Biotinylated Human FGF-7 / HBGF-7 / KGF Protein, His,Avitag™

Catalog # FG7-H82E7

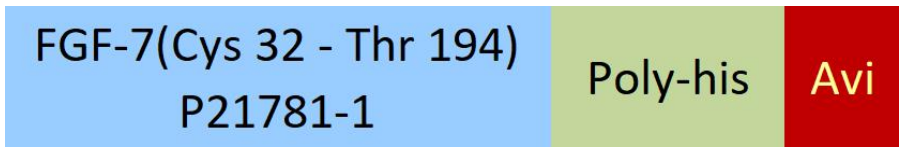
Synonym

FGF-7, Fibroblast growth factor 7, HBGF-7, Keratinocyte growth factor, KGF

Source

Biotinylated Human FGF-7, His,Avitag (FG7-H82E7) is expressed from human 293 cells (HEK293). It contains AA Cys 32 - Thr 194 (Accession # P21781-1).
Predicted N-terminus: Cys 32

Molecular Characterization



Other Tags and Version Biotin & Other Labeled Version

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).
The protein has a calculated MW of 22.6 kDa. The protein migrates as 25-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% 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

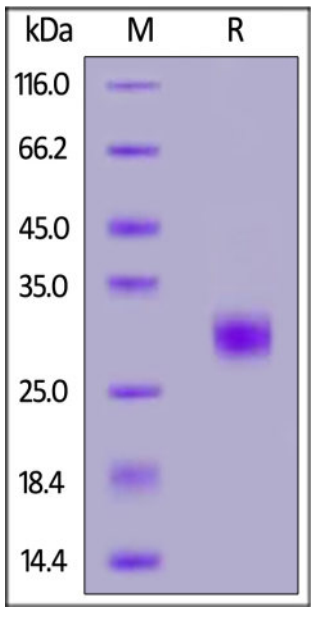
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

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

ACRO Quality Management System

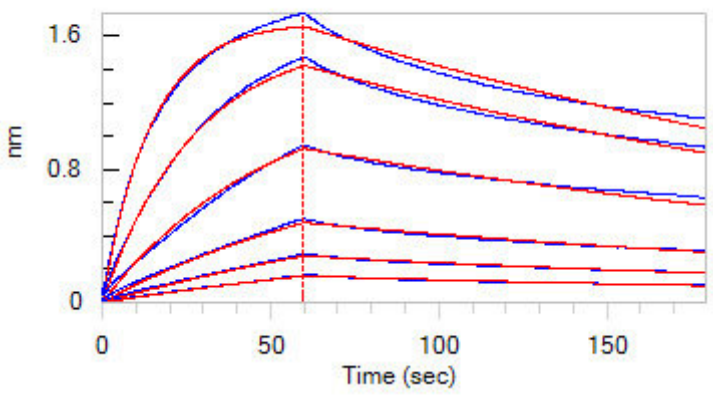
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE

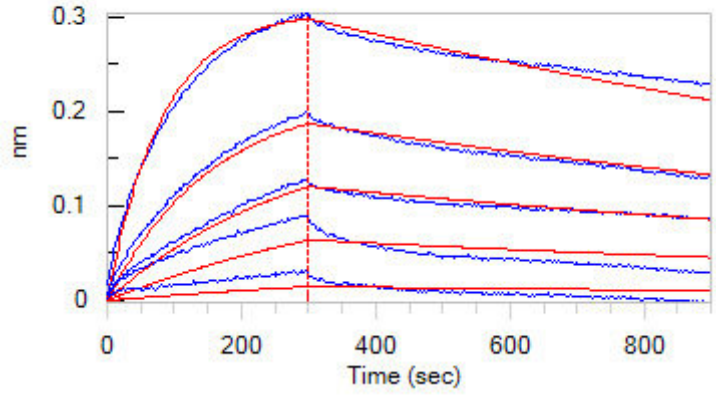


Biotinylated Human FGF-7, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-BLI



Loaded Biotinylated Human FGF-7, His,Avitag (Cat. No. FG7-H82E7) on SA Biosensor, can bind Human FGF R2 (IIIb), Fc Tag (Cat. No. FGB-H5256) with an affinity constant of 37 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Biotinylated Human FGF-7, His,Avitag (Cat. No. FG7-H82E7) on SA Biosensor, can bind Human FGF R1, His Tag (Cat. No. FG1-H5223) with an affinity constant of 243 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Fibroblast growth factor (FGF) 7 (is also known as Keratinocyte growth factor (KGF)), a member of FGF family, is initially found to be secreted from mesenchymal cells to repair epithelial tissues. As a well-characterized paracrine growth factor for tissue growth and regeneration, fibroblast growth factor 7 (FGF7) is involved in a number of physiological and pathological processes, including lung disease and cancer. The stromal-derived FGFs, such as FGF7 and FGF10, control epithelial cell resident FGFR2IIIb activities, promote net tissue homeostasis, and restraint tumor cells from progression to malignancy.