

Mouse Fgfr3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14841c

Specification

Mouse Fgfr3 Antibody (Center) - Product Information

Application WB, IHC-P,E Primary Accession Q61851

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 87758
Antigen Region 468-495

Mouse Fgfr3 Antibody (Center) - Additional Information

Other Names

Fibroblast growth factor receptor 3, FGFR-3, Heparin-binding growth factor receptor, CD333, Fgfr3, Mfr3, Sam3

Target/Specificity

This Mouse Fgfr3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 468-495 amino acids from the Central region of mouse Fgfr3.

Dilution

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

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

Mouse Fgfr3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Fgfr3 Antibody (Center) - Protein Information

Name Fgfr3

Synonyms Mfr3, Sam3

Function Tyrosine-protein kinase that acts as a cell-surface receptor for fibroblast growth factors



and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL and FRS2. 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. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3 maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of STAT1, STAT5A and STAT5B. Plays a role in postnatal lung development.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle. Endoplasmic reticulum. Note=The activated receptor is rapidly internalized and degraded. Detected in intracellular vesicles after internalization of the autophosphorylated receptor (By similarity).

Tissue Location

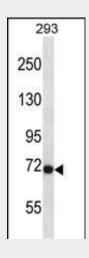
In embryo, expressed in heart, lung, kidney, skin, head and liver but not in muscle. In adult, highest levels in brain Also expressed in liver, lung, kidney, testis, ovary and uterus. Very low levels in heart, thymus, spleen and muscle

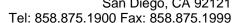
Mouse Fgfr3 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

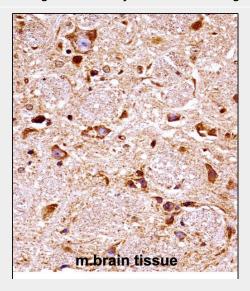
Mouse Fgfr3 Antibody (Center) - Images







Mouse Fgfr3 Antibody (Center) (Cat. #AP14841c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the Fgfr3 antibody detected the Fgfr3 protein (arrow).



Mouse Fgfr3 Antibody (Center) (Cat. #AP14841c) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Fgfr3 Antibody (Center) (Cat. #AP14841c) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Fgfr3 Antibody (Center) - Background

Receptor for acidic and basic fibroblast growth factors. Preferentially binds FGF1. **Mouse Fgfr3 Antibody (Center) - Citations**

 FGFR mutation promotes chemoresistance by activating Akt signaling in bladder cancer cells.