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

FGFR1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7636a

Product Information

Application	FC, WB, IHC-P, IF, E
Primary Accession	P11362
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	19-48

Additional Information

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 rabbits immunized with a KLH conjugated synthetic peptide between 19~48 amino acids from the N-terminal region of human FGFR1.
Dilution	FC~~1:10~50 WB~~1:1000 IHC-P~~1:100~500 IF~~1:50~100 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

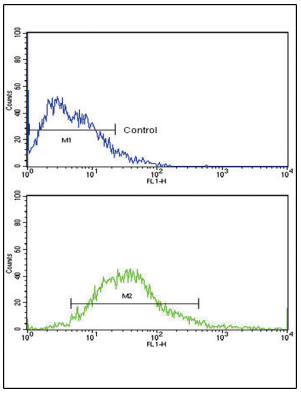
FGFR1 is a member of the fibroblast growth factor receptor family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein consists of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with

fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds both acidic and basic fibroblast growth factors and is involved in limb induction. Mutations in this gene can lead to Pfeiffer syndrome and Jackson-Weiss syndrome. The genomic organization of the gene is very similar to family members 2-4, encompassing 19 exons that are subject to complex alternative splicing, which allows for structural, tissue expression and ligand affinity variations among the isoforms.

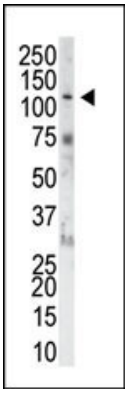
References

Jiao, J., et al., Arch. Biochem. Biophys. 410(2):187-200 (2003).
Fu, L., et al., J. Comp. Neurol. 462(2):265-273 (2003).
Lundin, L., et al., Exp. Cell Res. 287(1):190-198 (2003).
Kiselyov, V.V., et al., Structure (Camb.) 11(6):691-701 (2003).
Baumann, H., et al., J. Biol. Chem. 278(18):16198-16208 (2003).

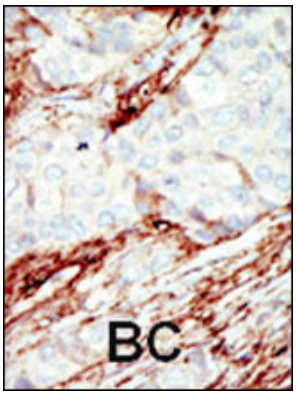
Images



Flow cytometric analysis of MCF-7 cells using FGFR1 Antibody (N-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

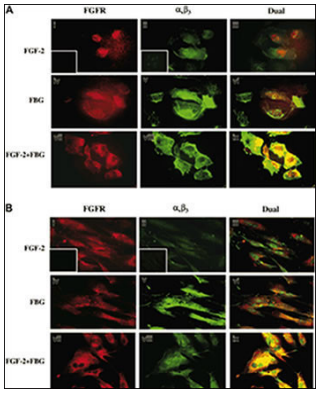


The anti-FGFR1 Pab (Cat. #AP7636a) is used in Western blot to detect FGFR1 in NIH-3T3 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Colocalization of A1B3 and FGFR1 using IF. Confluent ECs (A) or HFFs (B) were treated with or without 100 ng/mL



FGF-2 in the presence or absence of 10/mL fibrinogen. After 1 hour, cells were washed and fixed with 3.7% formaldehyde and stained using 10/mL FGFR1 and 7E3 antibody. FGFR is visualized as red fluorescence (i,iv,vii), A1B3 is visualized as green fluorescence (ii,v,viii), and colocalization of FGF-2 and fibrinogen receptors is shown as yellow fluorescence (iii,vi,ix). Insets represent the background staining for red (i) and green (ii) fluorescence. Bars represent 25 .

Citations

- Autologous culture method improves retention of tumors' native properties
- Fibrinogen binding potentiates FGF-2 but not VEGF induced expression of u-PA, u-PAR, and PAI-1 in endothelial cells.
- Induction of stem cell gene expression in adult human fibroblasts without transgenes.
- Stimulation of endothelial cell proliferation by FGF-2 in the presence of fibrinogen requires alphavbeta3.
- [Expeditions to high altitudes--what can we learn from them?].
- L1CAM stimulates glioma cell motility and proliferation through the fibroblast growth factor receptor.
- A tissue-engineered model of fetal distal lung tissue.
- Homeobox family Hoxc localization during murine palate formation.
- Basic fibroblast growth factor in the bone microenvironment enhances cell motility and invasion of Ewing\'s sarcoma family of tumours by activating the FGFR1-PI3K-Rac1 pathway.