

Goat Anti-SLP76 / LCP2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2002a**Specification**

Goat Anti-SLP76 / LCP2 Antibody - Product Information

Application	WB, E
Primary Accession	Q13094
Other Accession	NP_005556 , 3937
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	60188

Goat Anti-SLP76 / LCP2 Antibody - Additional Information**Gene ID** 3937**Other Names**

Lymphocyte cytosolic protein 2, SH2 domain-containing leukocyte protein of 76 kDa, SLP-76 tyrosine phosphoprotein, SLP76, LCP2

Dilution

WB~~1:1000

E~~N/A

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-SLP76 / LCP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SLP76 / LCP2 Antibody - Protein Information**Name** LCP2**Function**

Adapter protein primarily involved in signaling pathways within T-cells, as well as other immune

cells such as platelets, mast cells, and natural killer (NK) cells (PubMed:11313406, PubMed:33159816). Plays a crucial role for transducing signal from the T-cell receptor (TCR) after antigen recognition leading to T-cell activation. Mechanistically, once phosphorylated by the kinase ZAP70, mediates interactions with the guanine-nucleotide exchange factor VAV1, the adapter protein NCK and the kinase ITK (PubMed:8673706, PubMed:8702662). In turn, stimulates the activation of PKC-theta/PRKCQ and NF-kappa-B transcriptional activity in response to CD3 and CD28 costimulation (PubMed:11313406). Also plays an essential role in AGER- induced signaling pathways including p38 MAPK and ERK1/2 activation leading to cytokine release and pro-inflammatory responses (PubMed:33436632).

Cellular Location

Cytoplasm.

Tissue Location

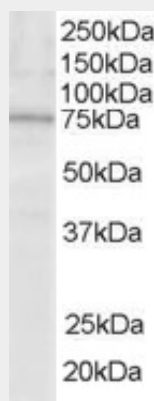
Highly expressed in spleen, thymus and peripheral blood leukocytes. Highly expressed also in T-cell and monocytic cell lines, expressed at lower level in B-cell lines. Not detected in fibroblast or neuroblastoma cell lines

Goat Anti-SLP76 / LCP2 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-SLP76 / LCP2 Antibody - Images



AF2002a staining (0.5 µg/ml) of Jurkat lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SLP76 / LCP2 Antibody - Background

SLP-76 was originally identified as a substrate of the ZAP-70 protein tyrosine kinase following T cell receptor (TCR) ligation in the leukemic T cell line Jurkat. The SLP-76 locus has been localized to human chromosome 5q33 and the gene structure has been partially characterized in mice. The human and murine cDNAs both encode 533 amino acid proteins that are 72% identical and comprised of three modular domains. The NH₂-terminus contains an acidic region that includes a PEST domain and several tyrosine residues which are phosphorylated following TCR ligation. SLP-76 also contains a central proline-rich domain and a COOH-terminal SH2 domain. A number of additional proteins have been identified that associate with SLP-76 both constitutively and inducibly following receptor ligation, supporting the notion that SLP-76 functions as an adaptor or scaffold protein. Studies using SLP-76 deficient T cell lines or mice have provided strong evidence that SLP-76 plays a positive role in promoting T cell development and activation as well as mast cell and platelet function.

Goat Anti-SLP76 / LCP2 Antibody - References

Cooperative interactions at the SLP-76 complex are critical for actin polymerization. Barda-Saad M, et al. EMBO J, 2010 Jul 21. PMID 20562827.

SH2 domain containing leukocyte phosphoprotein of 76-kDa (SLP-76) feedback regulation of ZAP-70 microclustering. Liu H, et al. Proc Natl Acad Sci U S A, 2010 Jun 1. PMID 20534575.

In vivo significance of ITK-SLP-76 interaction in cytokine production. Grasis JA, et al. Mol Cell Biol, 2010 Jul. PMID 20457812.

The Bcr-Abl kinase regulates the actin cytoskeleton via a GADS/Slp-76/Nck1 adaptor protein pathway. Preisinger C, et al. Cell Signal, 2010 May. PMID 20079431.

Src homology 2-domain containing leukocyte-specific phosphoprotein of 76 kDa is mandatory for TCR-mediated inside-out signaling, but dispensable for CXCR4-mediated LFA-1 activation, adhesion, and migration of T cells. Horn J, et al. J Immunol, 2009 Nov 1. PMID 19812192.