

Synonym

IBP7,IGFBP7

Source

Human IGFBP-7, Fc Tag(IG7-H5259) is expressed from human 293 cells (HEK293). It contains AA Asp 30 - Leu 282 (Accession # [Q16270-1](#)).

Predicted N-terminus: Asp 30

Molecular Characterization

IGFBP-7(Asp 30 - Leu 282) Q16270-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 52.6 kDa. The protein migrates as 55-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

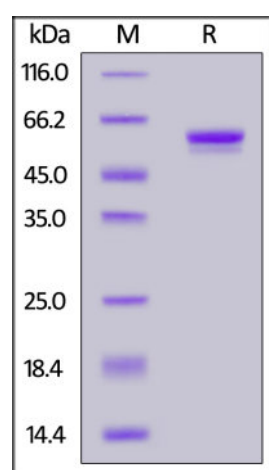
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

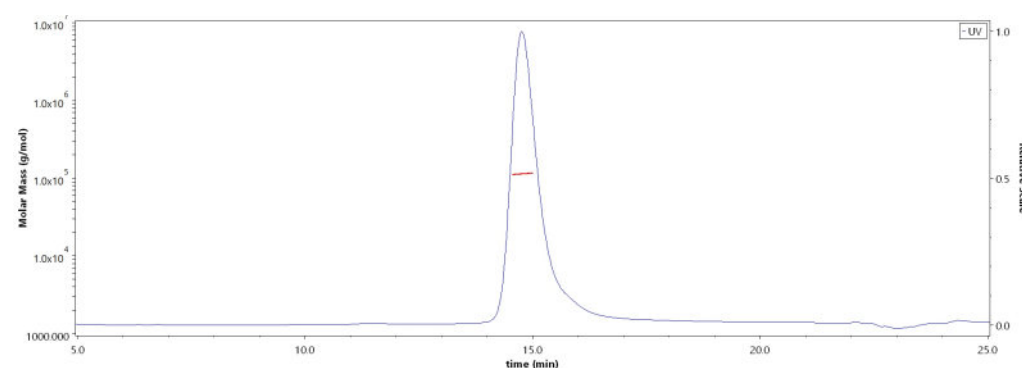
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

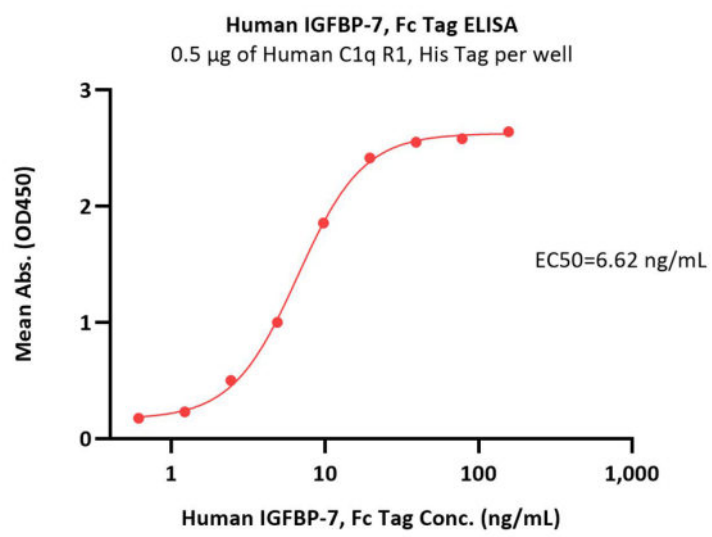
SDS-PAGE

Human IGFBP-7, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA**SEC-MALS**

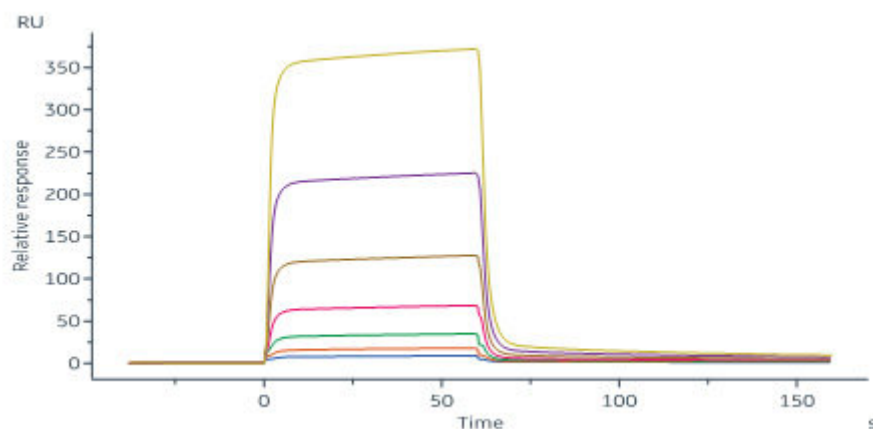
The purity of Human IGFBP-7, Fc Tag (Cat. No. IG7-H5259) is more than 90% and the molecular weight of this protein is around 102-124 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human C1q R1, His Tag (Cat. No. C11-H5228) at 5 µg/mL (100 µL/well) can bind Human IGFBP-7, Fc Tag (Cat. No. IG7-H5259) with a linear range of 0.6-20 ng/mL (QC tested).

Bioactivity-SPR



Human IGFBP-7 Protein, Fc Tag (Cat. No. IG7-H5259) immobilized on CM5 Chip can bind Human C1q R1 / CD93 Protein, His Tag (MALS verified) (Cat. No. C11-H5228) with an affinity constant of 7.29 µM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Insulin-like growth factor-binding protein 7 (IGFBP7) is also known as IGFBP-rP1, MAC25 protein, PGI2-stimulating factor, prostacyclin-stimulating factor and tumor-derived adhesion factor, which contains one Ig-like C2-type (immunoglobulin-like) domain, one IGFBP N-terminal domain and one Kazal-like domain. The major function of IGFBP7 is the regulation of availability of insulin-like growth factors (IGFs) in tissue as well as in modulating IGF binding to its receptors. IGFBP7 binds to IGF with high affinity except for IGF-I and IGF-II. IGFBP7 also stimulates cell adhesion. Furthermore, IGFBP7 is implicated in some cancers.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.