

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

Rat FGF-2 (basic)

CATALOG # AAA79309	HOST E Coli	REACTIVITY Rat
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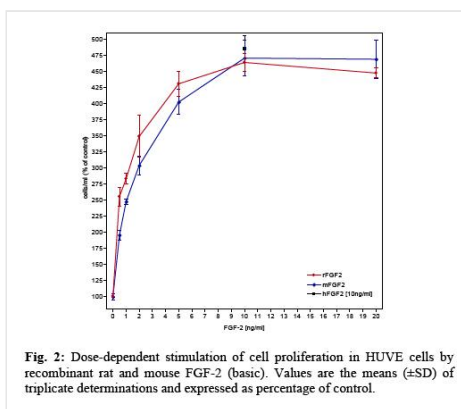
PRODUCT SYNONYMS

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

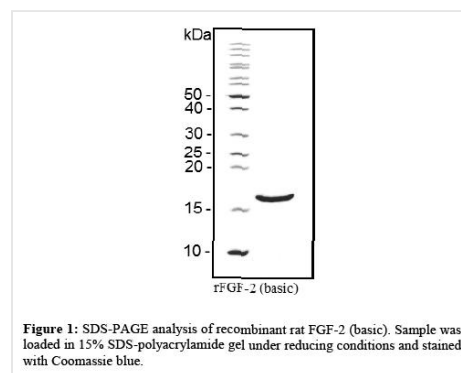
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Rat
Purity/Purification	> 98% by SDS-PAGE & silver stain
Form/Format	Freeze dried
Sequence	N-Terminal Sequence: A LPEDGGGAFP P
Sequence Length	145
Endotoxin Level	< 0.1ng per ug of rat FGF-2
Buffer	0,5X PBS
Preparation and Storage	The lyophilized rat FGF-2, though stable at room temperature, is best stored in working aliquots at -20 degree C to -70 degree C

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for FGF-2 active protein	The FGF family is composed of at least 23 polypeptides that show a variety of biological activities towards cells of mesenchymal, neuronal and epithelial origin. All members are heparin-binding growth factors (HB-GF). Until the structure of basic fibroblast growth factor (bFGF/FGF-2) was determined, a number of synonyms were used to describe this growth factor. As is often the case, the nomenclature reflected the observed activities reported by individual groups. Basic FGF has been reported as leukemia growth factor, macrophage growth factor, endothelial growth factor and tumor angiogenesis factor. The eventual isolation and characterization of bFGF was done from soluble brain extracts. bFGF was found to have a molecular mass of 16.5 kDa and to be 154 amino acids in length. Interestingly, bFGF contains no hydrophobic leader sequence previously thought to be required for cell secretion. Basic FGF bears 55% homology to acidic FGF and also seems to exist in three forms: the 154 amino-acid form and two other truncated versions of 146 and 131 amino acids lacking the N-terminal 9 and 24 residues. Acidic and basic FGF compete for the binding to 125 kDa and 145 kDa receptor species. However, acidic FGF has a higher affinity for the 125 kDa species, while basic FGF has a higher affinity for the 145 kDa species. FGF receptor activation leads to the activation of MAP kinase and protein kinase C. FGF's induce the proliferative response in cells derived from mesoderm and neuroectoderm. Perhaps one of the most potentially significant applications of bFGF is related to its reported ability to induce angiogenesis. The cDNA of native rat FGF-2 (Ala11-Ser154) was cloned from total RNA derived from a rat embryo using standard protocols.
Product Categories/Family for FGF-2 active protein	Cytokines & Growth Factors
References	1. Hisaoka K et al, J Biol Chem 286, 2011 2. Florkiewicz RZ et al, Biochem Biophys Res Commun 409, 2011 3. Sun Y et al, J Cell Sci 124, 2011 4. Turner CA et al, Proc Natl Acad Sci 108, 2011 5. Eckenstein FP et al, Biochem Pharmacol 47, 1994 6. el-Husseini AE, Biochim Biophys Acta 1131, 1992 7. Fujimoto K et al, Biochem Biophys Res Commun 180, 1991 8. Shimasaki S et al, Biochem Biophys Res Commun 157, 1988 9. Kurokawa et al, Nucleic Acids Res 16, 1988

NCBI AND UNIPROT INFORMATION

NCBI GI #	9506599
NCBI GeneID	54250
NCBI Accession #	NP_062178.1
NCBI GenBank Nucleotide #	NM_019305.2
UniProt Accession #	P13109
Molecular Weight	16,34 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	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_RAT

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.