

FGFR1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7636I

Specification

FGFR1 Antibody - Product Information

| | |
|-------------------|---------------------------|
| Application | WB, IHC-P, FC,E |
| Primary Accession | P11362 |
| Other Accession | NP_075598 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |

FGFR1 Antibody - 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 rabbits immunized with a His fusion protein from human FGFR1.

Dilution

WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

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 is for research use only and not for use in diagnostic or therapeutic procedures.

FGFR1 Antibody - 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.

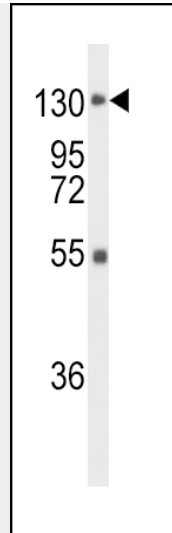
FGFR1 Antibody - Protocols

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

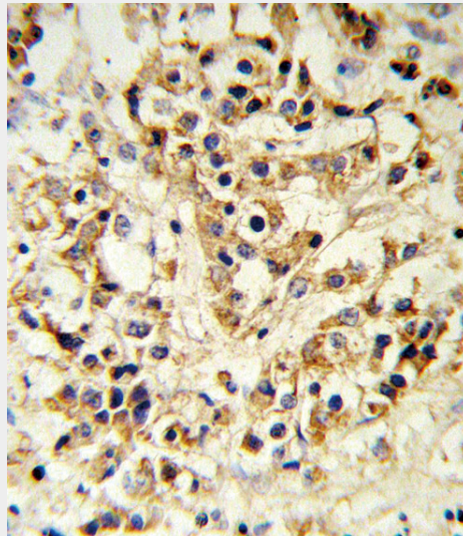
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FGFR1 Antibody - Images

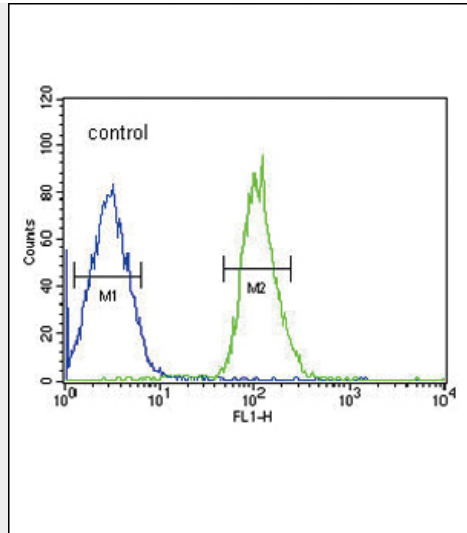




Western blot analysis of FGFR1 Antibody (Cat. #AP7636i) in mouse liver tissue lysates (35ug/lane). FGFR1 (arrow) was detected using the purified Pab.



FGFR1 Antibody (Cat. #AP7636i) IHC analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FGFR1 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



FGFR1 Antibody (Cat.#AP7636i) FC analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

FGFR1 Antibody - 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.

FGFR1 Antibody - 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).