

**Mouse Fgfr3 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP20744c****Specification**

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**Mouse Fgfr3 Blocking Peptide (Center) - Product Information**

Primary Accession [O61851](#)  
Other Accession [P22607](#)

**Mouse Fgfr3 Blocking Peptide (Center) - Additional Information****Other Names**

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

**Target/Specificity**

The synthetic peptide sequence is selected from aa 449-462 of HUMAN Fgfr3

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Mouse Fgfr3 Blocking Peptide (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 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

### **Mouse Fgfr3 Blocking Peptide (Center) - Images**

### **Mouse Fgfr3 Blocking Peptide (Center) - Background**

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### **Mouse Fgfr3 Blocking Peptide (Center) - References**

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Deng C.,et al.Cell 84:911-921(1996).  
Ornitz D.M.,et al.J. Biol. Chem. 271:15292-15297(1996).