

# Recombinant Human bFGF Protein

**Catalog Number: GMP-TL901**

## Product Name

Generic Name	Recombinant Human bFGF Protein
Synonym	FGF2, FGFB, FGF basic, HBGF-2

## Product Information

Protein sequence	A DNA sequence encoding the human FGF2 (P09038) was expressed with no tag.
Expression Host	E. coli
QC Testing Purity	> 90 % as determined by SDS-PAGE
Activity	Measured in a cell proliferation assay using Balb/c 3T3 cells. The ED <sub>50</sub> for this effect is ≤ 0.1 ng/mL, corresponding to a specific activity of ≥ 1 x 10 <sup>7</sup> units/mg.
Endotoxin Level	< 0.1 EU per 1 µg of the protein by the LAL method.
Molecular Mass	Predicts a molecular mass of 17.1 kD.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 6 % mannitol are added as protectants before lyophilization. 24 months at 2 °C to 8 °C in lyophilized state. 6 months at -20 °C under sterile conditions after reconstitution.
Stability & Storage	12 months at -80 °C under sterile conditions after reconstitution. Recommend to aliquot the protein into smaller quantities after reconstituting with water for injection, normal saline or PBS, and keep the diluted concentration above 100 µg/mL. Avoid repeated freeze-thaw cycles.

## Background

Basic fibroblast growth factor (bFGF), also known as FGF2, is a member of the fibroblast growth factor (FGF) family. It is a highly specific chemotactic and mitogenic factor for many cell types, and appears to be involved in remodeling damaged tissue, such as ulcer healing, vascular repair, traumatic brain injury (TBI). Proteins of this family play a central role during prenatal development, postnatal growth, and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-basic is a non-glycosylated, heparin-binding growth factor that is expressed in the brain, pituitary, kidney, retina, bone, testis, adrenal gland, liver, monocytes, epithelial cells, and endothelial cells. bFGF is a critical component of human embryonic stem cell culture medium. In addition, bFGF protein is a heparin-binding cationic protein involved in a variety of pathological conditions including angiogenesis and solid tumor growth. Thus, bFGF is regarded as a target for cancers chemopreventive and therapeutic strategies.

## References

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