

HUMAN FGF-4 (136AA) PROTEIN

Cat.#: 12066

Product Name: Human FGF-4 (136AA) Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: Fibroblast growth factor 4;FGF-4;Heparin secretory-transforming protein 1;HST;HST-1;HSTF-1;Heparin-binding growth factor 4;HBGF-4;Transforming protein KS3;FGF4;HST;HSTF1;KS3

Target: FGF-4

UNIPROT ID: P08620

Description: Recombinant Human Fibroblast Growth Factor 4 is produced by our E.coli expression system and the target gene encoding Ser71–Leu206 is expressed.

Background: Fibroblast growth factor 4(FGF-4) is a heparin binding member of the FGF family. The human FGF4 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 FGF4 shares 91%, 82%, 94% and 91% aa identity with mouse, rat, canine and bovine FGF4, 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. FGF-4 is proposed to play a physiologically relevant role in human embryonic stem cell selfrenewal. It promotes stem cell proliferation, but may also aid differentiation depending on context and concentration, and is often included in embryonic stem cell media in vitro. FGF-4 is mitogenic for fibroblasts and endothelial cells in vitro and has autocrine transforming potential. It is a potent angiogenesis promoter in vivo and has been investigated as therapy for coronary artery disease.

Species/Host: E.coli

Molecular Weight: 15.1 KDa

Molecular Characterization: Not available

Purity: Greater than 95% as determined by reducing SDS–PAGE.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris–HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at –20°C to –80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at –80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

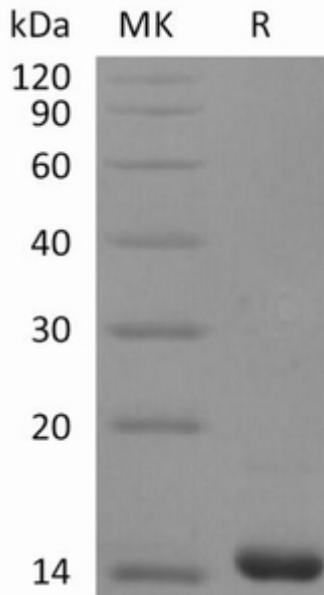


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.