Recombinant Human FGF-2/bFGF Protein

Catalog No.: RP01042

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Sequence Information

Species
Human

Gene ID
2247

Swiss Prot
P09038-4

Tags
No tag

Synonyms
BFGF, FGF-2, FGFB, HBGF-2,FGF2, FGF-2,FGFB,HBGF-2,Basic FGF, BFGF, fibroblast growth factor 2

Product Information

Source
E. coli

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
16.41 kDa

Observed MW
17 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of 20mM Tris，150 mM NaCl,pH7.5.Contact 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

This protein is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG initiation codons, resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF.

Basic Information

Description
Recombinant Human FGF-2/bFGF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Pro143-Ser288) of human FGF2 (Accession #NP_001997.5).

Activity
1.Immobilized recombinant human FGF2 at 1 μg/mL (100 μL/well) can bind recombinant human FGFR4 with a linear range of 30-125 ng/mL.
2.Immobilized Human FGF2 at 0.5 μg/mL (100 μL/well) can bind Human GPC3 with a linear range of 7-20ng/mL.
3.Recombinant Human FGF-2 promotes the proliferation of Balb3T3 mouse embryonic fibroblasts cells. The ED_{50} for this effect is 0.05-0.21 ng/mL, corresponding to a specific activity of 4.76×10^6~2.00×10^7 units/mg.
4.Human liver organoids were cultured with EGF(Cat. RP03287), HGF(Cat. RP01602), FGF2(Cat. RP01042), FGF10(Cat. RP01140), NOG(Cat. RP01237), RSPO1(Cat. RP00071), WNT-3a(Cat. RP01618SLQ).
5.Human kidney organoids were cultured with EGF(Cat. RP03287), FGF2(Cat. RP01042), FGF7(Cat. RP01717), FGF9(Cat. RP01710), FGF10(Cat. RP01140), IGF-(Cat. RP00996), NOG(Cat. RP01237), RSPO1(Cat. RP00071), WNT-3a(Cat. RP01618SLQ). And further, DKK-1(RP01343) was used to induce the establishment of cell polarity.

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℃

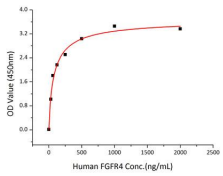
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

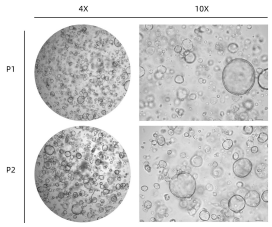
400-999-6126
cn.market@abclonal.com.cn
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For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

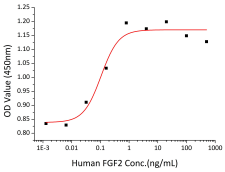
Validation Data



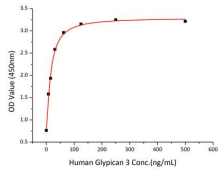
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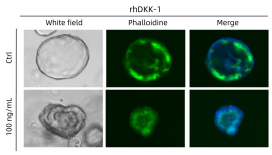
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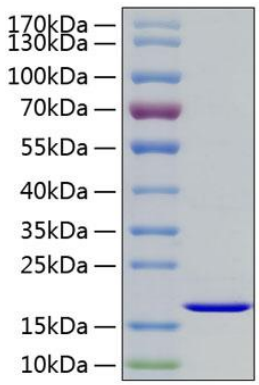
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Recombinant Human FGF-2/bFGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.