

FGF-8, Human

Cat. No.: Z02989-50

Size: 50.0 ug

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: ED₅₀ < 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× 10⁵ units/mg.

Molecular Weight: 22.5kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O 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.