

## Monoclonal Antibody to LSP1 / WP34 - Purified

<b>Alternate names:</b>	47 kDa actin-binding protein, 52 kDa phosphoprotein, Lymphocyte-specific antigen WP34, Lymphocyte-specific protein 1, Protein pp52
<b>Catalog No.:</b>	AM33059PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Background:</b>	<p>Leukocyte-specific protein 1 (LSP1), is a calcium-dependent F-actin binding protein and a major downstream substrate of p38 mitogen-activated protein kinase as well as protein kinase C. LSP1 plays an important role in leukocyte chemotaxis. During T cell maturation, expression of LSP1 is low on immature CD4+CD8+ double positive thymocytes, but is highly expressed on mature single positive CD4 and CD8 T cells.</p> <p><b>Distribution:</b> Localized to the cytoplasmic leaflet of the plasma membrane.</p> <p><b>Function:</b> Contributes to lymphocyte and neutrophil activation and chemotaxis, as well as lymphocyte differentiation.</p> <p><b>Regulation:</b> Phosphorylated by casein kinase II, protein kinase C and MAPKAPK2.</p> <p><b>Modification:</b> Phosphorylation.</p> <p><b>Interaction:</b> F-actin, Casein kinase II, PKC, MAPKAPK2.</p>
<b>Uniprot ID:</b>	<a href="#">P33241</a>
<b>NCBI:</b>	<a href="#">NP_001013271.1</a>
<b>GeneID:</b>	<a href="#">4046</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	5E3
<b>Immunogen:</b>	HUT 102 cell lysates.
<b>Format:</b>	<p><b>State:</b> Liquid purified IgG fraction</p> <p><b>Purification:</b> Affinity Chromatography</p> <p><b>Buffer System:</b> PBS, pH 7.2</p> <p><b>Preservatives:</b> 0.09% Sodium Azide</p>
<b>Applications:</b>	<p><b>Western blot:</b> Each lot of this antibody is quality control tested.</p> <p><b>Recommended Dilutions:</b> Use 5 µg per 5 ml antibody dilution buffer for each mini-gel.</p> <p><b>Immunofluorescence</b> (Reported).</p> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Specificity:</b>	This 5E3 Monoclonal antibody recognizes LSP1. Other species not tested.

**Storage:**

Store undiluted at 2-8°C.

**DO NOT FREEZE!**

Shelf life: one year from despatch.

**General Readings:**

1. Jongstra-Bilen J, Young AJ, Chong R, Jongstra J. Human and mouse LSP1 genes code for highly conserved phosphoproteins. *J Immunol.* 1990 Feb 1;144(3):1104-10. PubMed PMID: 2295815.
2. Kadiyala RK, McIntyre BW, Krensky AM. Molecular cloning and characterization of WP34, a phosphorylated human lymphocyte differentiation and activation antigen. *Eur J Immunol.* 1990 Nov;20(11):2417-23. PubMed PMID: 2174784.
3. Wu Y, Zhan L, Ai Y, Hannigan M, Gaestel M, Huang CK, et al. MAPKAPK2-mediated LSP1 phosphorylation and FMLP-induced neutrophil polarization. *Biochem Biophys Res Commun.* 2007 Jun 22;358(1):170-5. Epub 2007 Apr 24. PubMed PMID: 17481585.
4. Palker TJ, Fong AM, Scearce RM, Patel DD, Haynes BF. Developmental regulation of lymphocyte-specific protein 1 (LSP1) expression in thymus during human T-cell maturation. *Hybridoma.* 1998 Dec;17(6):497-507. PubMed PMID: 9890705.

**Pictures:**

Cell extracts from THP-1 cells were western blotted with anti-LSP1 Antibody Cat.-No AM33059PU-N (Clone 5E3).

