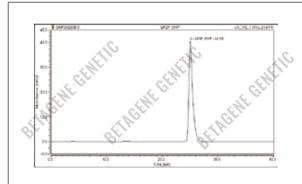


# Recombinant Human bFGF Tag-Free GMP

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.			
Gene ID	2247			
Description	bFGF is a growth factor and signaling protein encoded by the FGF2 gene. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. In normal tissue, bFGF is present in basement membranes and in the subendothelial extracellular matrix of blood vessels. bFGF 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.			
Catalog Number	GE02.1/GE02.2			
Volumn	50µg/100µg			
Source	E. coli			
Molecular Weight	Approximately 16.5 kDa, 146 amino acids			
AA Sequence	MPALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKLQLQAEERGVVSIKGVCANRYLAMKEDGRLLASKCVTDECFFFER LESNNYNTYRSRKYTSWYVALKRTGQYKLGSKTGPGQKAILFLPMSAKS			
Purity (HPLC)	> 96%			
Purity (SDS-PAGE)	> 96%			
Biological Activity	Fully biologically active when compared to standard substance. The $ED_{50}$ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>7</sup> IU/mg			
Host Cell DNA	<0.02 ng/µg of protein tested by DNA Fluorescent Staining method.			
Host Cell Protein	<0.5 ng/μg of protein tested by ELISA.			
Formulation	Lyophilized from 20mM Tris,150mM NaCl, 5% trehalose, 0.2% TWEEN-20, pH7.6			
Sterility	Negative			
Endotoxin	$< 0.01 EU/\mu g$ as determined by LAL gel-clot method.			
Mycoplasma	Negative			
Reconstitution	Before use this product, please read the direction below carefully.  1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom.  2. Reconstitute in a sterile aqueous buffer to an appropriate concentration.  3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.			
Stability & Storage	For long term storage, the product should be stored ≤-20°C.  Please avoid repeated freeze-thaw cycles after reconstitution.  1. At least 24 months from date of receipt, ≤-20 as supplied;  2. 1 month, 2 to 8 °C under sterile conditions after reconstitution;  3. 3 months, -20 to -70 °C under sterile conditions after reconstitution.			

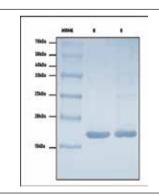
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended.

# **DATA**



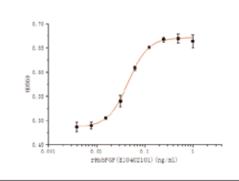
#### **Bioactivity of Recombinant Human bFGF HPLC**

HPLC analysis of Recombinant Human bFGF The major peak corresponds to the calculated purity of >96%.



#### **Bioactivity of Recombinant Human bFGF SDS-PAGE**

 $2\ \mu\text{g/lane}$  of Recombinant Human Recombinant bFGF was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing R band at 16.5kDa.



# **Bioactivity of Recombinant Human bFGF**

Recombinant Human bFGF stimulates cell proliferation using murine Balb/c 3T3 cells and  $\mathrm{ED}_{\mathrm{50}}$  as determined is < 0.05 ng/ml, corresponding to a specific activity of  $> 2.0 \times 10^7$  IU/mg.

# **CONTENTS**

Product	Cat. No.	Amount	Storage	Shelf life
Recombinant Human bFGF (GMP-Grade)	GE02.1 GE02.2	50µg 100µg	≤-20°C	24 months

### **LIMITED WARRANTY**

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