

Background:

FGF-4 (fibroblast growth factor-4), also known as FGF-K or K-FGF (Kaposi's sarcoma-associated FGF), is a 25 kDa secreted, heparin-binding member of the FGF family. The human FGF-4 cDNA encodes 206 amino acids (aa) with a 33 aa signal sequence and a 173 aa mature protein with an FGF homology domain that contains a heparin binding region near the C-terminus. Mature human FGF-4 (aa 71-206) shares 91%, 82%, 94% and 91% aa identity with mouse, rat, canine and bovine FGF-4, respectively. Human FGF-4 has been shown to exhibit cross species activity. Expression of FGF-4 and its receptors, FGF R1c, 2c, 3c and 4, is spatially and temporally regulated during embryonic development. Its expression in the mouse trophoblast inner cell mass promotes expression of FGF R2, and is required for maintenance of the trophectoderm and primitive endoderm.

Source:

Recombinant Human FGF-4 is expressed from Escherichia coli. It contains AA Ser 71 - Leu 206. Predicted molecular mass 19.6 kDa. This protein carries a polyhistidine tag at the N-terminus.

His₆ TEV FGF-4(Ser 71 - Leu 206)

Endotoxin:

Less than 1.0 EU per µg by the LAL method.

AA Sequence:

SGAGDYLLGIKRLRRLYCNVIGIFHLQALPDGRIGGAHADTRDLSLELSPVERGVVSIFGVASRFFVAMSSKGLYGSFFTFDECTFKEIL
LPNNYNAYESYKYPGMFIALSKNGKTKKGNRVSPMKVTHFLPRL

Purity:

Purity >95% as determined by SDS-PAGE.

Formulation:

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization. Contact us for customized product form or formulation.

Reconstitution

Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

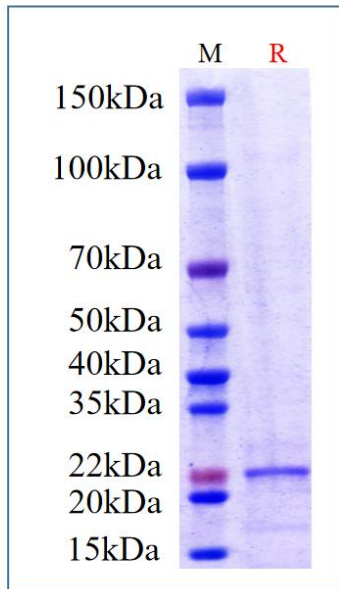
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human FGF-4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.