

FGF-1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10785**Specification**

FGF-1 Antibody - Product Information

Application	WB
Primary Accession	P05230
Other Accession	NP_000791
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17460

FGF-1 Antibody - Additional Information**Gene ID** 2246

Application & Usage	Western blot analysis (0.5-2 µg/ml). Per researchers feedback, it also works well in ELISA (2-3 µg/ml), and neutralization (3-6 µg/ml). However, the optimal conditions should be determined individually.
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Other Names

FGF1, FGF-1, FGF 1, Fibroblast Growth Factor 1, FGF 1, FGF1, Heparin-binding growth factor 1, HBGF-1, Acidic fibroblast growth factor, aFGF, Putative heparin-binding growth factor 1, Alpha-endothelial cell growth factor, Endothelial cell growth factor alpha

Target/Specificity

FGF-1

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit anti- human FGF-1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

FGF-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FGF-1 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, 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

FGF-1 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 Antibody - Images**FGF-1 Antibody - Background**

FGF-1 is an acidic heparin binding growth factor that stimulates the proliferation of a wide variety

of cells including mesenchymal, neuroectodermal and endothelial cells. Human FGF-1 is a 15.8 kDa protein containing 140 amino acid residues.