

## FGF-8, Human

**Cat. No.:** Z02989-1

**Size:** 1.0 mg

**Synonyms:** FGF-8b, AIGF, HBGF

### Description:

Fibroblast Growth Factor-8 (FGF-8) is a heparin-binding growth factor of the FGF family. There are 4 known forms of FGF8 produced by alternative splicing: FGF8a, FGF-8b, FGF-8e and FGF-8f. The human and mouse FGF8b are identical of aa sequences. FGF-8 plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. FGF-8 is required for normal brain, eye, ear and limb development during embryogenesis. It is also required for normal development of the gonadotropin-releasing hormone (GnRH) neuronal system.

Recombinant human Fibroblast Growth Factor-8 (rhFGF-8) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 194 amino acids. A fully biologically active molecule, rhFGF-8 has a molecular mass of 22.5kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 MQVTVQSSPN FTQHVREQSL VTDQLSRRLI RTYQLYSRTS
00041 GKHVQLANK RINAMAEDGD PFAKLIVETD TFGSRVRVRG
00081 AETGLYICMN KKGKLIASN GKGKDCVFTE IVLENNYTAL
00121 QNAKYEGWYM AFTRKGRPRK GSKTRQHQRV VHFMRKLRPG
00161 HHTTEQSLRF EFLNYPFTR SLRGSQRTWA PEPR
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**Source:** *E. coli*

**Species:** Human

**Biological Activity:** ED<sub>50</sub> < 5.0 ng/ml, measured by a cell proliferation assay using 3T3 cells in the presence of 1µg/ml of heparin, corresponding to a specific activity of > 2.0 × 10<sup>5</sup> units/mg.

**Molecular Weight:** 22.5kDa, 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 and HPLC analyses.

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

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