

## **DATASHEET** Version 20181206

## FGF-4, Human

Cat. No.: Z02984-25

Size: 25.0 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 nonglycosylated polypeptide chain containing 177 amino acids. A fully biologically active molecule obtained by proprietary chromatographic techniques at Gen-Script, rhFGF-4 has a molecular mass of 19.4kDa as analyzed by reducing SDS-PAGE.

## **Amino Acid Sequence:**

00001 MAPTAPNGTL EAELERRWES LVALSLARLP VAAQPKEAAV
00041 QSGAGDYLLG IKRLRRLYCN VGIGFHLQAL PDGRIGGAHA
00081 DTRDSLLELS PVERGVVSIF GVASRFFVAM SSKGKLYGSP
00121 FFTDECTFKE ILLPNNYNAY ESYKYPGMFI ALSKNGKTKK
00161 GNRVSPTMKV THFLPRL

Source: E. coli Species: Human

**Biological Activity**:  $ED_{50}$ <0.5ng/ml, measured in a cell proliferation assay using 3T3 cells, corresponding to a specific activity of >2.0×  $10^6$  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  $ddH_2O$  at 100  $\mu q/ml$ .

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.