

FGF-4, Human

Cat. No.: Z02984-100

Size: 100.0 ug

Synonyms: HBGF-4; HST; HST-1; HSTF1; K-FGF; KFGF.

Description:

Fibroblast Growth Factor-4 (FGF-4) also known as K-FGF is a heparin-binding growth factor of the FGF family. It was identified by its oncogenic transforming activity. FGF-4 and FGF-3 are located closely on chromosome 11. FGF-4 and its receptors (FGF R1c, 2c, 3c and 4) play an important role in the regulation of embryonic development, cell proliferation, and cell differentiation. FGF-4 is required for normal limb and cardiac valve development during embryogenesis. Recombinant human Fibroblast Growth Factor-4 (rhFGF-4) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 177 amino acids. A fully biologically active molecule obtained by proprietary chromatographic techniques at GenScript, rhFGF-4 has a molecular mass of 19.4kDa as analyzed by reducing SDS-PAGE.

Amino Acid Sequence:

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00001 MAPTAPNGTL EAELERRWES LVALSLARLP VAAQPKEAAV
00041 QSGAGDYLLG IKRLRRLYCN VGIGFHLQAL PDGRIGGAHA
00081 DTRDSLLELS PVERGVVSIF GVASRFFVAM SSKGKLYGSP
00121 FFTDECTFKE ILLPNNYNAY ESKYKPGMFI ALSKNGKTKK
00161 GNRVSPTMKV THFLPRL
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Source: *E. coli*

Species: Human

Biological Activity: ED₅₀ < 0.5ng/ml, measured in a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 2.0 × 10⁶ units/mg.

Molecular Weight: 19.4kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 50mM HEPES, 750mM NaCl, pH7.5.

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-4 (rhFGF-4) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhFGF-4 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.