Recombinant Human FGF-1/aFGF Protein

Catalog No.: RP01242

Sequence Information

Species	Gene ID
Human	2246
Swiss Prot	**Tags**
P05230-1	C-His

Synonyms

AFGF, ECGF, ECGF-beta, ECGFA, ECGFB, FGF-1, FGF-alpha, FGFA, GLIO703, HBGF-1, HBGF1,FGF1, ECGF,ECGF-beta,ECGFA,ECGFB, FGF-1,FGF-alpha,FGFA,GLIO703, HBGF-1,HBGF1

Product Information

Source	Purification
E. coli	≥ 95 % as determined by SDS-PAGE;≥95 % as determined by HPLC.
Calculated MW	**Observed MW**
16.67 kDa	20 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of 50mM MOPS,100mM Na2SO4,10mM EDTA, pH7. 9Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

aFGF, also known as FGF1 and HBGF-1, is a member of the fibroblast growth factor family. The biological activity of aFGF protein is exerted through binding to four high affinity cell surface receptors (FGFR1−4), which results in receptor dimerization and transphosphorylation in the tyrosine kinase domain. aFGF protein shows a wide range of endocrine-like activities. As a multiple function growth factor, this protein is involved in embryo development and tissue repair. Additionally, this protein is considered to function in several important physiological and pathological processes, such as embryonic development, morphogenesis, angiogenesis, wound healing and atheromatosis, carcinogenesis, development, and invasion of cancer.

Basic Information

Description

Recombinant Human FGF-1/aFGF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Phe16-Asp155) of human FGF acidic/FGF1 (Accession #NP_000791.1) fused with a 6×His tag at the C-terminus.

Activity

1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human FGF1 at 5 μg/mL (100 μL/well) can bind Recombinant Human FGFR3 with a linear range of 0.5-1.5 μg/mL.
2.Measured in a cell proliferation assay using BALB/c 3T3 mouse embryonic fibroblasts. The ED_{50} for this effect is typically 22-140 pg/mL.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20℃

Operational Notes

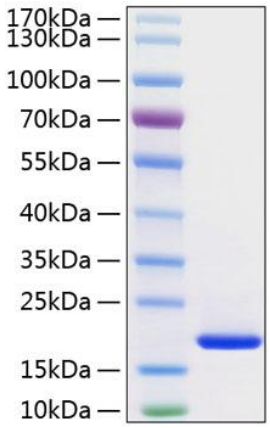
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

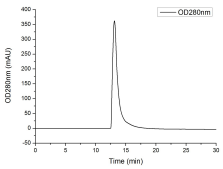
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Please visit http://abclonal.com for a complete listing of recommended products.

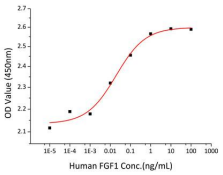
Validation Data



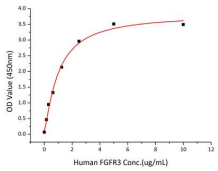
Recombinant Human FGF-1/aFGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of human FGF acidic/FGF1 Protein (Cat.RP01242) was greater than 95% as determined by SEC-HPLC.



Recombinant Human FGF1 promotes the proliferation of BALB/c 3T3 mouse embryonic fibroblasts cells. The ED_{50} for this effect is typically 22-140 pg/mL.



Immobilized Recombinant Human FGF1 at 5μg/mL (100 μL/well) can bind Recombinant Human FGFR3 with a linear range of 0.5-1.5 μg/mL.