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FGF1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6379a

Specification

FGF1 Antibody (N-term) - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	P05230
Other Accession	P20002
Reactivity	**Human**
Predicted	**Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**17460**
Antigen Region	**5-30**

FGF1 Antibody (N-term) - Additional Information

Gene ID 2246

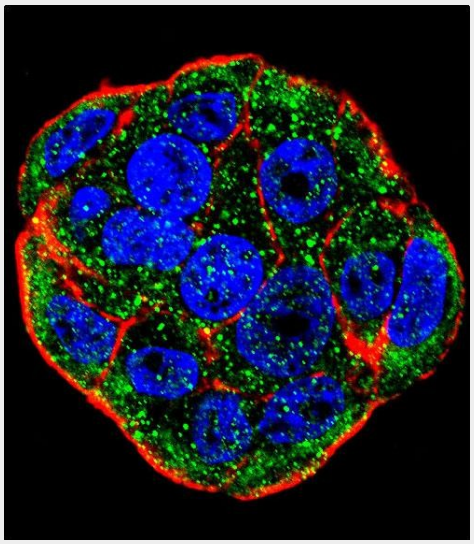
Other Names
Fibroblast growth factor 1, FGF-1, Acidic fibroblast growth factor, aFGF, Endothelial cell growth factor, ECGF, Heparin-binding growth factor 1, HBGF-1, FGF1, FGFA

Target/Specificity
This FGF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 5-30 amino acids from the N-terminal region of human FGF1.

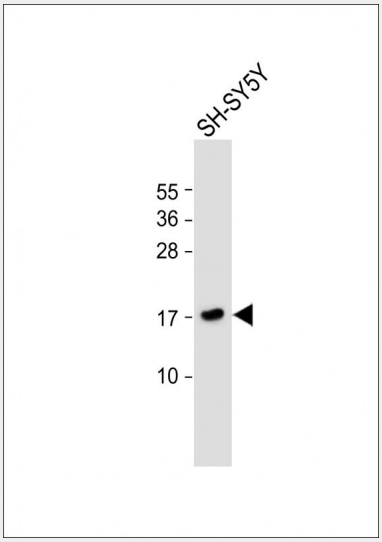
Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



Confocal immunofluorescent analysis of FGF1 Antibody (N-term)(Cat#AP6379a) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



Anti-FGF1 Antibody (N-term) at 1:1000 dilution + SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),

Precautions
FGF1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FGF1 Antibody (N-term) - Protein Information

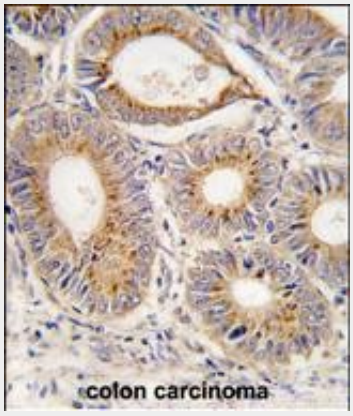
Name FGF1

Synonyms FGFA

Function
Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro. Acts as a ligand for FGFR1 and integrins. Binds to FGFR1 in the presence of heparin leading to FGFR1 dimerization and activation via sequential autophosphorylation on tyrosine residues which act as docking sites for interacting proteins, leading to the activation of several signaling cascades. Binds to integrin ITGAV:ITGB3. Its binding to integrin, subsequent ternary complex formation with integrin and FGFR1, and the recruitment of PTPN11 to the complex are essential for FGF1 signaling. Induces the phosphorylation and activation of FGFR1, FRS2, MAPK3/ERK1, MAPK1/ERK2 and AKT1 (PubMed:18441324, PubMed:20422052). Can induce angiogenesis (PubMed:23469107).

Cellular Location
Secreted. Cytoplasm. Cytoplasm, cell cortex. Cytoplasm, cytosol. Nucleus. Note=Lacks a cleavable signal sequence Within the cytoplasm, it is transported to the cell membrane and then secreted by a non-classical pathway that requires Cu(2+) ions and S100A13. Secreted in a complex with SYT1 (By similarity). Binding of exogenous FGF1 to FGFR facilitates endocytosis followed by translocation of FGF1 across endosomal membrane into the cytosol Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as LRRC59

Peroxidase conjugated at 1/10000 dilution.
Predicted band size : 17 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with FGF1 antibody (N-term) (Cat.#AP6379a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

FGF1 Antibody (N-term) - Background

FGF1 is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis.

FGF1 Antibody (N-term) - References

Fukushima,S., Int. J. Oncol. 32 (2), 467-473 (2008)
Riley,B.M.Am. J. Med. Genet. A 143 (24), 3228-3234 (2007)
Tomaszewski,M.,Circulation 116 (17), 1915-1924 (2007)

Tissue Location
Predominantly expressed in kidney and brain. Detected at much lower levels in heart and skeletal muscle

FGF1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture