

Synonym

IBP7,IGFBP7

Source

Human IGFBP-7, His Tag (IG7-H5240) is expressed from human 293 cells (HEK293). It contains AA Asp 30 - Leu 282 (Accession # [NP_001544](#)).

Predicted N-terminus: His

Molecular Characterization

Poly-his IGFBP-7(Asp 30 - Leu 282)
NP_001544

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 27.0 kDa. The protein migrates as 33-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

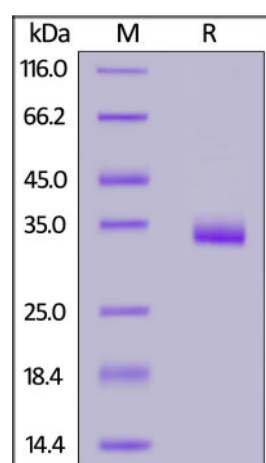
Storage

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

Please avoid repeated freeze-thaw cycles.

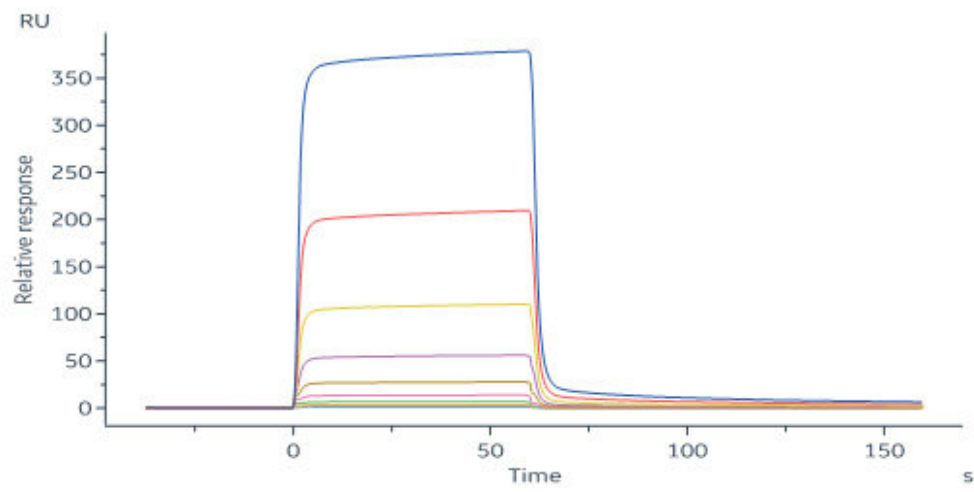
This product is stable after storage at:

- -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, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-SPR



Human IGFBP-7, His Tag (Cat. No. IG7-H5240) immobilized on CM5 Chip can bind Human C1q R1, His Tag (Cat. No. C11-H5228) with an affinity constant of 16.7 μ M 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.