

## Recombinant Mouse FGF-2/FGFb Protein

Catalog Number: PKSM041021

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

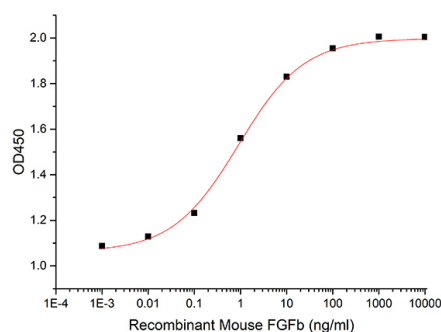
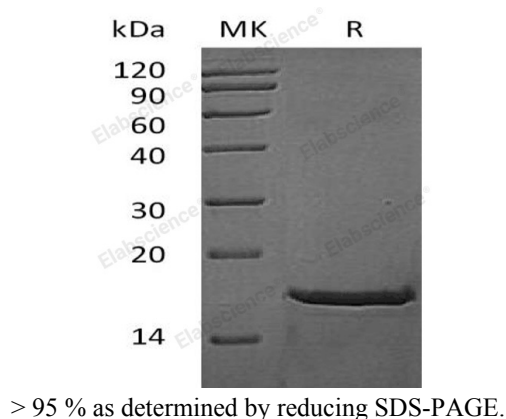
### Description

<b>Species</b>	Mouse
<b>Source</b>	E.coli-derived Mouse FGF-2/FGFb protein Met1-Ser154
<b>Calculated MW</b>	17.2 kDa
<b>Observed MW</b>	16 kDa
<b>Accession</b>	P15655
<b>Bio-activity</b>	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED <sub>50</sub> for this effect is 0.3-1.8 ng/ml.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED<sub>50</sub> for this effect is 0.3-1.8 ng/ml.

### 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.