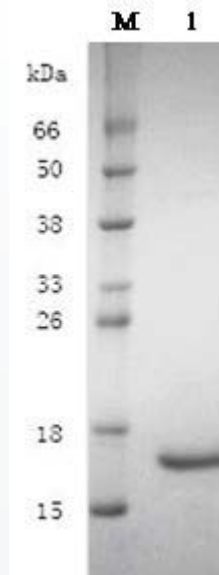


Recombinant Human Fibroblast Growth Factor-basic (rh-bFGF)

Catalog No.	■	LT12012
Packing Details	■	100 ug
Formulation	■	Lyophilized from 5 mM PBS, pH 7.4.
Mol. Wt.	■	17.2 kDa
Resources	■	Escherichia coli (E. coli)
Purity	■	≥95% by SDS-PAGE analysis
Endotoxin	■	<1.0 EU/μg protein
Storage	■	-20°C
Shelf Life	■	3 years



M: Protein marker standard

Lane 1: rh-bFGF

Biological Activity ■ EC50 0.5–1 ng/ml as indicated by dose-dependent proliferation of mouse BALB/c 3T3 cells corresponding to a specific activity of 1×10^6 – 2×10^6 units/mg protein.

Description ■ Fibroblast growth factor-basic (bFGF), also known as FGF-2, is a heparin-binding member of the FGF superfamily. It plays an important role in cell proliferation and differentiation associated with embryogenesis, tissue regeneration, wound healing, CNS development, angiogenesis, and tumor progression. bFGF is also a potent mitogenic agent in a wide variety of mesoderm-derived cells including BALB/c 3T3 fibroblasts, capillary and endocardial endothelial cells, myoblasts, vascular smooth muscle cells, mesothelial cells, glial and astroglial cells, and adrenal cortex cells.

■ For most in vitro applications, bFGF exerts its biological activity in the concentration range of 0.1 to 10.0 ng/mL. Responding cells are: Endothelial and mesenchymal cells. Human ES cells require concentrations in the range of 4 to 100 ng/mL, depending on the method of culture. Optimal working dilutions must be determined by end user.

■ Recombinant human bFGF produced in E. coli is a single non-glycosylated polypeptide chain containing 155 amino acids. It has a molecular mass of 17.2 kDa. SwissProt: P09038 # The heparin-binding growth factors are angiogenic agents in vivo and are potent mitogens for a variety of cell types in vitro. There are differences in the tissue distribution and concentration of these 2 growth factors.

Notes

It is recommended that the product be reconstituted with sterile water into a final concentration of no more than 0.5 mg/ml. Store the reconstituted product in aliquots at -20°C. Avoid multiple freeze-thaw cycles and exposure to frequent changes in temperature.

The use of strong acids and bases, strong oxidants, and high concentrations of organic solvents should be avoided to prevent denaturation.

For research purposes only!