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

FGFR1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20934a

Product Information

Application	WB, FC, E
Primary Accession	P11362
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50848
Calculated MW	91868

Additional Information

Gene ID	2260
Other Names	Fibroblast growth factor receptor 1, FGFR-1, Basic fibroblast growth factor receptor 1, BFGFR, bFGF-R-1, Fms-like tyrosine kinase 2, FLT-2, N-sam, Proto-oncogene c-Fgr, CD331, FGFR1, BFGFR, CEK, FGFBR, FLG, FLT2, HBGFR
Target/Specificity	This FGFR1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 291-324 amino acids from the Central region of human FGFR1.
Dilution	WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FGFR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FGFR1
Synonyms	BFGFR, CEK, FGFBR, FLG, FLT2, HBGFR
Function	Tyrosine-protein kinase that acts as a cell-surface receptor for fibroblast

	growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Nucleus. Cytoplasm, cytosol. Cytoplasmic vesicle. Note=After ligand binding, both receptor and ligand are rapidly internalized. Can translocate to the nucleus after internalization, or by translocation from the endoplasmic reticulum or Golgi apparatus to the cytosol, and from there to the nucleus
Tissue Location	Detected in astrocytoma, neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines, however isoform 17, isoform 18 and isoform 19 are not detected in these cells.

Background

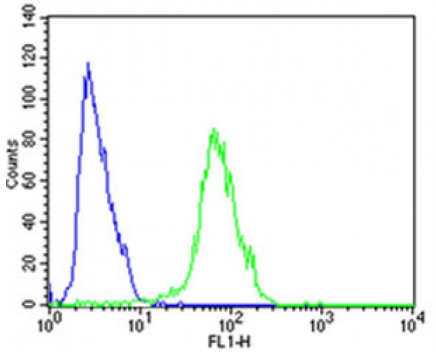
Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation.

References

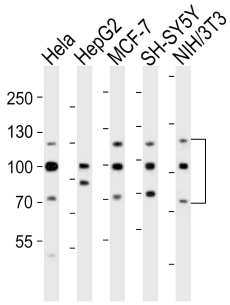
Itoh N.,et al.Biochem. Biophys. Res. Commun. 169:680-685(1990).
Dionne C.A.,et al.EMBO J. 9:2685-2692(1990).
Johnson D.E.,et al.Mol. Cell. Biol. 10:4728-4736(1990).
Isacchi A.,et al.Nucleic Acids Res. 18:1906-1906(1990).
Wennstroem S.,et al.Growth Factors 4:197-208(1991).

Images

Flow cytometric analysis of SH-SY5Y cells using FGFR1 Antibody (Center)(green, Cat#AP20934a) compared to an isotype control of rabbit IgG(blue). AP20934a was diluted



at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody.



Western blot analysis of lysates from Hela, HepG2, MCF-7, SH-SY5Y, mouse NIH/3T3 cell line (from left to right), using FGFR1 Antibody (Center)(Cat. #AP20934a). AP20934a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

Citations

- Fibroblast growth factor receptor-1 mediates internalization of pathogenic spotted fever rickettsiae into host endothelium.

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