FGF-4/HST-1/HBGF-4, Human, Recombinant

Cat. No. : PCK134

General Information

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
Species	Human
Expression host	E.coli
Sequence	Ser54-Leu206
Accession	P08620
Mol mass	16.9 KDa
Expiration date	12 months
Bio activity	Measured in a cell proliferation assay using MCF7 Human breast cancer cells. The ED50 for this effect is 2-20 ng/mL.

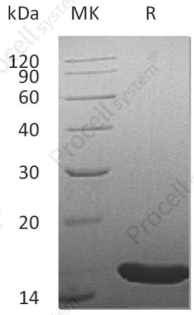
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mMPB, 5% Sucrose, 4% Mannitol, 0.02% Tween80, pH7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

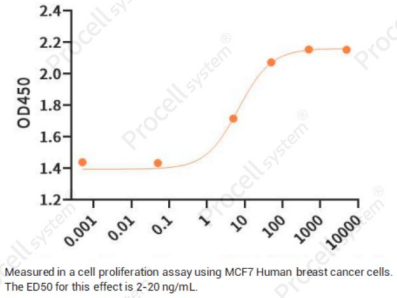
Background

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.

SDS-PAGE



Bio activity



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