

**FGF-1 Polyclonal Antibody**  
Catalog # AP69878**Specification****FGF-1 Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P05230</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**FGF-1 Polyclonal Antibody - Additional Information****Gene ID** 2246**Other Names**

FGF1; FGFA; Fibroblast growth factor 1; FGF-1; Acidic fibroblast growth factor; aFGF; Endothelial cell growth factor; ECGF; Heparin-binding growth factor 1; HBGF-1

**Dilution**

IHC~~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**FGF-1 Polyclonal 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: [18441324](http://www.uniprot.org/citations/18441324), PubMed: [20422052](http://www.uniprot.org/citations/20422052)). Can induce angiogenesis (PubMed: [23469107](http://www.uniprot.org/citations/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

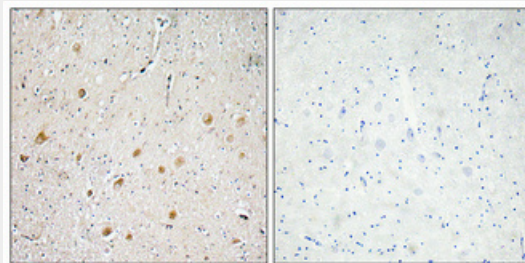
Predominantly expressed in kidney and brain. Detected at much lower levels in heart and skeletal muscle

### FGF-1 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### FGF-1 Polyclonal Antibody - Images



### FGF-1 Polyclonal Antibody - Background

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 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).