

LSP1 (E-20): sc-17939

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), 52 kDa phosphoprotein. However, mRNA splice variants that do not encode the 52 kDa lympho-specific protein are expressed from this gene in nonlymphoid cell lines (myocytes, stromal cells and fibroblasts) as well, suggesting that 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

- Gimble, J.M., et al. 1993. Alternatively spliced pp52 mRNA in nonlymphoid stromal cells. *J. Immunol.* 150: 115-121.
- May, W., et al. 1993. Human lymphocyte-specific pp52 gene is a member of a highly conserved dispersed family. *Genomics* 15: 515-520.
- 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.
- Pulford K., et al. 1999. Lymphocyte-specific protein 1: a specific marker of human leucocytes. *Immunology* 96: 262-271.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

LSP1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LSP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17939 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

LSP1 (E-20) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

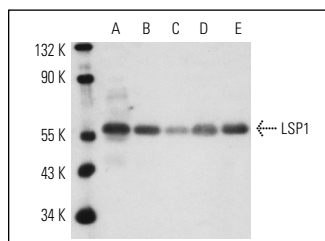
LSP1 (E-20) is also recommended for detection of LSP1 in additional species, including bovine.

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.

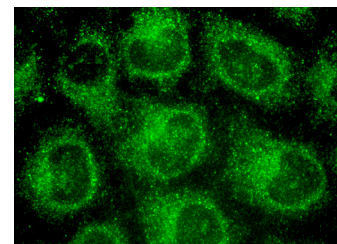
Molecular Weight of LSP1: 52 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, Ramos cell lysate: sc-2216 or HuT 78 whole cell lysate: sc-2208.

DATA



LSP1 (E-20): sc-17939. Western blot analysis of LSP1 expression in IB4 (A), Raji (B), MOLT-4 (C), Ramos (D) and HuT 78 (E) whole cell lysates.



LSP1 (E-20): sc-17939. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Weinkauf, M., et al. 2009. 2-D PAGE-based comparison of proteasome inhibitor bortezomib in sensitive and resistant mantle cell lymphoma. *Electrophoresis* 30: 974-986.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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Try **LSP1 (TDP153): sc-53363** or **LSP1 (16): sc-135976**, our highly recommended monoclonal alternatives to LSP1 (E-20).