

### **FGF1** Antibody

Rabbit mAb Catalog # AP91709

#### **Specification**

#### **FGF1 Antibody - Product Information**

Application WB, IHC
Primary Accession P05230
Reactivity Rat

Clonality Monoclonal

**Other Names** 

FGF1; AFGF; ECGF; ECGF-beta; ECGFA; ECGFB; FGF-alpha; FGFA; HBGF1;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 17460 Da

## **FGF1** Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

FGF1

Description The heparin-binding fibroblast growth

factors play important roles in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell

migration.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### **FGF1** Antibody - 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**

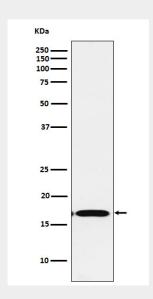
Predominantly expressed in kidney and brain. Detected at much lower levels in heart and skeletal muscle

#### **FGF1 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **FGF1** Antibody - Images



Western blot analysis of FGF1 expression in Mouse kidney lysate.