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FGF1 Antibody (clone 1F9)

Mouse Monoclonal Antibody

Catalog # ALS14050

Specification

FGF1 Antibody (clone 1F9) - Product Information

Application	IF
Primary Accession	P05230
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	17kDa KDa

FGF1 Antibody (clone 1F9) - 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
Human FGF1

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

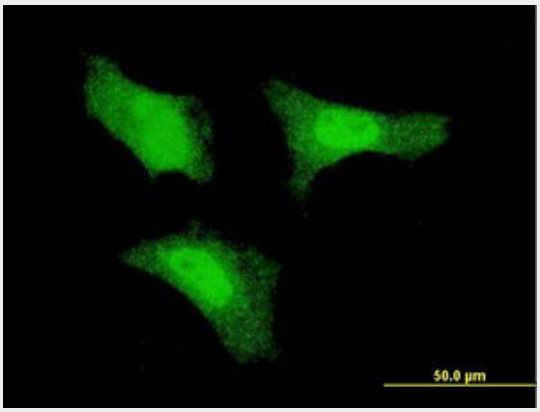
Precautions
FGF1 Antibody (clone 1F9) is for research use only and not for use in diagnostic or therapeutic procedures.

FGF1 Antibody (clone 1F9) - 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



Immunofluorescence of monoclonal antibody to FGF1 on HeLa cell. [antibody concentration 10 ug/ml].

FGF1 Antibody (clone 1F9) - Background

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FGF1 Antibody (clone 1F9) - References

Jaye M.,et al.Science 233:541-545(1986).
Mergia A.,et al.Biochem. Biophys. Res. Commun. 164:1121-1129(1989).
Wang W.P.,et al.Mol. Cell. Biol. 9:2387-2395(1989).
Chiu I.M.,et al.Oncogene 5:755-762(1990).
Wang W.P.,et al.Oncogene 6:1521-1529(1991).

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

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

FGF1 Antibody (clone 1F9) - 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