Datasheet for ABIN1944840

anti-LYN antibody (AA 1-210)

1 Image | 4 Publications

Go to Product page

Overview

Quantity:	400 µL
Target:	LYN
Binding Specificity:	AA 1-210
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LYN antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 1-210 amino acids from human.
Clone:	1174CT22-3-1-1
Isotype:	IgG1 kappa
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	LYN
Alternative Name:	LYN (LYN Products)
Background:	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. 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, PTK2B/PYK2, 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'.
Molecular Weight:	58574
Gene ID:	4067
UniProt:	P07948
Pathways:	Fc-epsilon Receptor Signaling Pathway, Hormone Transport, Response to Growth Hormone Stimulus, Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated

Target Details

	Immunity, Positive Regulation of Immune Effector Process, CXCR4-mediated Signaling Events, Thromboxane A2 Receptor Signaling, Integrin Complex, BCR Signaling

Application Details

Application Notes:	WB: 1:1000
Restrictions:	For Research Use only

Handling

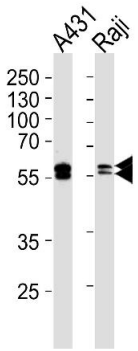
Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Publications

Product cited in:	Rider, Raben, Miller, Jelsema: "The cDNAs encoding two forms of the LYN protein tyrosine kinase are expressed in rat mast cells and human myeloid cells." in: **Gene**, Vol. 138, Issue 1-2, pp. 219-22, (1994) (PubMed). Roifman, Ke: "CD19 is a substrate of the antigen receptor-associated protein tyrosine kinase in human B cells." in: **Biochemical and biophysical research communications**, Vol. 194, Issue 1, pp. 222-5, (1993) (PubMed). Bielke, Ziemieki, Kappos, Miescher: "Expression of the B cell-associated tyrosine kinase gene Lyn in primary neuroblastoma tumours and its modulation during the differentiation of neuroblastoma cell lines." in: **Biochemical and biophysical research communications**, Vol. 186, Issue 3, pp. 1403-9, (1992) (PubMed). Partanen, Mäkelä, Alitalo, Lehväslaiho, Alitalo: "Putative tyrosine kinases expressed in K-562 human leukemia cells." in: **Proceedings of the National Academy of Sciences of the United**

States of America, Vol. 87, Issue 22, pp. 8913-7, (1991) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of lysates from A431, Raji cell line (from left to right), using LYN Antibody (ABIN1944840 and ABIN2843643). (ABIN1944840 and ABIN2843643) was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.