

Mouse Lyn Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14624a**Specification**

Mouse Lyn Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P25911](#)**Mouse Lyn Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 17096**Other Names**

Tyrosine-protein kinase Lyn, V-yes-1 Yamaguchi sarcoma viral related oncogene homolog, p53Lyn, p56Lyn, Lyn

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 Lyn Antibody (N-term) Blocking Peptide - Protein Information**Name** Lyn**Function**

Non-receptor tyrosine-protein kinase that transmits signals from cell surface receptors and plays an important role in the regulation of innate and adaptive immune responses, hematopoiesis, responses to growth factors and cytokines, integrin signaling, but also responses to DNA damage and genotoxic agents. Functions primarily as negative regulator, but can also function as activator, depending on the context. Required for the initiation of the B-cell response, but also for its down-regulation and termination. Plays an important role in the regulation of B-cell differentiation, proliferation, survival and apoptosis, and is important for immune self-tolerance. Acts downstream of several immune receptors, including the B-cell receptor, CD79A, CD79B, CD5, CD19, CD22, FCER1, FCGR2, FCGR1A, TLR2 and TLR4. Plays a role in the inflammatory response to bacterial lipopolysaccharide. Mediates the responses to cytokines and growth factors in hematopoietic progenitors, platelets, erythrocytes, and in mature myeloid cells, such as dendritic cells, neutrophils and eosinophils. Acts downstream of EPOR, KIT, MPL, the chemokine receptor CXCR4, as well as the receptors for IL3, IL5 and CSF2. Plays an important role in integrin signaling. Regulates cell proliferation, survival, differentiation, migration, adhesion, degranulation, and cytokine release. Involved in the regulation of endothelial activation, neutrophil adhesion and transendothelial migration (By similarity). Down-regulates signaling pathways by phosphorylation of immunoreceptor tyrosine-based inhibitory motifs (ITIM), that then serve as binding sites for

phosphatases, such as PTPN6/SHP-1, PTPN11/SHP-2 and INPP5D/SHIP-1, that modulate signaling by dephosphorylation of kinases and their substrates. Phosphorylates LIME1 in response to CD22 activation. Phosphorylates BTK, CBL, CD5, CD19, CD72, CD79A, CD79B, CSF2RB, DOK1, HCLS1, LILRB3/PIR-B, MS4A2/FCER1B, SYK and TEC. Promotes phosphorylation of SIRPA, PTPN6/SHP-1, PTPN11/SHP-2 and INPP5D/SHIP-1. Required for rapid phosphorylation of FER in response to FCER1 activation. Mediates KIT phosphorylation. Acts as an effector of EPOR (erythropoietin receptor) in controlling KIT expression and may play a role in erythroid differentiation during the switch between proliferation and maturation. Depending on the context, activates or inhibits several signaling cascades. Regulates phosphatidylinositol 3- kinase activity and AKT1 activation. Regulates activation of the MAP kinase signaling cascade, including activation of MAP2K1/MEK1, MAPK1/ERK2, MAPK3/ERK1, MAPK8/JNK1 and MAPK9/JNK2. Mediates activation of STAT5A and/or STAT5B. Phosphorylates LPXN on 'Tyr-72'. Kinase activity facilitates TLR4-TLR6 heterodimerization and signal initiation. Phosphorylates SCIMP on 'Tyr-96'; this enhances binding of SCIMP to TLR4, promoting the phosphorylation of TLR4, and a selective cytokine response to lipopolysaccharide in macrophages (PubMed:28098138). Phosphorylates CLNK (PubMed:12681493). Phosphorylates BCAR1/CAS and NEDD9/HEF1 (By similarity).

Cellular Location

Cell membrane. Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Membrane {ECO:0000250|UniProtKB:P07948}; Lipid-anchor {ECO:0000250|UniProtKB:P07948}.

Note=Accumulates in the nucleus by inhibition of Crm1-mediated nuclear export. Nuclear accumulation is increased by inhibition of its kinase activity. The trafficking from the Golgi apparatus to the cell membrane occurs in a kinase domain- dependent but kinase activity independent manner and is mediated by exocytic vesicular transport (By similarity).

Tissue Location

Detected in bone marrow-derived monocytes and macrophages (at protein level) (PubMed:28098138, PubMed:2017160) Expressed predominantly in B-lymphoid and myeloid cells (PubMed:2017160).

Mouse Lyn Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Lyn Antibody (N-term) Blocking Peptide - Images

Mouse Lyn Antibody (N-term) Blocking Peptide - Background

Lyn acts as a positive regulator of cell movement while negatively regulating adhesion to stromal cells by inhibiting the ICAM-1-binding activity of beta-2 integrins. Acts as the mediator that relays suppressing signals from the chemokine receptor CXCR4 to beta-2 integrin LFA-1 in hematopoietic precursors. Involved in induction of stress-activated protein kinase (SAPK), but not ERK or p38 MAPK, in response to genotoxic agents. Induces SAPK by a MKK7-and MEKK1-dependent mechanism. The LYN -> MEKK1 -> MKK7 -> SAPK pathway is functional in the induction of apoptosis by genotoxic agents (By similarity). Down regulates expression of stem cell growth factor receptor (KIT). Acts as an effector of EpoR (erythropoietin receptor) in controlling KIT expression and may play a central role in erythroid differentiation during the switch between proliferation and maturation.

Mouse Lyn Antibody (N-term) Blocking Peptide - References

Scapini, P., et al. J. Exp. Med. 207(8):1757-1773(2010)Gutierrez, T., et al. Eur. J. Immunol.

40(7):1897-1905(2010)Charles, N., et al. Nat. Med. 16(6):701-707(2010)Keck, S., et al. J. Immunol. 184(10):5809-5818(2010)Alvarez-Errico, D., et al. J. Immunol. 184(9):5000-5008(2010)