

FGFR1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1299a**Specification**

FGFR1 Antibody - Product Information

Application	WB
Primary Accession	P11362
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	92kDa KDa

Description

Fibroblast growth factor receptor 1 (FGFR1), also known as basic fibroblast growth factor receptor 1, fms-related tyrosine kinase-2 / Pfeiffer syndrome, and CD331, is a receptor tyrosine kinase whose ligands are specific members of the fibroblast growth factor family. FGFR1 has been shown to be associated with Pfeiffer syndrome. It is a member of the fibroblast growth factor receptor (FGFR) 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.

Immunogen

Purified recombinant extracellular fragment of human FGFR1 (aa22-376) fused with hIgGfc tag expressed in HEK293 cells.

Formulation

Ascitic fluid containing 0.03% sodium azide.

FGFR1 Antibody - Additional Information

Gene ID 2260

Other Names

Fibroblast growth factor receptor 1, FGFR-1, 2.7.10.1, 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

Dilution

WB~~1/500 - 1/2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. 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, HBGR

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

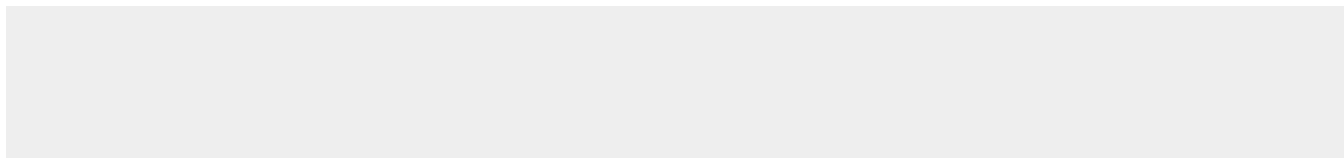
Tissue Location

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

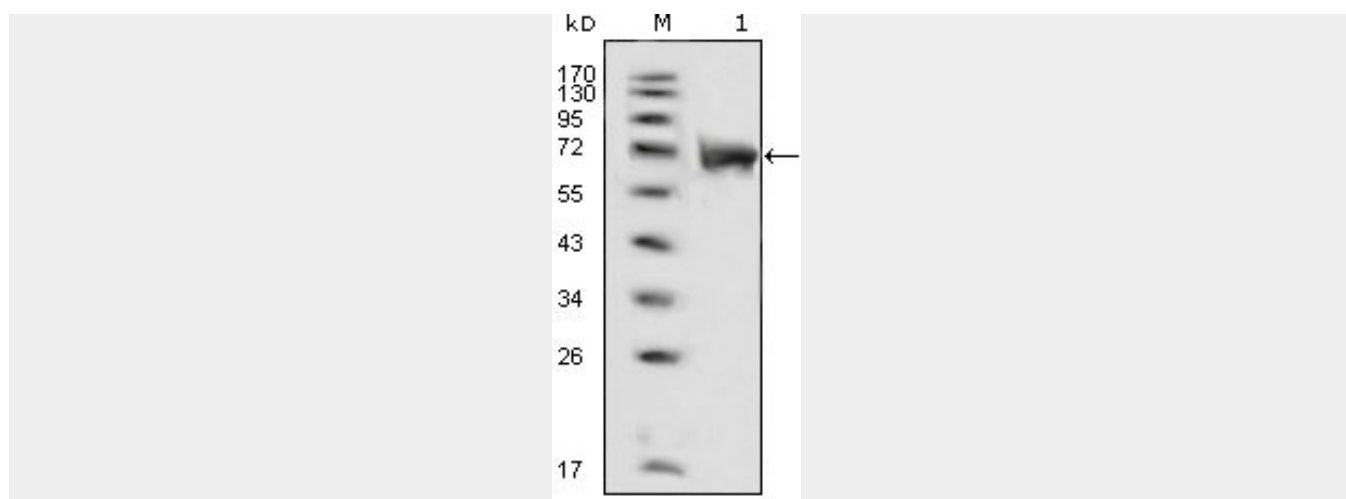


Figure 1: Western blot analysis using FGFR1 mouse mAb against extracellular domain of human FGFR1 (aa22-376).

FGFR1 Antibody - References

1. J Biol Chem. 2004 Jul 9;279(28):29325-35.
2. Arterioscler Thromb Vasc Biol. 2005 May;25(5):944-9.
3. Breast Cancer Res. 2007;9(2):R23.