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

Anti-FGF1 Picoband Antibody

Catalog # ABO11932

Product Information

Application	WB
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 in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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: N22-L146). Human FGF1 shares 97% 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.
Sequence Similarities	Belongs to the heparin-binding growth factors family.

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

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. Acidic fibroblast growth factor is derived from beta-endothelial cell growth factor (ECGFB) by posttranslational processing. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor.

Images



Anti- FGF1 antibody, ABO11932, Western blottingAll lanes: Anti FGF1 (ABO11932) at 0.5ug/mlWB: Recombinant Human FGF1 Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.