Recombinant Protein Technical Manual

Recombinant Mouse FGF-2/FGFb Protein (aa 154)(Active)

RPES0721

Product Data:

Product SKU: RPES0721

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: P15655

Protein Information:

Molecular Mass:	17.2 kDa
AP Molecular Mass:	16 kDa
Tag:	
Bio-activity:	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.3.8 ng/ml.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Cell Culture
Synonyms:	Fibroblast Growth Factor 2; FGF-2; Basic Fibroblast Growth Factor; bFGF; Heparin-Binding Growth Factor 2; HBGF-2; Fgf2; Fgf-2

Immunogen Information:

Sequence: Met1-Ser154

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.