

## **Anti-Lyn Picoband Antibody**

Catalog # ABO12946

# **Specification**

## **Anti-Lyn Picoband Antibody - Product Information**

Application WB, IHC-P
Primary Accession P07948
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Tyrosine-protein kinase Lyn(LYN) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-Lyn Picoband 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

## Calculated MW 58574 MW KDa

## **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Mouse, Rat, By Heat<br/>br> Western blot, 0.1-0.5 μg/ml, Human, <br/>br> <br/>

## **Subcellular Localization**

Cell membrane. Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Membrane; Lipid-anchor. 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 Specificity**

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. .

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.





## **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Lyn (470-501aa DELYDIMKMCWKEKAEERPTFDYLQSVLDDFY), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

**Purification** 

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-Lyn Picoband 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**

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## **Anti-Lyn Picoband Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-Lyn Picoband Antibody - Images**

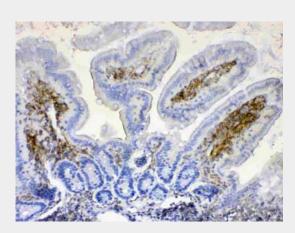
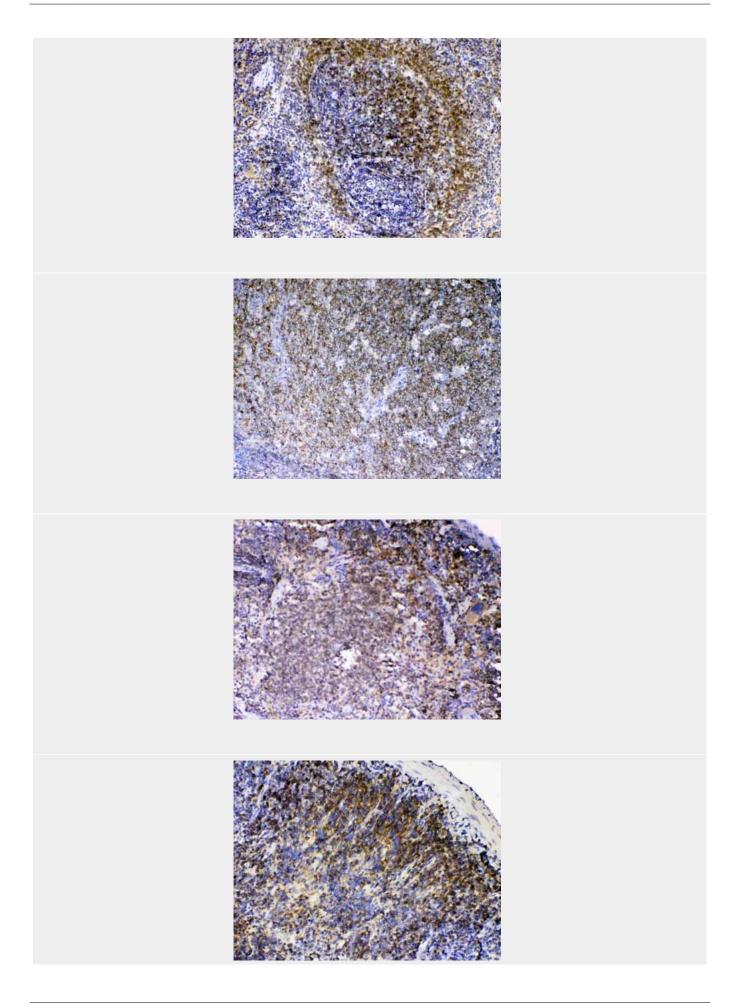


Figure 5. IHC analysis of Lyn using anti-Lyn antibody (ABO12946).









# **Anti-Lyn Picoband Antibody - Background**

Tyrosine-protein kinase Lyn is a protein that in humans is encoded in humans by the LYN gene. It is mapped to 8q12.1. Lyn is a member of the Src family of protein tyrosine kinases. In various hematopoietic cells, Lyn has emerged as a key enzyme involved in the regulation of cell activation. Lyn has been described to have an inhibitory role in myeloid lineage proliferation.