

FGF-2 Monoclonal Antibody

Catalog No :	YM0265
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	FGF-2
Fields :	>>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>PI3K-Akt signaling pathway;>>Signaling pathways regulating pluripotency of stem cells;>>Regulation of actin cytoskeleton;>>Kaposi sarcoma-associated herpesvirus infection;>>Pathways in cancer;>>Proteoglycans in cancer;>>Chemical carcinogenesis - receptor activation;>>Melanoma;>>Breast cancer;>>Gastric cancer
Gene Name :	FGF2
Protein Name :	Heparin-binding growth factor 2
Human Gene Id :	2247
Human Swiss Prot No :	P09038
Mouse Swiss Prot No :	P15655
Immunogen :	Purified recombinant fragment of FGF-2 expressed in E. Coli.
Specificity :	FGF-2 Monoclonal Antibody detects endogenous levels of FGF-2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 31kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;Regulates Actin and Cytoskeleton;Pathways in cancer;Melanoma;

P References : 1. Romanov VV et.al Oncogene. 2005,Oct 13; 24(45) : 6855-60.
2. Webber CA et.al Mol Cell Neurosci. 2005, Sep; 30 (1):37-47.

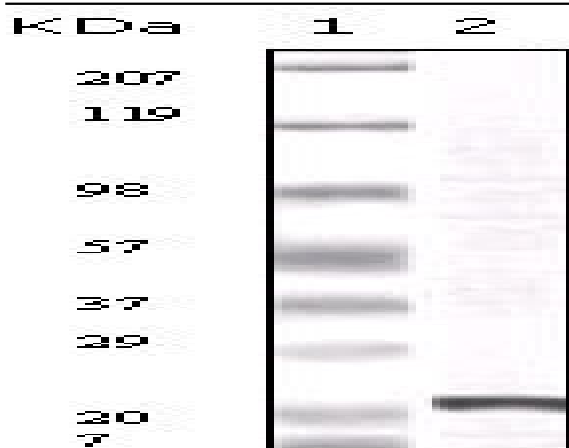
Background : The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG initiation codons, resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF. [provided by RefSeq, Jul 2008],

Function : function:The heparin-binding growth factors are angiogenic agents in vivo and are potent mitogens for a variety of cell types in vitro. There are differences in the tissue distribution and concentration of these 2 growth factors.,miscellaneous:This protein binds heparin more strongly than does aFGF.,PTM:Several N-termini starting at positions 48, 54, 47 and 65 have been identified by direct sequencing.,sequence caution:Unusual initiator. The initiator methionine is coded by a non-canonical CTG leucine codon.,similarity:Belongs to the heparin-binding growth factors family.,subunit:Monomer. Interacts with CSPG4 and FGFBP1. Found in a complex with FGFBP1, FGF1 and FGF2.,tissue specificity:Expressed in granulosa and cumulus cells.,

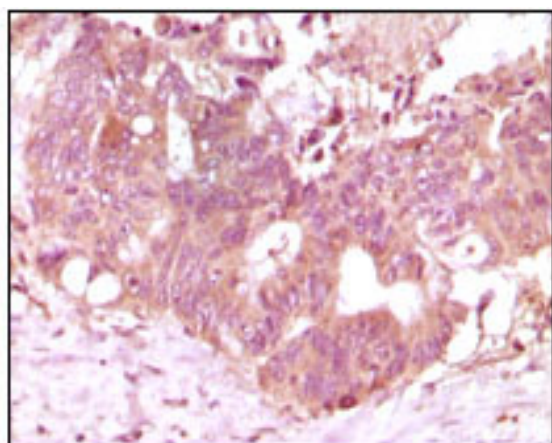
Subcellular Location : Secreted . Nucleus . Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane (PubMed:20230531). Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol (PubMed:22321063). Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57 (PubMed:22321063). .

Expression : Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.

Products Images



Western Blot analysis using FGF-2 Monoclonal Antibody against truncated FGF-2 recombinant protein.



Immunohistochemistry analysis of paraffin-embedded human rectum adenocarcinoma tissue showing cytoplasmic localization with DAB staining using FGF-2 Monoclonal Antibody.