# LSP1 (m): 293T Lysate: sc-127107



The Power to Question

# **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**

- Gimble, J.M., Dorheim, M.A., Youkhana, K., Hudson, J., Nead, M., Gilly, M., Wood, W.J.J., Hermanson, G.G., Kuehl, M., Wall, R., et al. 1993. Alternatively spliced pp52 mRNA in nonlymphoid stromal cells. J. Immunol. 150: 115-121.
- May, W., Korenberg, J.R., Chen, X.N., Lunsford, L., Wood, W.J., Thompson, A., Wall, R. and Denny, C.T. 1993. Human lymphocyte-specific pp52 gene is a member of a highly conserved dispersed family. Genomics 15: 515-520.
- Omori, S.A., Smale, S., O'Shea-Greenfield, A. and Wall, R. 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., Stewart, P.L., Kincade, P.W., Lee, M.B., Thompson, A.A. and Wall, R. 2001. Aberrant expression and localization of the cytoskeletonbinding pp52 (LSP1) protein in hairy cell leukemia. Leuk. Res. 25: 57-67.
- Malone, C.S., Omori, S.A., Gangadharan, D. and Wall, R. 2001. Leukocytespecific 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 (mouse) mapping to 7 F5.

# **PRODUCT**

LSP1 (m): 293T Lysate represents a lysate of mouse LSP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

# **APPLICATIONS**

LSP1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive LSP1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

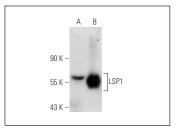
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LSP1 (B-6): sc-271137 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse LSP1 expression in LSP1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\lambda$  BP-HRP: sc-516132 or m-lgG $\lambda$  BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



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

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **RESEARCH USE**

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

# **PROTOCOLS**

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

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