

FGF-2 (basic) Active Protein | FGF-2 active protein

Human FGF-2 (basic)

CATALOG # AAA79213	HOST E Coli	REACTIVITY Human
------------------------------	-----------------------	----------------------------

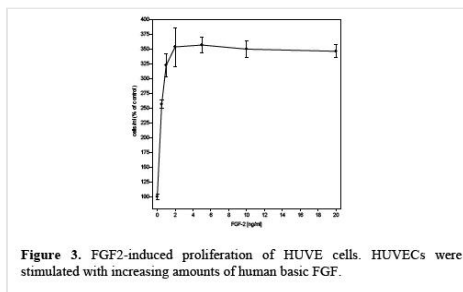
PRODUCT SYNONYMS

FGF-2 (basic); Human FGF-2 (basic); Recombinant Human Fibroblast Growth Factor-2 (basic); basic Fibroblast growth factor (bFGF); Heparin binding growth factor-2 (HBGF-2); FGF-2 active protein

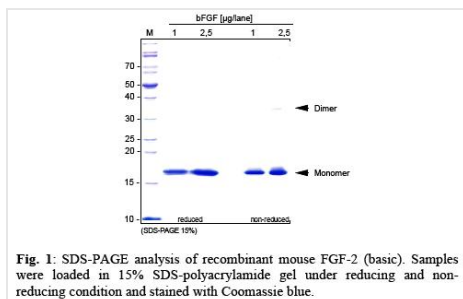
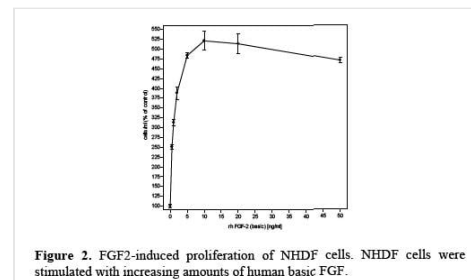
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 98% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	N-Terminal Sequence: A GSITTL
Sequence Length	153
Endotoxin Level	< 0.1ng per ug of human FGF-2
Buffer	PBS
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for FGF-2 active protein	FGF basic (FGF2, HBGF2) is one of at least 23 mitogenic proteins of the FGF family, which show 35-60% amino acid conservation. Unlike other FGFs, FGF acidic and basic lack signal peptides and are secreted by an alternate pathway. Storage pools within the cell or on cell surface heparan sulfate proteoglycans (HSPG) are likely. The predicted 17 kDa FGF basic isoform can be located in both the cytoplasm and the nucleus and is presumed to be the form secreted. Transcription from alternate start sites produces 21-24 kDa forms found only in the nucleus. High and low molecular weight human FGF basic targets the expression of different genes when expressed in NIH3T3 cells. The 17 kDa mouse sequence has 98% aa identity with rat, and 95% identity with human, bovine and sheep FGF basic. Autocrine, intracrine and paracrine actions of FGF basic have been identified. Binding of FGF to heparin or cell surface HSPG is necessary for binding, dimerization and activation of tyrosine kinase FGF receptors. FGF basic binds other proteins, polysaccharides and lipids with lower affinity. Expression of FGF basic is nearly ubiquitous but disruption of the mouse FGF basic gene gives a relatively mild phenotype, suggesting compensation by other FGF family members. FGF basic modulates such normal processes as angiogenesis, wound healing and tissue repair, embryonic development and differentiation, neuronal function and neural degeneration. Transgenic overexpression of FGF basic results in excessive proliferation and angiogenesis reminiscent of a variety of pathological conditions.
Product Categories/Family for FGF-2 active protein	Cytokines & Growth Factors
References	Quarto N et al, Gene 356:49, (2005); Tsuneto M et al, Biochem Biophys Res Comm 335:1239 (2005); Presta M et al, Cytokine Growth Factor Rev 16:159, (2005); Claus P et al, J Biol Chem 278:479, (2003); Coulier F et al, J Mol Evol 44:43, (1997)

NCBI AND UNIPROT INFORMATION

NCBI GI #	153285461
NCBI GeneID	2247
NCBI Accession #	NP_001997.5
NCBI GenBank Nucleotide #	NM_002006.4
UniProt Accession #	P09038; O00527; P78443; Q16443; Q5PY50; Q7KZ11; Q7KZ72; Q9UC54; Q9UCS5; Q9UCS6; A4LBB8
Molecular Weight	16.5 kDa
NCBI Official Full Name	fibroblast growth factor 2
NCBI Official Synonym Full Names	fibroblast growth factor 2 (basic)
NCBI Official Symbol	FGF2
NCBI Official Synonym Symbols	BFGF; FGFB; FGF-2; HBGF-2
NCBI Protein Information	fibroblast growth factor 2; prostatropin; heparin-binding growth factor 2; basic fibroblast growth factor bFGF
UniProt Protein Name	Fibroblast growth factor 2
UniProt Gene Name	FGF2
UniProt Synonym Gene Names	FGFB; FGF-2; bFGF; HBGF-2
UniProt Entry Name	FGF2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.