

**Goat Anti-LYN Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1640a

**Specification**

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**Goat Anti-LYN Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P07948</a>
Other Accession	<a href="#">NP_002341</a> , <a href="#">4067</a>
Reactivity	<b>Human</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Concentration	<b>100ug/200ul</b>
Isotype	<b>IgG</b>
Calculated MW	<b>58574</b>

**Goat Anti-LYN Antibody - Additional Information**

**Gene ID** 4067

**Other Names**

Tyrosine-protein kinase Lyn, 2.7.10.2, Lck/Yes-related novel protein tyrosine kinase, V-yes-1 Yamaguchi sarcoma viral related oncogene homolog, p53Lyn, p56Lyn, LYN, JTK8

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-LYN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-LYN Antibody - Protein Information**

**Name** LYN

**Synonyms** JTK8

**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 (PubMed:<a href="http://www.uniprot.org/citations/36932076" target="\_blank">36932076</a>). 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. Mediates phosphorylation of the BCR-ABL fusion protein. 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- 107'; this enhances binding of SCIMP to TLR4, promoting the phosphorylation of TLR4, and a selective cytokine response to lipopolysaccharide in macrophages (By similarity). Phosphorylates CLNK (By similarity). Phosphorylates BCAR1/CAS and NEDD9/HEF1 (PubMed:<a href="http://www.uniprot.org/citations/9020138" target="\_blank">9020138</a>).

#### **Cellular Location**

Cell membrane. Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Membrane; Lipid- anchor. 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 plasma membrane occurs in a kinase domain-dependent but kinase activity independent manner and is mediated by exocytic vesicular transport. Detected on plasma membrane lipid rafts

#### **Tissue Location**

Detected in monocytes (at protein level). Detected in placenta, and in fetal brain, lung, liver and kidney. Widely expressed in a variety of organs, tissues, and cell types such as epidermoid, hematopoietic, and neuronal cells. Expressed in primary neuroblastoma tumors.

#### **Goat Anti-LYN Antibody - 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](#)

### Goat Anti-LYN Antibody - Images



AF1640a (0.1 µg/ml) staining of U937 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-LYN Antibody - References

- The sphingolipid-rich rafts of ALK+ lymphomas downregulate the Lyn-Cbp/PAG signalosome. Yerly S, et al. *Eur J Haematol*, 2010 Aug. PMID 20561033.
- The role of height-associated loci identified in genome wide association studies in the determination of pediatric stature. Zhao J, et al. *BMC Med Genet*, 2010 Jun 14. PMID 20546612.
- Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614.
- LYN is a mediator of epithelial-mesenchymal transition and a target of dasatinib in breast cancer. Choi YL, et al. *Cancer Res*, 2010 Mar 15. PMID 20215510.
- An important role of the SRC family kinase Lyn in stimulating platelet granule secretion. Li Z, et al. *J Biol Chem*, 2010 Apr 23. PMID 20189992.