

LSP1 (M-20): sc-17941

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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: LSP1 (human) mapping to 11p15.5; Lsp1 (mouse) mapping to 7 F5.

SOURCE

LSP1 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSP1 of mouse 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-17941 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.

APPLICATIONS

LSP1 (M-20) is recommended for detection of LSP1 of mouse and rat 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).

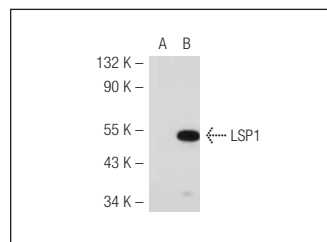
Molecular Weight of LSP1: 52 kDa.

Positive Controls: TK-1 whole cell lysate or IB4 whole cell lysate.

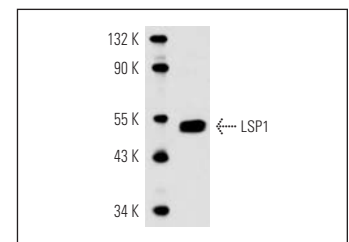
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LSP1 (M-20): sc-17941. Western blot analysis of LSP1 expression in non-transfected: sc-117752 (A) and mouse LSP1 transfected: sc-127107 (B) 293T whole cell lysates.



LSP1 (M-20): sc-17941. Western blot analysis of LSP1 expression in TK-1 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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