

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

Mouse FGF-2 (basic)

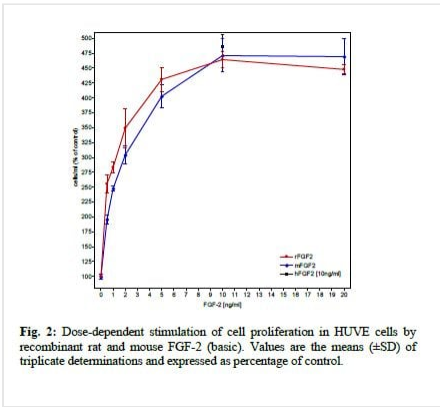
CATALOG # AAA79158	HOST E Coli	REACTIVITY Mouse
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PRODUCT SYNONYMS

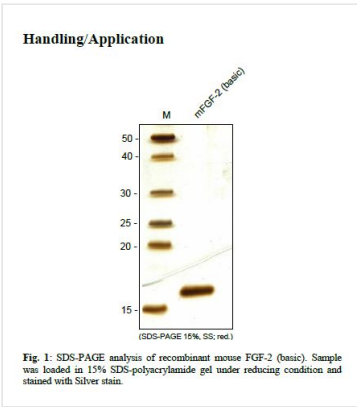
FGF-2 (basic); Mouse FGF-2 (basic); basic Fibroblast growth factor (bFGF); Heparin binding growth factor-2 (HBGF-2); FGF-2 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Mouse
Purity/Purification	> 98% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	N-Terminal Sequence: A LPEDGG
Sequence Length	144
Endotoxin Level	< 0.1ng per ug of mouse FGF-2
Buffer	PBS
Reconstitution	The lyophilized basic FGF should be reconstituted in water containing at least 0.1% human or bovine serum albumin to a concentration not lower than 10 ug/ml.
Length	144
Result by N-terminal sequencing	ALPEDGG
Sequence	ALPEDGGAAFPPGHHKDPKR LYCKNGGFFLRHPDGRVDG VREKSDPHVKLQ LQAEERGVSIIKVCANRYL AMKEDGRLLASKCVTEECFF FERLESNNYNTY RSRKYSWYVALKRTGQYKL GSKTGPGQKAILFLPMSAKS
Biological Activity	The ED ₅₀ for stimulation of cell proliferation by human umbilical vein endothelial cells for mouse FGF-2 has been determined to be in the range of 0.1-2ng/ml.
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Basic FGF can be stored in high-salt buffer (PBS, 1M NaCl) at 4 degree C for 2-4 weeks.



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 (1-3). 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 (4). 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 (5). The 17 kDa mouse sequence has 98% aa identity with rat, and 95% identity with human, bovine and sheep FGF basic (6,7). 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 (3). 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 (1-3).
Product Categories/Family for FGF-2 active protein	Cytokines & Growth Factors
References	1. Coulier F et al, J Mol Evol 44:43, 1997 2. Fernig D et al, Prog Growth Factor Res 5:353, 1994 3. Presta M et al, Cytokine Growth Factor Rev 16:159, 2005 4. Claus P et al, J Biol Chem 278:479, 2003 5. Quarto N et al, Gene 356:49, 2005 6. Tsuneto M et al, Biochem Biophys Res Comm 335:1239, 2005 7. Hebert JM et al, Dev Biol 138:454, 1990

NCBI AND UNIPROT INFORMATION

NCBI GI #	7106315
NCBI GeneID	14173
NCBI Accession #	NP_032032.1
NCBI GenBank Nucleotide #	NM_008006.2
UniProt Accession #	P15655
Molecular Weight	16.35 kDa
NCBI Official Full Name	fibroblast growth factor 2
NCBI Official Synonym Full Names	fibroblast growth factor 2
NCBI Official Symbol	Fgf2
NCBI Official Synonym Symbols	Fgfb; bFGF; Fgf-2

NCBI Protein Information	fibroblast growth factor 2; HBGF-2; basic fibroblast growth factor; heparin-binding growth factor 2
UniProt Protein Name	Fibroblast growth factor 2
UniProt Gene Name	Fgf2
UniProt Synonym Gene Names	Fgf-2; FGF-2; bFGF; HBGF-2
UniProt Entry Name	FGF2_MOUSE

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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-mouse-active-protein/fgf-2-basic/79158>