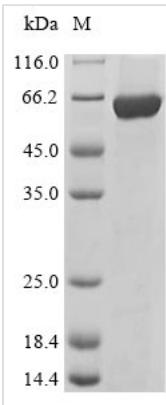




Recombinant Mouse Tyrosine-protein kinase Lyn (Lyn)

Product Code	CSB-EP013259MO
Relevance	<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. 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>
Abbreviation	Recombinant Mouse Lyn protein
Storage	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.</p>



Uniprot No.	P25911
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	GCIKSKRKDNLNDDEVDSKTQPVRNTDRTIYVRDPTSNKQQRVPVEFHLLPGQ RFQTKDP EEGDIVVALYPYDGIHPDDL SFKKGEKMKVLEEHGEWWKAKSLS SKREGFIPSNYVAKVNTLETEEWWFFKDITRKDAERQLLAPGNSAGAFLIRESET LKGSFSLSVRDYDPMHGDVIKHYKIRSLDNGGGYISPRITFPCISDMIKHYQKQS DGLCRRLEKACISPKPQKPWDKDAWEIPRESIKLVKKLGAGQFGEVWMGYYN NSTKVAVKTLKPGTMSVQAFLEENLMTKLQHDKLVRLYAVVTKEEPIYITEFM AKGSLLDFLKSDEGGKVLLPKLIDFSAQIAEGMAYIERKNYIHRDLRAANVLVSE SLMCKIADFGLARVIEDNEYTAREGAKFPIKWTAPEAINFGCFTIKSDVWSFGIL LYEIVTYGKIPYPGRTNADVMSALSQGYRMPRMENCPDELYDIMKMCWKEKA EERPTFDYQLQSVLDDFYTATEGQYQQQP
Research Area	Signal Transduction
Source	E.coli
Target Names	Lyn
Protein Names	V-yes-1 Yamaguchi sarcoma viral related oncogene homolog p53Lyn p56Lyn
Expression Region	2-512aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	63.7 kDa
Protein Length	Full Length of Mature Protein
Image	 <p>(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.</p>

Description

Discover the potential of the Recombinant Mouse Lyn, a premium-quality recombinant protein designed for applications in the field of Signal Transduction. This protein mirrors the Tyrosine-protein kinase Lyn, also known as the V-yes-1 Yamaguchi sarcoma viral related oncogene homolog, from the Mouse species. Manufactured via an E.coli expression system, this full-length mature protein



guarantees high fidelity to its natural counterpart, thus ensuring reliable research outcomes.

Spanning from the 2nd to the 512th amino acid sequence, the Recombinant Mouse Lyn replicates the complete functional spectrum of the native protein. The inclusion of an N-terminal 10xHis-tag and a C-terminal Myc-tag aids in efficient purification and detection procedures. This protein product maintains a purity exceeding 85% as confirmed by SDS-PAGE, thus delivering you a high-quality product. Depending on your experimental setup and storage capabilities, the Recombinant Mouse Lyn is available in either liquid or lyophilized powder form.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.