

## Human FGF-6

Human Fibroblast Growth Factor-6, recombinant

Synonyms: Fibroblast Growth Factor 6, Heparin Secretory-Transforming Protein 2, Heparin-Binding Growth Factor 6, HBGF-6, HSTF-2

**PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING**

Size	Order #	Lot #	Expiry Date
5 µg	1374.950.005		
25 µg	1374.950.025		
1 mg	1374.950.199		

Please enquire for bulk quantities and other vial sizes

### Description

Recombinant Human FGF-6 is a 169 amino acid protein, with a molecular mass of 18,9 kDa. Fibroblast Growth Factor-6 (FGF-6) is a secreted, heparin-binding growth factor belonging to the fibroblast growth factor (FGF) family. FGF family members possess extensive mitogenic and cell survival functions, and are involved in various biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-6 is expressed in leukemia cell lines with platelet megakaryocytic differentiation potential. It signals through FGFR 1c, 2c, and 4. The FGF6 gene displays oncogenic transforming activity when transfected into mammalian cells. The mouse homolog of the FGF6 gene displays a restricted expression profile predominantly in the myogenic lineage, suggesting a role in muscle regeneration or differentiation.

- **Biological Activity**             $\geq 2 \times 10^6$  units/mg
- **Source**                            *E. Coli*
- **Purity**                              $\geq 98\%$  (SDS-PAGE, HPLC)
- **Endotoxin level**                 $\leq 0.1\text{ng}/\mu\text{g}$  ( $\leq 1\text{EU}/\mu\text{g}$ )
- **Stabilizer**                        None
- **Buffer**                             Sodium Phosphate (10mM) Sodium Chloride (50mM), pH 7.5\*
- **Physical state**                 Sterile filtered, lyophilized

### Biological Activity

The ED<sub>50</sub> of  $\leq 0.5\text{ng}/\text{ml}$  was determined by the dose-dependent stimulation of thymidine uptake of BaF3 cells. It corresponds to a specific activity of  $\geq 2.0 \times 10^6$  units/mg.

### Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of at least 100 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week or in working aliquots at -20°C to -80°C. Working aliquots should be at the highest practical concentration. For long term storage we recommend to add at least 0.1% HSA (order number: 2835.955.xyz or 2835.958.xyz) or BSA.

### Stability

The lyophilized protein is stable at room temperature for up to 1 month and at least until the lot specific expiry date if kept below -18°C. Reconstituted FGF-6 should be stored in working aliquots at -20°C to -80°C if possible with carrier protein. **Please avoid repeated freeze-thaw cycles.**

### Amino Acid Sequence

MGTRANNTLL DSRGWGTLSS RSRAGLAGEI AGVNWESGYL VGIKRQRRLY CNVGIGFHLQ VLPDGRISGT  
 HEENPYSLLE ISTVERGVVS LFGVRSALFV AMNSKGRLYA TPSFQEECKF RETLLPNNYN AYESDLYQGT  
 YIALSKYGRV KRGSKVSPIM TVTHFLPRI

**Usage:** For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

\*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

ORDERING  
 Tel.: +49 40 43208448-0  
 order@active-bioscience.de  
 www.active-bioscience.de

TECHNICAL SUPPORT  
 Tel.: +49 40 43208448-11  
 support@active-bioscience.de

Active Bioscience GmbH  
 Oberaltenallee 8  
 D-22081 Hamburg  
 HRB 98170 Amtsgericht Hamburg