

FGF1 Antibody

Rabbit mAb

Catalog # AP91709

Product Information

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| Application | WB, IHC |
| Primary Accession | P05230 |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Other Names | FGF1; AFGF; ECGF; ECGF-beta; ECGFA; ECGFB; FGF-alpha; FGFA; HBGF1; |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 17460 |

Additional Information

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|-------------------------------------|---|
| Dilution | WB 1:500~1:2000 IHC 1:50~1:200 |
| 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. |

Protein Information

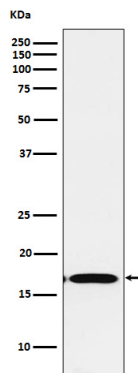
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|--------------------------|---|
| Name | FGF1 |
| Synonyms | FGFA |
| Function | Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as a potent mitogen in vitro. 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

Images



Western blot analysis of FGF1 expression in Mouse kidney lysate.

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