

LSP1 (B-6): sc-271137

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

1. Gimble, J.M., et al. 1993. Alternatively spliced pp52 mRNA in nonlymphoid stromal cells. *J. Immunol.* 150: 115-121.
2. May, W., et al. 1993. Human lymphocyte-specific pp52 gene is a member of a highly conserved dispersed family. *Genomics* 15: 515-520.
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.

CHROMOSOMAL LOCATION

Genetic locus: Lsp1 (mouse) mapping to 7 F5.

SOURCE

LSP1 (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 206-243 within an internal region of LSP-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LSP1 (B-6) is available conjugated to agarose (sc-271137 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271137 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271137 PE), fluorescein (sc-271137 FITC), Alexa Fluor® 488 (sc-271137 AF488), Alexa Fluor® 546 (sc-271137 AF546), Alexa Fluor® 594 (sc-271137 AF594) or Alexa Fluor® 647 (sc-271137 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271137 AF680) or Alexa Fluor® 790 (sc-271137 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271137 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

LSP1 (B-6) is recommended for detection of LSP1 of mouse and rat origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LSP1 siRNA (m): sc-42900, LSP1 shRNA Plasmid (m): sc-42900-SH and LSP1 shRNA (m) Lentiviral Particles: sc-42900-V.

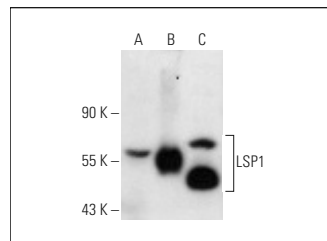
Molecular Weight of LSP1: 52 kDa.

Positive Controls: TK-1 whole cell lysate: sc-364798, IB4 whole cell lysate: sc-364780 or LSP1 (m): 293T Lysate: sc-127107.

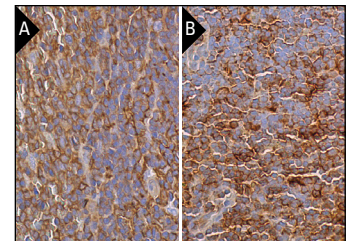
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGλ BP-HRP: sc-516132 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



LSP1 (B-6): sc-271137. Western blot analysis of LSP1 expression in non-transfected 293T: sc-117752 (A), mouse LSP1 transfected 293T: sc-127107 (B) and TK-1 (C) whole cell lysates.



LSP1 (B-6): sc-271137. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat spleen tissue showing membrane and cytoplasmic staining of cells in white pulp and cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse lymph node tissue showing membrane and cytoplasmic staining of cells in germinal center and cells in non-germinal center (B).

STORAGE

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

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