

Recombinant Mouse FGFb

Catalog No.: RP0075

Basic Information

Information

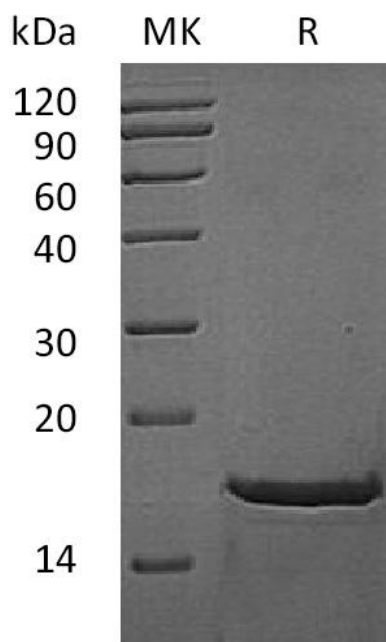
Source	<i>E.coli</i>
Description	Recombinant Mouse Fibroblast Growth Factor 2/Fibroblast Growth Factor Basic is produced by our E.coli expression system and the target gene encoding Met1-Ser154 is expressed.
Accession	P15655
Known As	Fibroblast Growth Factor 2; FGF-2; Basic Fibroblast Growth Factor; bFGF; Heparin-Binding Growth Factor 2; HBGF-2; Fgf2; Fgf-2
Predicted Mol Mass	17.15 KDa
Apparent Mol Mass	16 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 400mM NaCl, 0.02% Tween 80, 4.0% Sucrose, 4.0% Mannitol, pH 7.0.
Storage	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at $2-8^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
Endotoxin	< 0.01 EU/ μ g as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

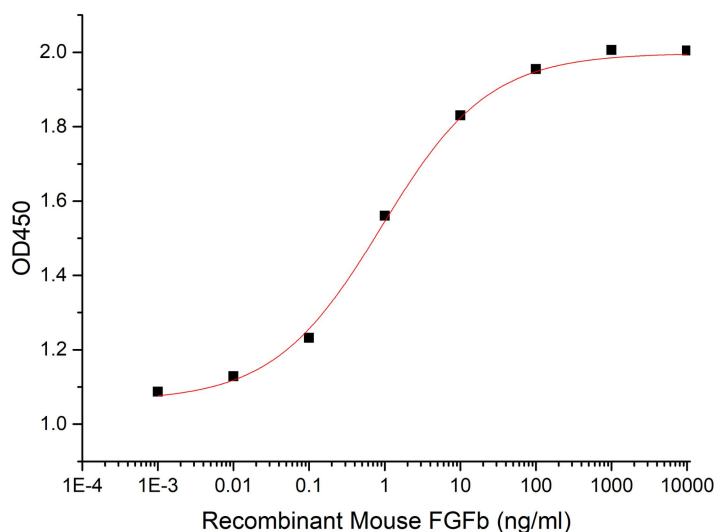
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.3-1.8 ng/ml. (QC verified)

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.