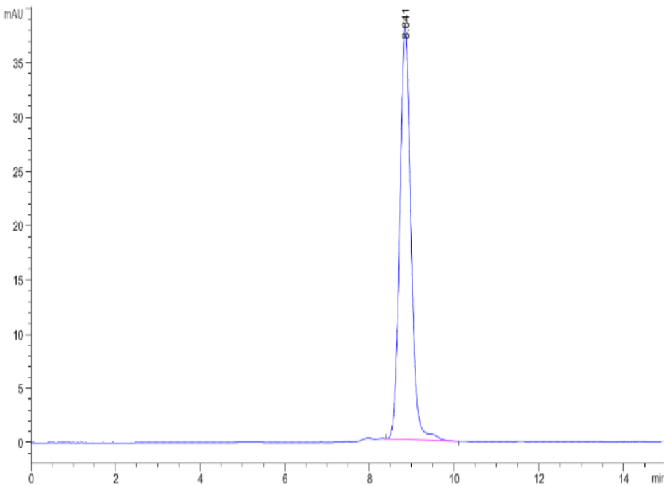
Bis-Tris PAGE



Human IGF1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

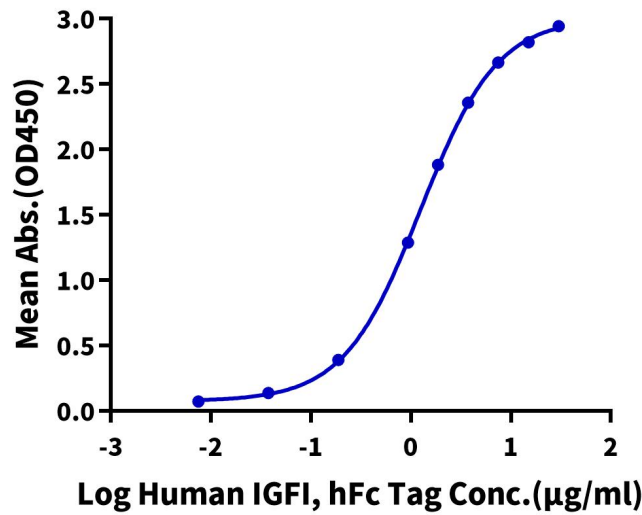
Assay Data



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

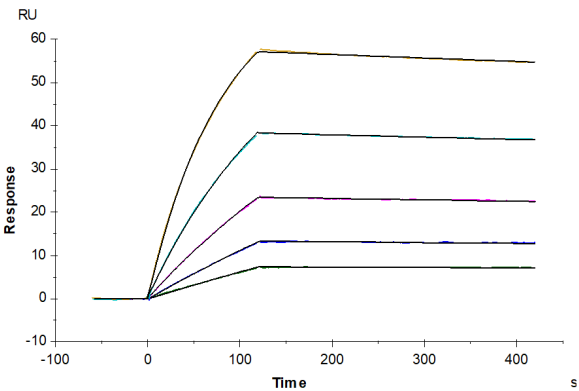
ELISA Data

Human IGFI, hFc Tag ELISA
0.5µg Human IGF1R, His Tag Per Well



Immobilized Human IGF1R, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human IGFI, hFc Tag with the EC50 of 1.25µg/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).