

## FGF-8f, Human

**Cat. No.:** Z03203-1

**Size:** 1.0 mg

**Synonyms:** Fibroblast Growth Factor-8f (FGF-8f), Human

### Description:

Fibroblast Growth Factor 8f (FGF-8f) is a cytokine belonging to the heparin-binding FGF family, which has at least 23 members. FGF-8 has 8 different isoforms, named FGF-8a through FGF-8h. Different FGF-8 isoforms have different receptor affinities, and thus participate in different signaling cascade pathways. FGF-8 has widespread expression during embryonic development, promoting gastrulation, somitogenesis, morphogenesis, and limb formation. FGF-8 also has oncogenic potential. While in normal cells FGF-8 is expressed at very low levels, in breast, prostate and ovarian cancer FGF-8 is highly expressed. FGF-8 promotes tumor angiogenesis by increasing neo-vascularization, and inducing osteoblastic differentiation.

Recombinant human Fibroblast Growth Factor 8f (rhFGF-8f) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 223 amino acids. A fully biologically active molecule, rhFGF-8f has a molecular mass of 25.5 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Amino Acid Sequence:

```
00001 MQEGPGRGPA LGRELASLFR AGREPQGVSSQ QVTVQSSPNF
00041 TQHVREQSLV TDQLSRRLIR TYQLYSRTSG KHVQVLANKR
00081 INAMAEDGDP FAKLIVETDT FGSRVRVRGA ETGLYICMNK
00121 KGKLIKSNK KGKDCVFTEI VLENNYTALQ NAKYEGWYMA
00161 FTRKGRPRKG SKTRQHQREV HFMKRLPRGH HTTEQSLRFE
00201 FLNYPFTRSLRGSQRTWAP EPR
```

**Source:** *E. coli*

**Species:** Human

**Biological Activity:** ED<sub>50</sub> < 50ng/mL, measured by a cell proliferation assay using 3T3 cells in the presence of 10 µg/ml of heparin, corresponding to a specific activity of > 2 × 10<sup>4</sup> units/mg.

**Molecular Weight:** 25.5 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% by SDS-PAGE analysis.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant human Fibroblast Growth Factor 8f (rhFGF-8f) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhFGF-8f remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.