10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-FGF1 Picoband Antibody

Catalog # ABO12629

Specification

Anti-FGF1 Picoband Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	P05230
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

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

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

Anti-FGF1 Picoband 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, Mouse, Rat, By Heat

ELISA , 0.1-0.5 µg/ml, Human, -
Western blot, 0.1-0.5 µg/ml, Rat, 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 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human FGF1 recombinant protein (Position: F16-D155). Human FGF1 shares 96.4% amino acid (aa) sequence identity with both mouse and rat FGF1.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-FGF1 Picoband 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

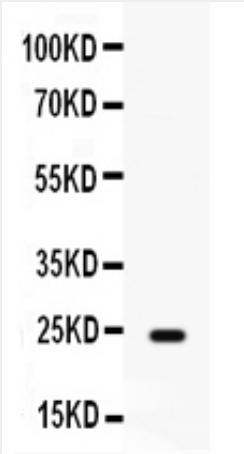
Anti-FGF1 Picoband Antibody - Protocols

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

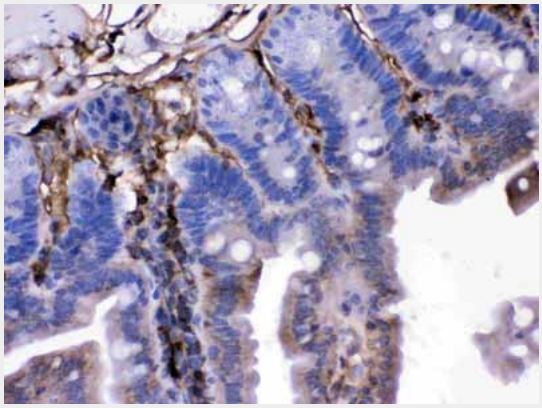
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-FGF1 Picoband Antibody - Images

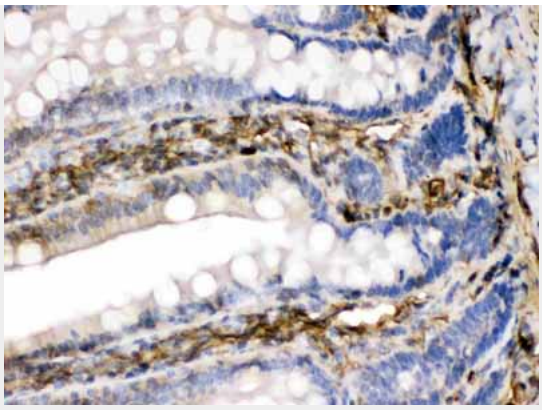


Western blot analysis of FGF1 expression in rat cardiac muscle extract (lane 1). FGF1 at 24KD was detected using rabbit anti- FGF1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12629) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

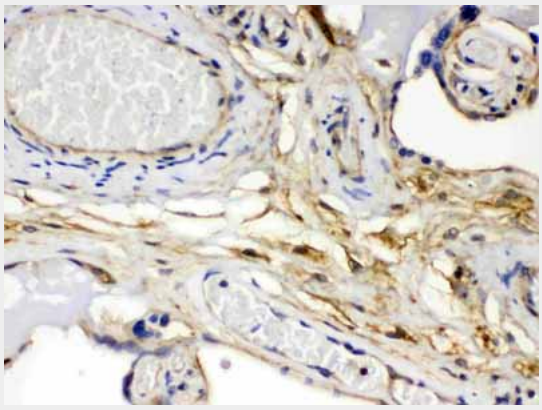


FGF1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti-FGF1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12629) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



FGF1 was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti- FGF1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12629) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



FGF1 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti-FGF1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12629) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-FGF1 Picoband Antibody - Background

Fibroblast growth factor 1 (acidic), also known as FGF1/ECGF/HBGF1, is a human gene which is mapped to 5q31. 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 also acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis.