

Anti-FGF1 Antibody
Catalog # ABO12690

Specification

Anti-FGF1 Antibody - Product Information

Application	WB, IHC
Primary Accession	P05230
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Fibroblast growth factor 1(FGF1) detection. Tested with WB, IHC-P, ELISA in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-FGF1 Antibody - Additional Information

Gene ID 2246

Other Names

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

Calculated MW

17460 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

ELISA , 0.1-0.5 µg/ml, Human, -
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Secreted. Cytoplasm. Cytoplasm, cell cortex. Cytoplasm, cytosol. Nucleus. 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 Specificity

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

Protein Name

Fibroblast growth factor 1

Contents

Each vial contains 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify "Carrier Free" or "No BSA" in your order note. "

Immunogen

E. coli-derived human FGF1 recombinant protein(Position: F16-D155).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the heparin-binding growth factors family.

Anti-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: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

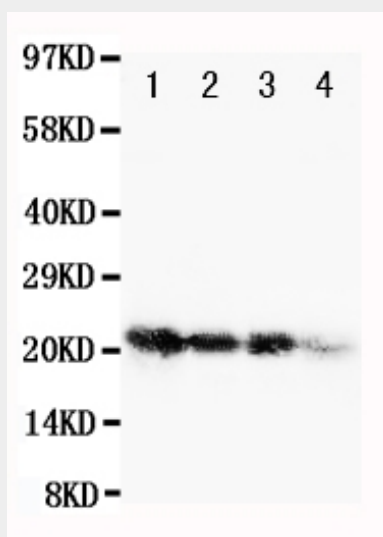
Predominantly expressed in kidney and brain. Detected at much lower levels in heart and skeletal muscle

Anti-FGF1 Antibody - Protocols

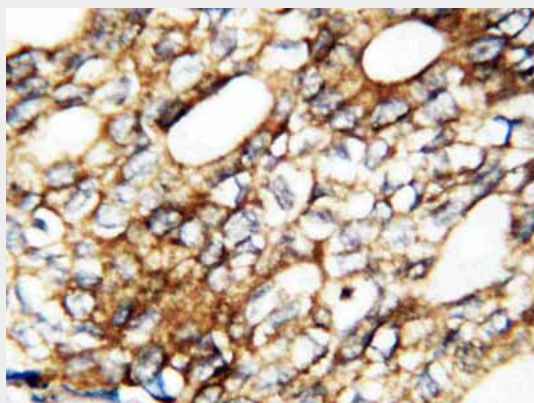
Provided below are standard protocols that you may find useful for product applications.

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

Anti-FGF1 Antibody - Images



Anti-human FGF1 antibody, ABO12690, Western blotting
Lane 1: Recombinant Human FGF1 Protein 10ng
Lane 2: Recombinant Human FGF1 Protein 5ng
Lane 3: Recombinant Human FGF1 Protein 2



Anti-human FGF1 antibody, ABO12690, IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-FGF1 Antibody - Background

Fibroblast growth factor 1(acidic), also known as FGF1/ECGF/HBGF1, is a human gene which is

mapped to 5q31. Human FGF1 shares 96% amino acid sequence homology with both rat and mouse. The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. Additionally, Acidic fibroblast growth factor is derived from beta-endothelial cell growth factor (ECGFB) by posttranslational processing. Alpha-ECGF is also derived from ECGFB in the same manner.