

Human FGF1 Protein

Cat. No. FGF-HE00A

Description

Source	Recombinant Human FGF1 Protein is expressed from E.coli without tag. It contains Phe16-Asp155.
Accession	P05230-1
Molecular Weight	The protein has a predicted MW of 15.83 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

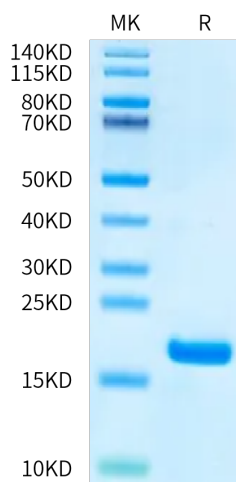
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled 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 Factor 1 (Fgf1), also known as acidic FGF (aFGF), is involved in the regulation of various biological processes, ranging from development to disease pathogenesis. It is a single chain polypeptide and is highly expressed in adult brain and kidney tissues. Its expression has been shown to be directed by multiple tissue-specific promoters, which generate transcripts of varying lengths.

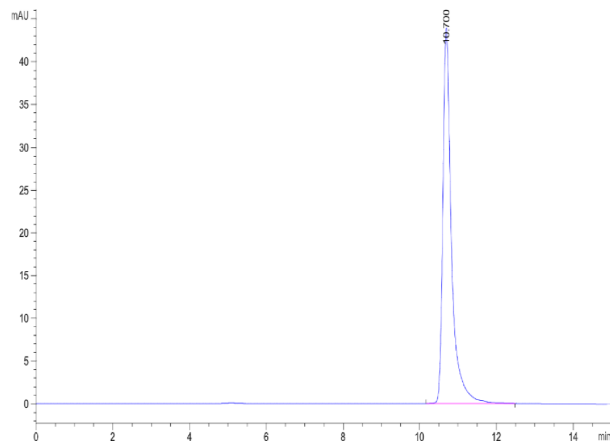
Assay Data

Bis-Tris PAGE



Human FGF1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

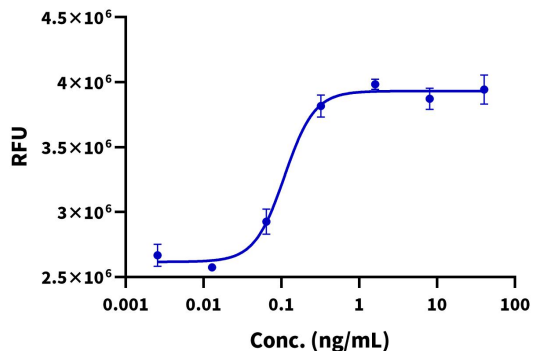


The purity of Human FGF1 is greater than 95% as determined by SEC-HPLC.

Assay Data

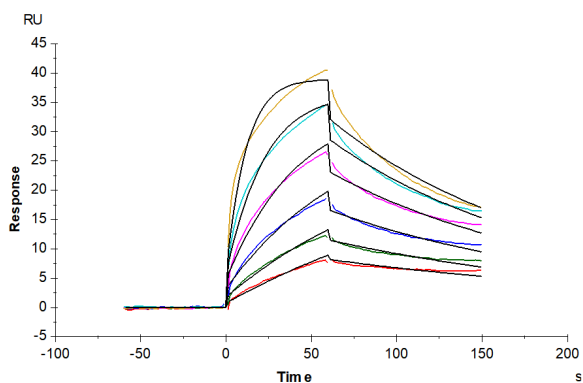
Cell Based Assay

Recombinant Human FGF1 Bioactivity



Measured in a cell proliferation assay using Balb/c 3T3 mouse embryonic fibroblasts. The ED50 for this effect is typically 0.1-0.7 ng/mL (QC Test).

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).