

Human FGFR1 alpha (IIIc) Protein

Cat. No. FGF-HM4RA

Description

Source	Recombinant Human FGFR1 alpha (IIIc) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Arg22-Glu374.
Accession	P11362-7
Molecular Weight	The protein has a predicted MW of 42 kDa. Due to glycosylation, the protein migrates to 68-83 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

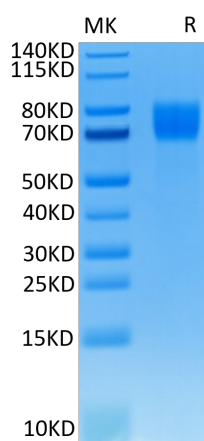
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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 factors (FGFs) comprise a family of at least eighteen structurally related proteins that are involved in a multitude of physiological and pathological cellular processes, including cell growth, differentiation, angiogenesis, wound healing and tumorigenesis. The biological activities of the FGFs are mediated by a family of type I transmembrane tyrosine kinases which undergo dimerization and autophosphorylation after ligand binding. FGFR1 is tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system.

Assay Data

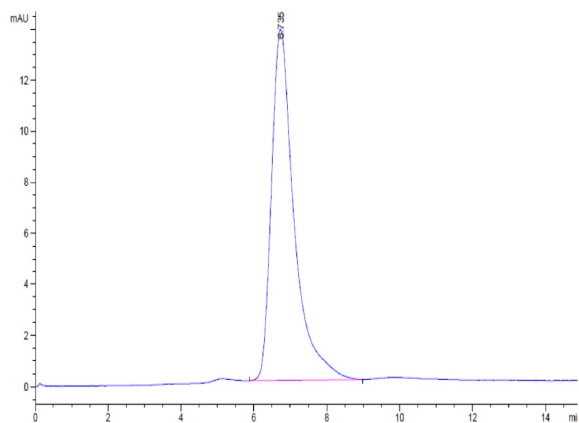
Bis-Tris PAGE



Human FGFR1 alpha (IIIc) on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Human FGFR1 alpha (IIIc) is greater than 95% as determined by SEC-HPLC.

Human FGFR1 alpha (IIIc) Protein

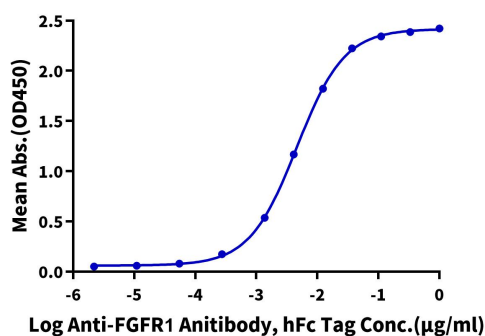
Cat. No. FGF-HM4RA

Assay Data

ELISA Data

Human FGFR1 alpha (IIIc), His Tag ELISA

0.05µg Human FGFR1 alpha (IIIc), His Tag Per Well

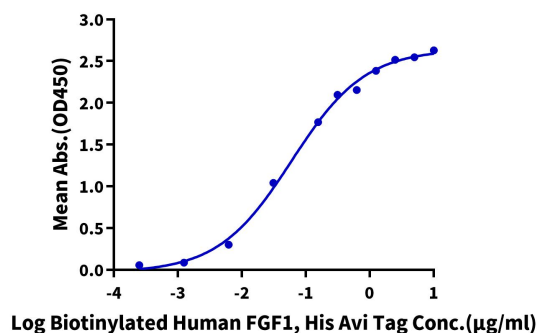


Immobilized Human FGFR1 alpha (IIIc) at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-FGFR1 Antibody, hFc Tag with the EC50 of 4.6ng/ml determined by ELISA (QC Test).

ELISA Data

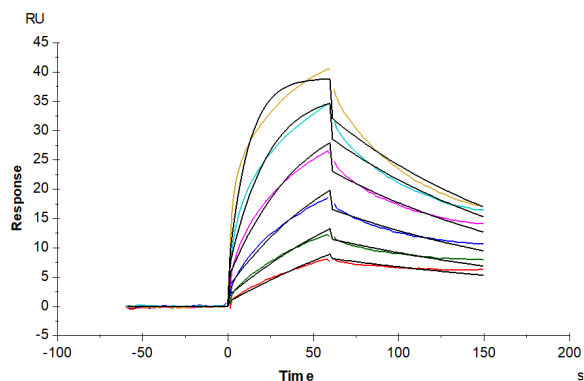
Human FGFR1 alpha (IIIc), His Tag ELISA

0.5µg Human FGFR1 alpha (IIIc), His Tag Per Well



Immobilized Human FGFR1 alpha (IIIc), His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human FGF1, His-Avi Tag with the EC50 of 60.0ng/ml determined by ELISA.

SPR Data



Human FGFR1 alpha (IIIc), His Tag captured on CM5 Chip via Anti-His Antibody can bind Human FGF1, No tag with an affinity constant of 42.45 nM as determined in SPR assay (Biacore T200).