

Recombinant Mouse FGF-1/aFGF Protein

Catalog No.: RP00487 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Mouse	14164	P61148

Tags

No tag

Synonyms

Fibroblast Growth Factor 1; FGF-1; Acidic Fibroblast Growth Factor; aFGF; Heparin-Binding Growth Factor 1; HBGF-1; Fgf1; Fgf-1; Fgfa

Product Information

Source	Purification
<i>E. coli</i>	≥ 95 % as determined by SDS-PAGE.

Calculated MW	Observed MW
15.79 kDa	15-25 kDa

Endotoxin

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

Formulation

Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, pH7.5, 50 mM Na₂SO₄, 0.5 mM DTT, 1 mM EDTA. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the tube 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 stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

FGF acidic is a 17 kDa nonglycosylated member of the FGF family of mitogenic peptides. FGF acidic, which is produced by multiple cell types, stimulates the proliferation of all cells of mesodermal origin and many cells of neuroectodermal, ectodermal, and endodermal origin. It plays a number of roles in development, regeneration, and angiogenesis. FGF-acidic is a non-glycosylated heparin binding growth factor that is expressed in the brain, kidney, retina, smooth muscle cells, bone matrix, osteoblasts, astrocytes and endothelial cells. FGF-acidic has the ability to signal through all the FGF receptors.

Basic Information

Description

Recombinant Mouse FGF-1/aFGF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Phe16-Asp155) of mouse FGF1/FGFa/FGF acidic (Accession #P61148).

Bio-Activity

Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED50 for this effect is 0.528-2.11 ng/mL in the presence of 10 μg/mL of heparin, corresponding to a specific activity of 4.74×10⁵~1.90×10⁶ units/mg.

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

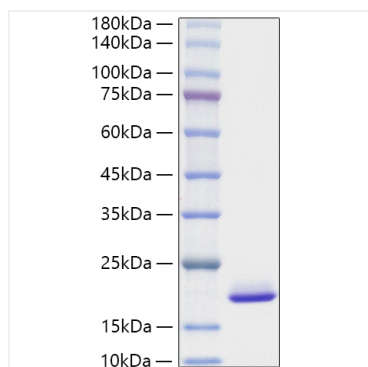
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.
Avoid repeated freeze/thaw cycles.

Operational Notes

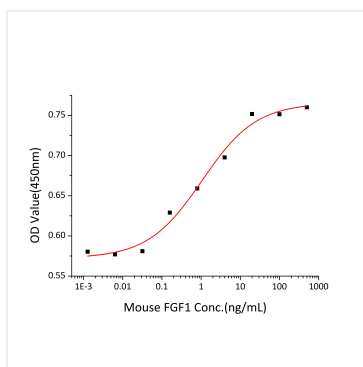
For your safety and health, please wear a lab coat and disposable gloves for handling.



Validation Data



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



Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED_{50} for this effect is 0.528-2.11 ng/mL in the presence of 10 μ g/mL of heparin, corresponding to a specific activity of $4.74 \times 10^5 \sim 1.90 \times 10^6$ units/mg.