

# Biotinylated Human FGF10 Protein (Primary Amine Labeling)

Cat. No. FGF-HE010B

## Description

<b>Source</b>	Recombinant Biotinylated Human FGF10 Protein (Primary Amine Labeling) is expressed from E.coli without tag. It contains Gln38-Ser208.
<b>Accession</b>	O15520
<b>Molecular Weight</b>	The protein has a predicted MW of 19.3 kDa same as Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

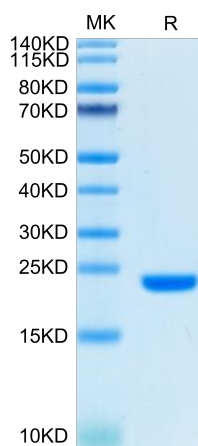
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 20mM Tris,150mM NaCl (pH 8.0). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Fibroblast growth factor 10 (FGF10) regulates multiple stages of structural lung morphogenesis, cellular differentiation, and the response to injury. As a driver of lung airway branching morphogenesis, FGF10 signaling defects during development lead to neonatal lung disease. Lung diseases impact patients across the lifespan, from infants in the first minutes of life through the aged population. Congenital abnormalities of lung structure can cause lung disease at birth or make adults more susceptible to chronic disease.

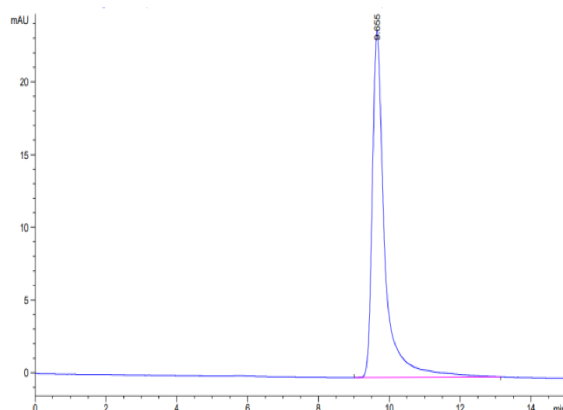
## Assay Data

### Bis-Tris PAGE



Biotinylated Human FGF10 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



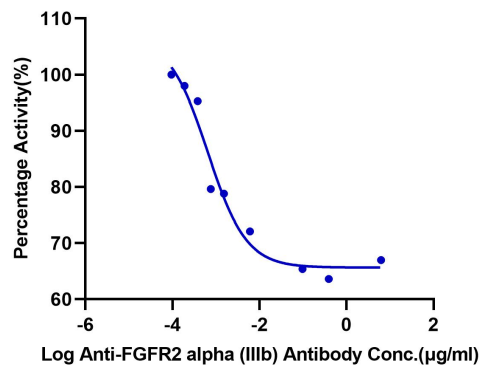
The purity of Biotinylated Human FGF10 is greater than 95% as determined by SEC-HPLC.

## Assay Data

### Blocking Data

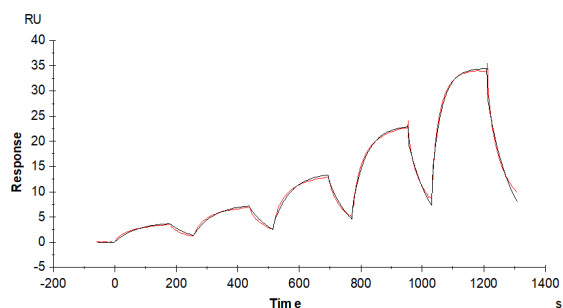
#### Inhibition of Human FGFR2 alpha (IIIb) and FGF10 Binding

0.05µg Human FGFR2 alpha (IIIb), His Tag Per Well



Serial dilutions of Anti-FGFR2 alpha (IIIb) Antibody were added into Human FGFR2 alpha (IIIb), His Tag : Biotinylated Human FGF10, No Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.7ng/ml.

### SPR Data



Biotinylated Human FGF10, No tag immobilized on CM5 Chip can bind Human FGFR2 alpha IIIb, His tag with an affinity constant of 147.70 nM as determined in SPR assay (Biacore T200) (QC Test).