

# LSP1 (16): sc-135976

## BACKGROUND

pp52 (human) or LSP1 (murine) is a hematopoietic-expressed gene that encodes an F-Actin-binding, leukocyte-specific (including B and T lymphocytes, granulocytes and macrophages), phosphoprotein. However, mRNA splice variants that do not encode the lympho-specific protein are expressed from this gene in nonlymphoid cell lines as well (myocytes, stromal cells and fibroblasts), suggesting pp52 has a divergent role in signal transduction. The pp52 (LSP1) locus maps to human chromosome 11p15.5, which is implicated in tumor-related chromosomal translocations found in chronic lymphocytic leukemia. The pp52 promoter contains key elements that control transcriptional activity including an initiator specifying the unique 5' terminus of pp52 mRNA, tandem pairs of Ets and SP1 motifs, and a single C/EBP motif. LSP1 binds the cytoskeleton and has been implicated in affecting cytoskeletal remodeling in a variety of leukocyte functions, including cell motility and chemotaxis.

## REFERENCES

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3. Omori, S.A., et al. 1997. Differential interaction of nuclear factors with the leukocyte-specific pp52 promoter in B and T cells. *J. Immunol.* 159: 1800-1808.
4. Pulford, K., et al. 1999. Lymphocyte-specific protein 1: a specific marker of human leucocytes. *Immunology* 96: 262-271.
5. Miyoshi, E.K., et al. 2001. Aberrant expression and localization of the cytoskeleton-binding pp52 (LSP1) protein in hairy cell leukemia. *Leuk. Res.* 25: 57-67.
6. Malone, C.S., et al. 2001. Leukocyte-specific expression of the pp52 (LSP1) promoter is controlled by the *cis*-acting pp52 silencer and anti-silencer elements. *Gene* 268: 9-16.
7. Marafioti, T., et al. 2003. Leukocyte-specific protein (LSP1) in malignant lymphoma and Hodgkin's disease. *Br. J. Haematol.* 120: 671-678.
8. Marafioti, T., et al. 2004. Leukocyte-specific phosphoprotein-1 and PU.1: two useful markers for distinguishing T-cell-rich B-cell lymphoma from lymphocyte-predominant Hodgkin's disease. *Haematologica* 89: 957-964.

## CHROMOSOMAL LOCATION

Genetic locus: LSP1 (human) mapping to 11p15.5.

## SOURCE

LSP1 (16) is a mouse monoclonal antibody raised against amino acids 75-215 of LSP1 of human origin.

## PRODUCT

Each vial contains 50 µg IgG<sub>1</sub> in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

## APPLICATIONS

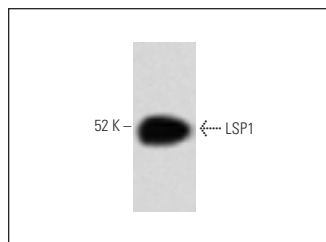
LSP1 (16) is recommended for detection of LSP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LSP1 siRNA (h): sc-42899, LSP1 shRNA Plasmid (h): sc-42899-SH and LSP1 shRNA (h) Lentiviral Particles: sc-42899-V.

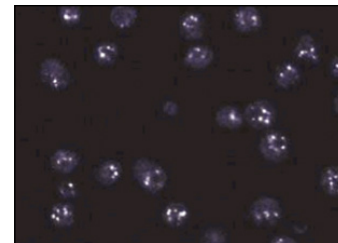
Molecular Weight of LSP1: 52 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HuT 78 whole cell lysate: sc-2208 or Ramos cell lysate: sc-2216.

## DATA



LSP1 (16): sc-135976. Western blot analysis of LSP1 expression in A-431 whole cell lysate.



LSP1 (16): sc-135976. Immunofluorescence staining of Jurkat cells showing nuclear localization.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.