Human IGF-II R Protein, His Tag

Catalog # IGR-H52H3

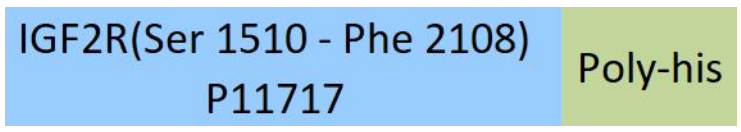
Synonym

Cation-independent mannose-6-phosphate receptor,CI Man-6-P receptor,CI-MPR,M6PR,300 kDa mannose 6-phosphate receptor (MPR 300),Insulin-like growth factor 2 receptor,Insulin-like growth factor II receptor (IGF-II receptor),M6P/IGF2 receptor (M6P/IGF2R),CD222

Source

Human IGF-II R Protein, His Tag(IGR-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ser 1510 - Phe 2108 (Accession # P11717).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 68 kDa. The protein migrates as 75-90 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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.

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

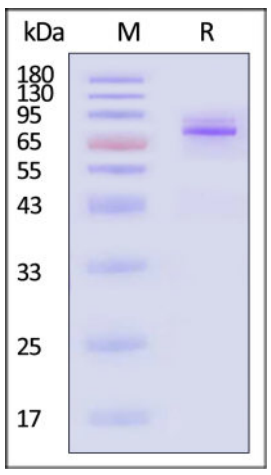
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

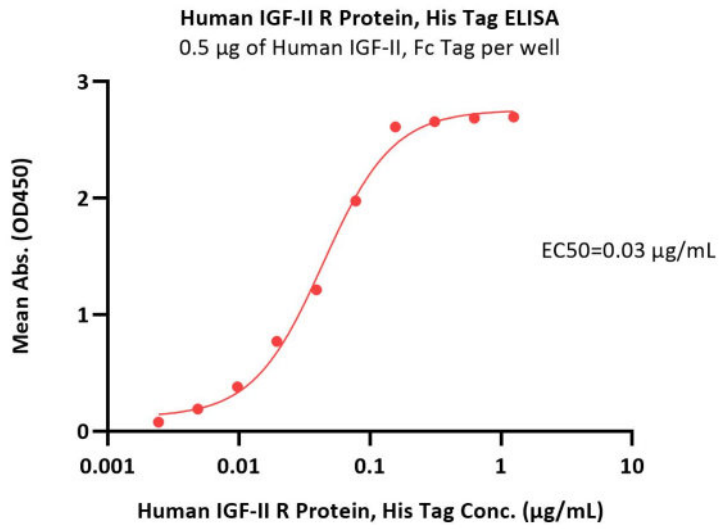
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



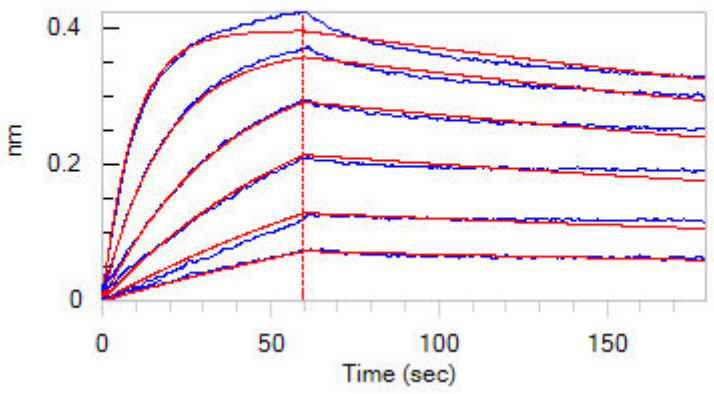
Human IGF-II R Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Human IGF-II, Fc Tag (Cat. No. IG2-H4260) at 5 μg/mL (100 μL/well) can bind Human IGF-II R Protein, His Tag (Cat. No. IGR-H52H3) with a linear range of 0.010-0.313 μg/mL (Routinely tested).

Bioactivity-BLI



Loaded Human IGF-II R Protein, His Tag (Cat. No. IGR-H52H3) on HIS1K Biosensor, can bind Human IGF-II, Fc Tag (Cat. No. IG2-H4260) with an affinity constant of 15.6 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

Background

IGF2R, also known as the cation-independent mannose-6-phosphate receptor, is found ubiquitously in human tissues with a truncated soluble form of the receptor present in the circulation. Full-length, 300-kDa, IGF2R comprises a large N-terminal extracellular region of 15 homologous domains, a single membrane-spanning region and a small cytoplasmic tail. In addition to IGF-II binding, major IGF2R functions include sorting newly synthesized lysosomal enzymes and endocytosis of extracellular lysosomal enzymes. To perform these disparate functions, the extracellular region contains binding sites for IGF-II and phosphomannosyl residues.

Clinical and Translational Updates

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