

Human FGF21 Protein

Cat. No. FGF-HM621

Description

Source	Recombinant Human FGF21 Protein is expressed from HEK293 with mFc (IgG1) tag and Avi tag at the N-Terminus. It contains His29-Ser209.
Accession	Q9NSA1-1
Molecular Weight	The protein has a predicted MW of 46.9 kDa. Due to glycosylation, the protein migrates to 52-60 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

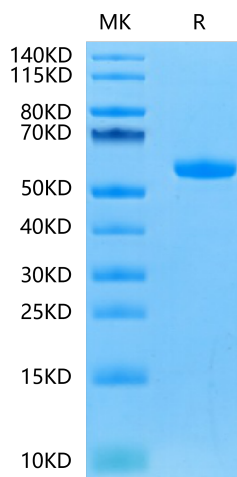
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Fibroblast growth factor 21 (FGF21) is a peptide hormone that is synthesized by several organs and regulates energy homeostasis. Excitement surrounding this relatively recently identified hormone is based on the documented metabolic beneficial effects of FGF21, which include weight loss and improved glycemia.

Assay Data

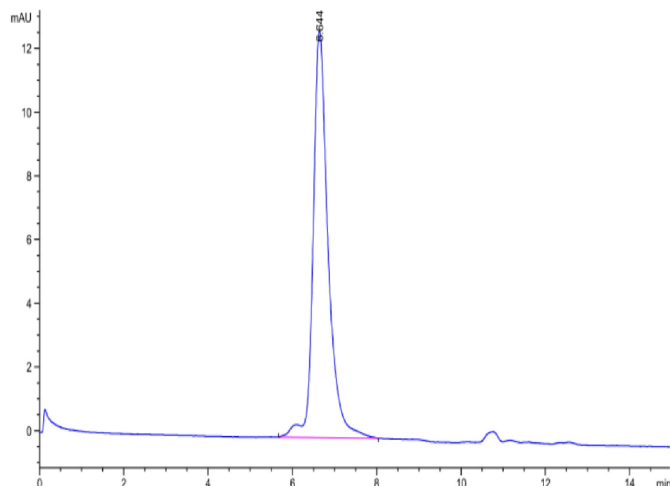
Tris-Bis PAGE



Human FGF21 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

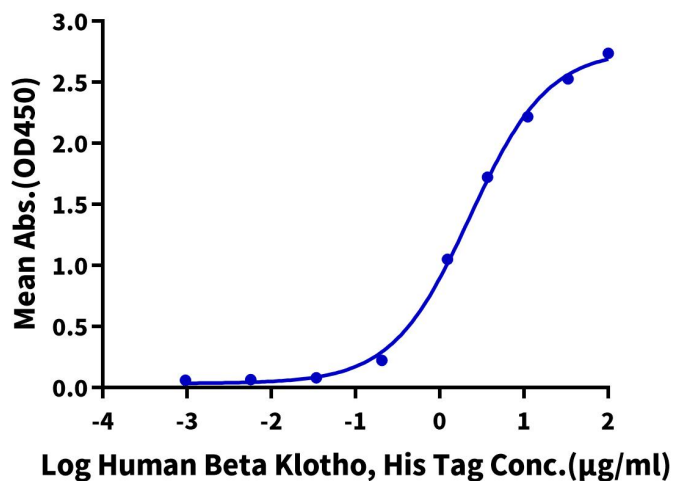


The purity of Human FGF21 is greater than 95% as determined by SEC-HPLC.

ELISA Data

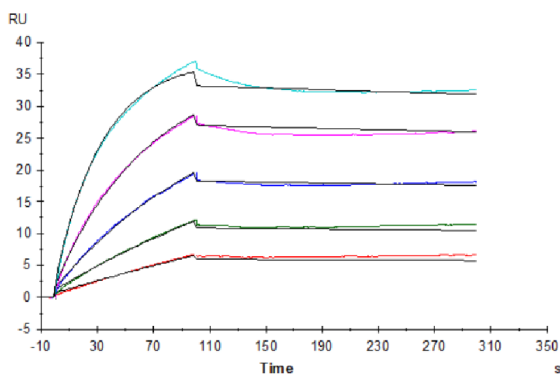
Human FGF21, mFc Tag ELISA

0.5µg Human FGF21, mFc Tag Per Well



Immobilized Human FGF21 at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human Beta Klotho, His Tag with the EC50 of 2.29µg/ml determined by ELISA (QC Test).

SPR Data



Human Beta Klotho, His Tag captured on CM5 Chip via anti-His antibody can bind Human FGF21, mFc Tag with an affinity constant of 0.54nM as determined in SPR assay (Biacore T200).