

Recombinant Mouse FGF-2/FGFb Protein

Catalog No. PKSM041021

Note: Centrifuge before opening to ensure complete recovery of vial contents.

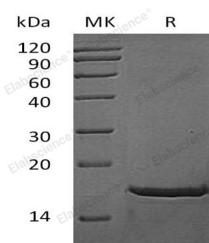
Description

Synonyms	Fibroblast Growth Factor 2;FGF-2;Basic Fibroblast Growth Factor;bFGF;Heparin-Binding Growth Factor 2;HBGF-2;Fgf2;Fgf-2
Species	Mouse
Expression Host	E.coli
Sequence	Met1-Ser154
Accession	P15655
Calculated Molecular Weight	17.2 kDa
Observed molecular weight	16 kDa
Tag	None
Bioactivity	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.3-1.8 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 400mM NaCl, 0.02% Tween 80, 4.0% Sucrose, 4.0% Mannitol, pH 7.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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Background

FGF basic is one of 22 mitogenic proteins of the FGF family, which show 35-60% amino acid conservation. Unlike other FGFs, FGF acidic and basic lack signal peptides and are secreted by an alternate pathway. The 17 kDa mouse sequence has 98% aa identity with rat, and 95% identity with human, bovine, and sheep FGF basic. Binding of FGF to heparin or cell surface HSPG is necessary for binding, dimerization and activation of tyrosine kinase FGF receptors. FGF basic binds other proteins, polysaccharides and lipids with lower affinity. Expression of FGF basic is nearly ubiquitous but disruption of the mouse FGF basic gene gives a relatively mild phenotype, suggesting compensation by other FGF family members. FGF basic modulates such normal processes as angiogenesis, wound healing and tissue repair, embryonic development and differentiation, neuronal function and neural degeneration. Transgenic overexpression of FGF basic results in excessive proliferation and angiogenesis is reminiscent of a variety of pathological conditions.

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