

## **RECOMBINANT HUMAN FIBROBLAST GROWTH FACTOR-BASIC**

CATALOG NUMBER:	GF003	QUANTITY:	50 µg
LOT NUMBER:		ALTERNATE NAMES:	bFGF, FGF-2
BACKGROUND:	Fibroblast Growth Factor-basic (bFGF, FGF-2) is a heparin binding growth factor which stimulates the proliferation of a wide variety of cells including mesenchymal, neuroectodermal, endothelial, and human embryonic stem cells. bFGF also exerts a potent angiogenic activity <i>in vivo</i> . Human bFGF is a 17.2 kDa protein containing 154 amino acid residues.		
SOURCE:	E. coli		
PURITY:	Greater than 95% by SDS-PAGE. Endotoxin level is less than 1 EU/µg (0.1ng/µg) of bFGF.		
ACTIVITY:	Human bFGF is fully biologically active when compared to standards. The $ED_{50}$ was determined by colorimetric assay using NIH3T3 cells expressing FGF receptors. The $ED_{50}$ is defined as the effective concentration of bFGF at which the biological activity is 50% of the maximum response in a cell based assay.		
APPLICATIONS:	For most <i>in vitro</i> applications, bFGF exerts its biological activity in the concentration range of 0.1 to 10.0 ng/mL. Responding cells are (partial list): Endothelial, mesenchymal cells. Human ES cells require concentrations in the range of 4 to 100 ng/mL, depending on the method of culture.		
PRESENTATION:	Lyophilized from a solution of 5mM Tris, pH 7.5 with 150mM NaCl.		
STORAGE/HANDLING:	Maintain the lyophilized material at -20°C until expiration date as stated on the label. After a quick spin, reconstitute in 0.1M phosphate buffer, pH 6.8, to a concentration of 0.1-1.0 mg/mL. Reconstituted bFGF should be stored in working aliquots at -20°C for up to six months. Multiple freeze/thaw cycles will result in significant loss of activity.		

*Important Note:* During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200  $\mu$ L or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

## FOR RESEARCH USE ONLY; NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION

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