

**Mouse Fgr Blocking Peptide (Center)**  
Synthetic peptide  
Catalog # BP21017a**Specification****Mouse Fgr Blocking Peptide (Center) - Product Information**Primary Accession [P14234](#)**Mouse Fgr Blocking Peptide (Center) - Additional Information**

Gene ID 14191

**Other Names**

Tyrosine-protein kinase Fgr, Proto-oncogene c-Fgr, p55-Fgr, Fgr

**Target/Specificity**

The synthetic peptide sequence is selected from aa 232-245 of HUMAN Fgr

**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 Fgr Blocking Peptide (Center) - Protein Information**

Name Fgr

**Function**

Non-receptor tyrosine-protein kinase that transmits signals from cell surface receptors devoid of kinase activity and contributes to the regulation of immune responses, including neutrophil, monocyte, macrophage and mast cell functions,

**Mouse Fgr Blocking Peptide (Center) - Background**

Non-receptor tyrosine-protein kinase that transmits signals from cell surface receptors devoid of kinase activity and contributes to the regulation of immune responses, including neutrophil, monocyte, macrophage and mast cell functions, cytoskeleton remodeling in response to extracellular stimuli, phagocytosis, cell adhesion and migration. Promotes mast cell degranulation, release of inflammatory cytokines and IgE-mediated anaphylaxis. Acts downstream of receptors that bind the Fc region of immunoglobulins, such as MS4A2/FCER1B, FCER1G and FCGR2. Acts downstream of ITGB1 and ITGB2, and regulates actin cytoskeleton reorganization, cell spreading and adhesion. Depending on the context, activates or inhibits cellular responses. Functions as negative regulator of ITGB2 signaling, phagocytosis and SYK activity in monocytes (PubMed:11672534). Required for normal ITGB1 and ITGB2 signaling, normal cell spreading and adhesion in neutrophils and macrophages (PubMed:8666673 and PubMed:9687507). Functions as positive regulator of cell migration and regulates cytoskeleton reorganization via RAC1 activation (PubMed:15561106). Phosphorylates SYK (in vitro) and promotes SYK-dependent activation of AKT1 and MAP kinase signaling (PubMed:21746961). Phosphorylates PLD2 in antigen-stimulated mast cells, leading to PLD2 activation and the production of the signaling molecules lysophosphatidic acid and diacylglycerol. Promotes activation of PIK3R1. Phosphorylates FASLG, and thereby regulates its ubiquitination and subsequent internalization. Phosphorylates ABL1. Promotes phosphorylation of CBL, CTTN, PIK3R1, PTK2/FAK1, PTK2B/PYK2 and VAV2. Phosphorylates HCLS1 that has already been phosphorylated by SYK, but not unphosphorylated HCLS1.

**Mouse Fgr Blocking Peptide (Center) - References**

cytoskeleton remodeling in response to extracellular stimuli, phagocytosis, cell adhesion and migration. Promotes mast cell degranulation, release of inflammatory cytokines and IgE-mediated anaphylaxis. Acts downstream of receptors that bind the Fc region of immunoglobulins, such as MS4A2/FCER1B, FCER1G and FCGR2. Acts downstream of ITGB1 and ITGB2, and regulates actin cytoskeleton reorganization, cell spreading and adhesion. Depending on the context, activates or inhibits cellular responses. Functions as negative regulator of ITGB2 signaling, phagocytosis and SYK activity in monocytes (PubMed:<a href="http://www.uniprot.org/citations/11672534" target="\_blank">11672534</a>). Required for normal ITGB1 and ITGB2 signaling, normal cell spreading and adhesion in neutrophils and macrophages (PubMed:<a href="http://www.uniprot.org/citations/8666673" target="\_blank">8666673</a> and PubMed:<a href="http://www.uniprot.org/citations/9687507" target="\_blank">9687507</a>). Functions as positive regulator of cell migration and regulates cytoskeleton reorganization via RAC1 activation (PubMed:<a href="http://www.uniprot.org/citations/15561106" target="\_blank">15561106</a>). Phosphorylates SYK (in vitro) and promotes SYK-dependent activation of AKT1 and MAP kinase signaling (PubMed:<a href="http://www.uniprot.org/citations/21746961" target="\_blank">21746961</a>). Phosphorylates PLD2 in antigen-stimulated mast cells, leading to PLD2 activation and the production of the signaling molecules lysophosphatidic acid and diacylglycerol. Promotes activation of PIK3R1. Phosphorylates FASLG, and thereby regulates its ubiquitination and subsequent internalization. Phosphorylates ABL1. Promotes phosphorylation of CBL, CTTN, PIK3R1, PTK2/FAK1, PTK2B/PYK2 and VAV2. Phosphorylates HCLS1 that has already been phosphorylated by SYK, but not unphosphorylated HCLS1. Together with CLNK, it acts as a negative regulator of natural killer cell-activating receptors and inhibits interferon-gamma production (PubMed:<a href="http://www.uniprot.org/citations/16439675" target="\_blank">16439675</a>).

#### Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic

Yi T.L.,et al.Oncogene 4:1081-1087(1989).  
King F.J.,et al.Oncogene 5:337-344(1990).  
Carninci P.,et al.Science 309:1559-1563(2005).  
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, ruffle membrane. Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Mitochondrion inner membrane. Mitochondrion intermembrane space Note=Detected in mitochondrial intermembrane space and at inner membranes (By similarity). Colocalizes with actin fibers at membrane ruffles. Detected at plasma membrane lipid rafts.

**Tissue Location**

Expressed in natural killer cells (at protein level).

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

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

- [Blocking Peptides](#)