
Recombinant Mouse Fibroblast Growth Factor-acidic (FGF-acidic)

(Cat. No.: C043)

Background:

FGF acidic, also known as FGF-1, ECGF, and HBGF-1, 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.

Description:

Recombinant Mouse FGF-acidic produced in *E. coli* is a non-glycosylated polypeptide chain containing 140 amino acids and having a molecular mass of 15796 Dalton.

Quality Control:

Biological activity: The ED50 as determined by the dose-dependant stimulation of thymidine uptake by 3T3 cells in the presence of heparin was found to be less than 0.5 ng/ml, corresponding to a Specific Activity of 2.0×10^6 IU/mg.

Purity: Greater than 95% as determined by

(a) Analysis by HPLC.

(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel..

Amino-Acid Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Phe-Asn-Leu-Pro-Leu.

Endotoxin: Less than 0.1ng/μg (1IEU/μg) of FGF-acidic.

Formulation: Mouse FGF-acidic was lyophilized after extensive dialysis against PBS.

Storage: Lyophilized rmFGF-acidic although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rmFGF-acidic should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

Reconstitution: It is recommended to reconstitute the lyophilized rmFGF-acidic in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.
