

**Mouse Fgfr4 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21465c**

**Specification**

---

**Mouse Fgfr4 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q03142</a>
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	88661

**Mouse Fgfr4 Antibody (Center) - Additional Information**

**Gene ID** 14186

**Other Names**

Fibroblast growth factor receptor 4, FGFR-4, Protein-tyrosine kinase receptor MPK-11, CD334, Fgfr4, Fgfr-4, Mpk-11

**Target/Specificity**

This Mouse Fgfr4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 448-482 amino acids from the Central region of Mouse Fgfr4.

**Dilution**

WB~~1:2000

**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 Fgfr4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mouse Fgfr4 Antibody (Center) - Protein Information**

**Name** Fgfr4

**Synonyms** Fgfr-4, Mpk-11

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

and plays a role in the regulation of cell proliferation, differentiation and migration, and in regulation of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis. Required for normal down- regulation of the expression of CYP7A1, the rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 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. Promotes SRC-dependent phosphorylation of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-regulated by receptor internalization and degradation; MMP14 promotes internalization and degradation of FGFR4. Plays a role in postnatal lung development. May be involved in the development of skeletal muscle cell lineages.

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein Endosome. Endoplasmic reticulum

Note=Internalized from the cell membrane to recycling endosomes, and from there back to the cell membrane.

#### **Tissue Location**

Isoform 1 and isoform 2 are expressed in lung and proliferating myoblasts and myotubes of primary myogenic cells (at protein level). Isoform 1 and isoform 2 are expressed in liver, muscle, spleen, heart, lung, kidney and in primary myogenic cells

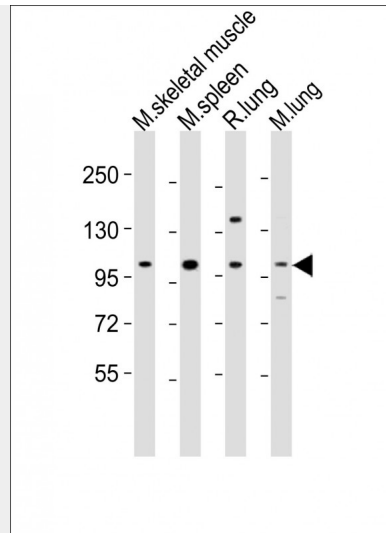
#### **Mouse Fgfr4 Antibody (Center) - Protocols**

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

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

#### **Mouse Fgfr4 Antibody (Center) - Images**





All lanes : Anti-Fgfr4 Antibody (Center) at 1:2000 dilution Lane 1: mouse skeletal muscle lysates Lane 2: mouse spleen lysates Lane 3: rat lung lysates Lane 4: mouse lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 89 kDa Blocking/Dilution buffer: 5% NFD/MTBST.

### Mouse Fgfr4 Antibody (Center) - Background

Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays a role in the regulation of cell proliferation, differentiation and migration, and in regulation of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis. Required for normal down-regulation of the expression of CYP7A1, the rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 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. Promotes SRC-dependent phosphorylation of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-regulated by receptor internalization and degradation; MMP14 promotes internalization and degradation of FGFR4. Plays a role in postnatal lung development. May be involved in the development of skeletal muscle cell lineages.

### Mouse Fgfr4 Antibody (Center) - References

- Stark K.L., et al. *Development* 113:641-651(1991).
- Kwiatkowski B.A., et al. *J. Cell. Physiol.* 215:803-817(2008).
- Carninci P., et al. *Science* 309:1559-1563(2005).
- Gilardi-Hebenstreit P., et al. *Oncogene* 7:2499-2506(1992).
- Weinstein M., et al. *Development* 125:3615-3623(1998).