# Biotinylated Human FGF-10 / KGF 2 Protein, His,Avitag™ (SPR verified)

Catalog # FG0-H81Q7

## Synonym

FGF-10,Fibroblast growth factor 10,Keratinocyte growth factor 2

## Source

Biotinylated Human FGF-10, His,Avitag(FG0-H81Q7) is expressed from E. coli cells. It contains AA Gln 38 - Ser 208 (Accession # O15520-1).
Predicted N-terminus: Met

## Molecular Characterization


This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 22.9 kDa. The protein migrates as 27 kDa under reducing (R) condition (SDS-PAGE).

## 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.

## Endotoxin

Less than 0.1 EU per μg by the LAL method.

## Sterility

Negative

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.5 M Arginine, pH 7.4 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

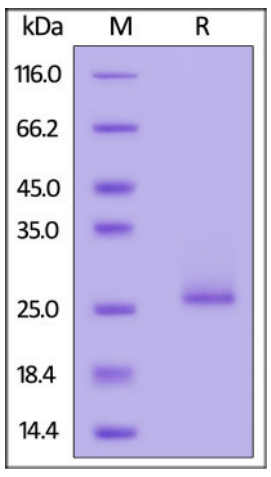
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

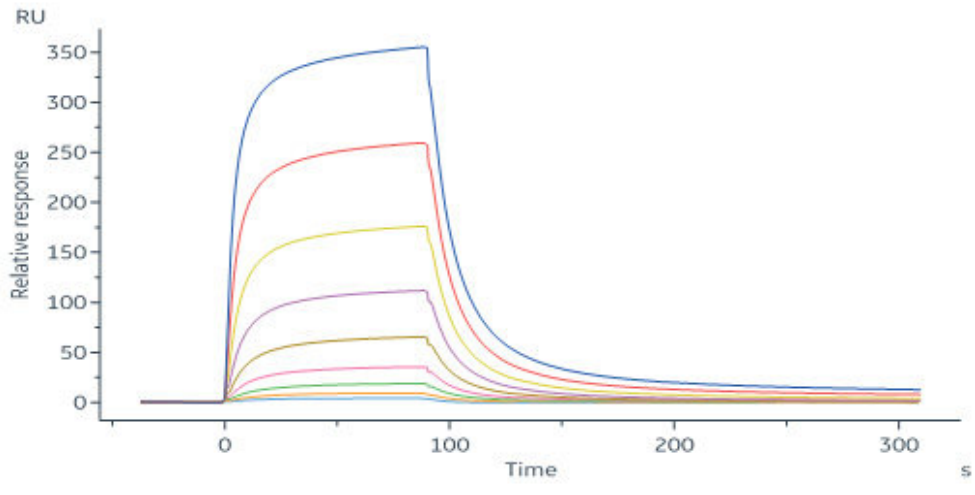
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE




Biotinylated Human FGF-10, 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-SPR




Biotinylated Human FGF-10, His,Avitag (Cat. No. FG0-H81Q7) immobilized on SA Chip can bind Human FGFR2 (IIIb), His Tag (Cat. No. FGB-H5223) with an affinity constant of 5.02 μM as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

Fibroblast Growth Factor 10 (FGF 10) is an evolutionary conserved secreted growth factor mediating mostly mesenchymal to epithelial signaling. FGF 10 belongs to the FGF 7 subfamily and shares similar biochemical and amino acid sequences with its constituent members (FGF3, FGF 7 and FGF 22). As a paracrine FGF, FGF 10 elicits its biological responses by activating the fibroblast growth factor receptor 2b (FGF R 2b), is crucial for governing proximal distal outgrowth as well as patterning and acts upstream of the known apical ectodermal ridge (AER) marker FGF 8. FGF10 is also implicated in pancreatic cancer, and that overexpression of FGFR2b is associated with metastatic invasion.

## Clinical and Translational Updates