

**Mouse Fyn Antibody (C-term) Blocking Peptide**

Synthetic peptide

Catalog # BP14843b

**Specification**

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**Mouse Fyn Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession

[P39688](#)**Mouse Fyn Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 14360

**Other Names**

Tyrosine-protein kinase Fyn, Proto-oncogene c-Fyn, p59-Fyn, Fyn

**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 Fyn Antibody (C-term) Blocking Peptide - Protein Information****Name** Fyn**Function**

Non-receptor tyrosine-protein kinase that plays a role in many biological processes including regulation of cell growth and survival, cell adhesion, integrin-mediated signaling, cytoskeletal remodeling, cell motility, immune response and axon guidance. Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain. Following activation by PKA, the protein subsequently associates with PTK2/FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions. Involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (beta- catenin) and CTNND1 (delta-catenin). Regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubule-associated proteins MAP2 and MAPT. Promotes cell survival by phosphorylating AGAP2/PIKE-A and preventing its apoptotic cleavage. Participates in signal transduction pathways that regulate the integrity of the glomerular slit diaphragm (an essential part of the glomerular filter of the kidney) by phosphorylating several slit diaphragm components including NPHS1, KIRREL1 and TRPC6. Plays a role in neural processes by phosphorylating DPYSL2, a multifunctional adapter protein within the central nervous system, ARHGAP32, a regulator for Rho family GTPases implicated in various neural functions, and SNCA, a small pre-synaptic protein. Participates in the downstream signaling pathways that lead to T-cell differentiation and proliferation following T-cell receptor (TCR) stimulation. Phosphorylates PTK2B/PYK2 in response to T-cell receptor activation. Also participates in negative feedback regulation of TCR signaling through phosphorylation of

PAG1, thereby promoting interaction between PAG1 and CSK and recruitment of CSK to lipid rafts. CSK maintains LCK and FYN in an inactive form. Promotes CD28-induced phosphorylation of VAV1. In mast cells, phosphorylates CLNK after activation of immunoglobulin epsilon receptor signaling (PubMed:<a href="http://www.uniprot.org/citations/12681493" target="\_blank">12681493</a>).

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:P06241}. Nucleus {ECO:0000250|UniProtKB:P06241}. Cell membrane. Perikaryon {ECO:0000250|UniProtKB:Q62844}. Note=Present and active in lipid rafts (PubMed:14645715). Palmitoylation is crucial for proper trafficking (By similarity). {ECO:0000250|UniProtKB:P06241, ECO:0000269|PubMed:14645715}

**Tissue Location**

Isoform 1 is highly expressed in the brain, isoform 2 is expressed in cells of hemopoietic lineages, especially T- lymphocytes.

**Mouse Fyn Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**Mouse Fyn Antibody (C-term) Blocking Peptide - Images****Mouse Fyn Antibody (C-term) Blocking Peptide - Background**

Implicated in the control of cell growth. Plays a role in the regulation of intracellular calcium levels, with isoform 2 showing the greater ability to mobilize cytoplasmic calcium in comparison to isoform 1. Required in brain development and mature brain function with important roles in the regulation of axon growth, axon guidance, and neurite extension. Blocks axon outgrowth and attraction induced by NTN1 by phosphorylating its receptor DDC.

**Mouse Fyn Antibody (C-term) Blocking Peptide - References**

Garcia-Roman, J., et al. Biochem. Biophys. Res. Commun. 401(2):262-267(2010)Cannons, J.L., et al. J. Immunol. 185(5):2819-2827(2010)Zheng, Y., et al. Mol. Cell. Biol. 30(17):4280-4292(2010)Ohnishi, H., et al. J. Neurosci. 30(31):10472-10483(2010)Luo, J., et al. Reprod. Fertil. Dev. 22(6):966-976(2010)