

Recombinant Human FGF2,His-tagged

Cat. No. FGF2-91H Lot. No. (See product label)

SPECIFICATION

Product Overview

The recombinant human FGF2, His-tagged protein was expressed in Baculovirus and purified by affinity chromatography in combination with FPLC columns.

Species

Human

Source

Insect Cells

Description

Acidic fibroblast growth factor (FGF-1) and basic fibroblast growth factor (FGF-2) are ubiquitous cytokines found in many tissues. They have effects on multiple cell types derived from mesoderm and neuroectoderm, including endothelial cells. FGF proteins are small peptides of 155 to 268 amino acid residues. The degree of sequence identity between different family members is 30-60% in a "central domain" of ~120 amino acids. This domain confers to FGFs a common tertiary structure and the ability to bind to heparin. Secreted FGFs signal to target cells by binding and activating cell-surface tyrosine kinase FGF receptors (FGFRs). The function of FGFs and FGFRs during embryonic development and adult physiology has been addressed by gain- and loss-of-function experiments in several animal model organisms. These studies have shown that FGFs act as key regulators of developmental events. Human FGF2 occurs in low molecular weight (LMW) and high molecular weight (HMW) isoforms. LMW FGF2 is primarily cytoplasmic and functions in an autocrine manner, whereas HMW FGF2s are nuclear and exert activities through an intracrine mechanism. Gene synonym include BFGF; FGFB and HBGF-2.

Size

5000 U

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UnitDefinition	1 unit equals 1 nanogram of purified protein; 20 units are sufficient in cell culture experiments.
Protein Sequence	MAAGSITLTP ALPEDGGSGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD GVREKSDPHI KLQLQAEERG VVSIKGVCAN RYLAMKEDGR LLASKCVTDE CFFFERLESN NYNTYRSRKY TSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS
Purity	95%
Applications	FGF2 has been applied in cell culture experiments.
OfficialSymbol	FGF2
GENE INFORMATION	
Gene Name	FGF2 fibroblast growth factor 2 (basic) [Homo sapiens]
Synonyms	BFGF; FGFB; FGF-2; HBGF-2; fibroblast growth factor 2; basic fibroblast growth factor bFGF; bFGF; prostatropin; heparin-binding growth factor 2; Basic fibroblast growth factor
Gene ID	2247
mRNA Refseq	NM_002006
Protein Refseq	NP_001997
MIM	134920
UniProt ID	P09038

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Chromosome Location	4q26
Pathway	Activated point mutants of FGFR; Adaptive Immune System; Angiopoietin receptor Tie2-mediated signaling
Function	chemoattractant activity; cytokine activity; fibroblast growth factor binding; fibroblast growth factor receptor binding; growth factor activity; heparin binding; ligand-dependent nuclear receptor transcription coactivator activity; protein binding; voltage-gated calcium channel activity
PDBrendering based on 1bas.	

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