

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

Mouse Anti Human Monoclonal Antibody Catalog # ALS18458

### **Specification**

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

Application WB, IHC-P, E
Primary Accession Predicted Human
Host Mouse
Clonality Monoclonal
Isotype IgG2b,k
Calculated MW 17460

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

# Anti-FGF1 / Acidic FGF Antibody (clone 5F12C10) - 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:<a href="http://www.uniprot.org/citations/18441324" target="\_blank">18441324</a>, PubMed:<a href="http://www.uniprot.org/citations/20422052" target="\_blank">20422052</a>). Can induce angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/23469107" target=" blank">23469107</a>).

#### **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

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

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