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

Mouse Fgfr3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20744c

Specification

Mouse Fgfr3 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q61851
Other Accession	P22607
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**87758**

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 a rabbit immunized with a KLH conjugated synthetic peptide between 449-482 amino acids from the Central region of human Mouse Fgfr3.

Dilution
WB~~1:1000
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
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

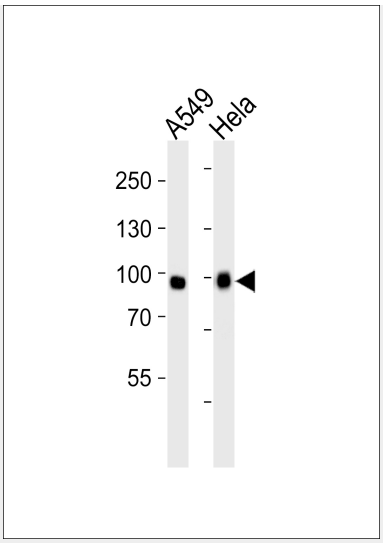
Mouse Fgfr3 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Fgfr3 Antibody (Center) - Images

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



Western blot analysis of lysates from A549, Hela cell line (from left to right), using Mouse Fgfr3 Antibody (Center)(Cat. #AP20744c). AP20744c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Mouse Fgfr3 Antibody (Center) - Background

Tyrosine-protein kinase that acts as 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.

Mouse Fgfr3 Antibody (Center) - References

Ornitz D.M.,et al.J. Biol. Chem. 267:16305-16311(1992).
Katoh O.,et al.Cancer Res. 53:1136-1141(1993).
Chellaiah A.T.,et al.J. Biol. Chem. 269:11620-11627(1994).
Deng C.,et al.Cell 84:911-921(1996).
Ornitz D.M.,et al.J. Biol. Chem. 271:15292-15297(1996).