

Recombinant Human FGF4 Protein

Cat. No. FGF4-14H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human FGF-4 protein without tag was expressed in E. coli. Carrier protein-free. Mass spectrometry: single species with expected mass. Recovery from stock vial: >95%
Species	Human
Source	E.coli
Description	The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This gene was identified by its oncogenic transforming activity. This gene and FGF3, another oncogenic growth factor, are located closely on chromosome 11. Co-amplification of both genes was found in various kinds of human tumors. Studies on the mouse homolog suggested a function in bone morphogenesis and limb development through the sonic hedgehog (SHH) signaling pathway.
Molecular Mass	14 kDa
Endotoxin	<0.005 EU/μg protein (below level of detection)
Applications	iPSC/ESC Expansion and Differentiation

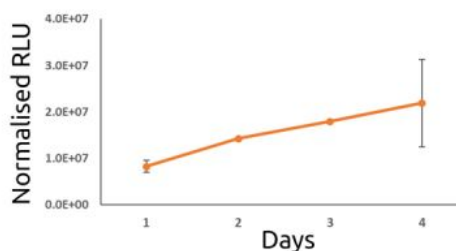
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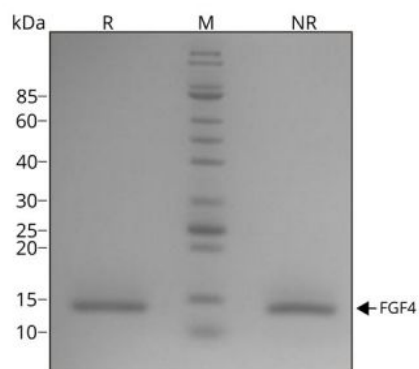
Storage	Resuspend in water at >100 µg/mL, prepare single use aliquots, add carrier protein if desired and store frozen at -20 or -80 centigrade
Storage Buffer	Lyophilized from PBS
GENE INFORMATION	
Gene Name	FGF4 fibroblast growth factor 4 [Homo sapiens (human)]
Official Symbol	FGF4
Synonyms	FGF4; fibroblast growth factor 4; HST; KFGF; FGF-4; HST-1; HSTF1; K-FGF; HBGF-4; HSTF-1; fibroblast growth factor 4; heparin secretory transforming protein 1; heparin-binding growth factor 4; human stomach cancer, transforming factor from FGF-related oncogene; kaposi sarcoma oncogene; oncogene HST; transforming protein KS3
Gene ID	2249
mRNA Refseq	NM_002007
Protein Refseq	NP_001998
MIM	164980
UniProt ID	P08620

Bioactivity



FGF4 induces cell proliferation of iPSC cells (Stemnovate iPSC1 line). IPSC were cultured in serum-free media containing 100ng/mL hFGF4. The number of viable metabolically active cells was detected by ATP measurement using a bioluminescent reaction. No media change was performed on day 2 leading to reduced viable cell numbers on day 3. FGF-4 protein induces proliferation of HEK293T cells.

Purity



Recombinant human FGF4 protein migrates as a single band at 14 kDa in non-reducing conditions and upon reduction (R). No contaminating protein bands are visible. Purified recombinant protein was resolved using 15% w/v SDS-PAGE in reduced and non-reduced conditions and stained with Coomassie Brilliant Blue R250.