

Datasheet for ABIN3093649

LYN Protein (AA 2-512) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	LYN
Protein Characteristics:	AA 2-512
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LYN protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: GCIKSKGKDS LSDDGVDLKT QPVRNTERTI YVRDPTSNKQ QRPVPESQLL PGQRFQTKDP
EEQGDIVVAL YPYDGIHPDD LSFKKGEKMK VLEEHGEWWK AKSLLTKKEG FIPSNYVAKL
NTLETEEWFF KDITRKDAER QLLAPGNSAG AFLIRESETL KGSFSLSVRD FDPVHGDVIK
HYKIRSLDNG GYYISPRITF PCISDMIKHY QKQADGLCRR LEKACISPKP QKPWDKDAWE
IPRESIKLVK RLGAGQFGEV WMGYNNSTK VAVKTLKPGT MSVQAFLEEA NLMKTLQHDK
LVRLYAVVTR EEPYIITEY MAKGSLLDFL KSDEGGKVLL PKLIDFSAQI AEGMAYIERK
NYIHRDLRAA NVLVSESLMC KIADFGLARV IEDNEYTARE GAKFPIKWTA PEAINFGCFT
IKSDVWSFGI LLYEIVTYGK IPYPGRTNAD VMTALSQGYR MPRVENCPE LYDIMKMCWK
EKAEERPTFD YLQSVLDDFY TATEGYQQQ P

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human LYN Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
 - State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	LYN
Alternative Name:	LYN (LYN Products)
Background:	<p>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'. Kinase activity facilitates TLR4-TLR6 heterodimerization and signal initiation.</p> <p>{ECO:0000269 PubMed:10574931, ECO:0000269 PubMed:10748115, ECO:0000269 PubMed:10891478, ECO:0000269 PubMed:11435302, ECO:0000269 PubMed:11517336, ECO:0000269 PubMed:11825908,</p>

Target Details

ECO:0000269|PubMed:14726379, ECO:0000269|PubMed:15795233,
ECO:0000269|PubMed:16467205, ECO:0000269|PubMed:17640867,
ECO:0000269|PubMed:17977829, ECO:0000269|PubMed:18056483,
ECO:0000269|PubMed:18070987, ECO:0000269|PubMed:18235045,
ECO:0000269|PubMed:18577747, ECO:0000269|PubMed:18802065,
ECO:0000269|PubMed:19290919, ECO:0000269|PubMed:20028775,
ECO:0000269|PubMed:20037584, ECO:0000269|PubMed:7687428}.

Molecular Weight: 59.4 kDa Including tag.

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 Immunity](#), [Positive Regulation of Immune Effector Process](#), [CXCR4-mediated Signaling Events](#), [Thromboxane A2 Receptor Signaling](#), [Integrin Complex](#), [BCR Signaling](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process