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Anti-FGF1 / Acidic FGF Antibody (clone 5F12C10)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS18458

Product Information

Application	WB, IHC-P, E
Primary Accession	P05230
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Clone Names	5F12C10
Calculated MW	17460
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	2246
Alias Symbol	FGF1
Other Names	FGF1, AFGF, Endothelial cell growth factor, Fibroblast growth factor 1, FGFA, ECGFB, HBGF-1, GLIO703, ECGF, ECGF-beta, ECGFA, FGF-1, FGF-alpha, HBGF1
Target/Specificity	This product is specific to human FGF-acidic and shows no cross-reactivity with FGF basic, hFGF6, hFGF16, or hFGF17.
Reconstitution & Storage	Protein A purified
Precautions	Anti-FGF1 / Acidic FGF Antibody (clone 5F12C10) is for research use only and not for use in diagnostic or therapeutic procedures.

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