

SP140 (E-14): sc-109035

BACKGROUND

SP140 (SP140 nuclear body protein), also known as LYSP100, LYSP100-A or LYSP100-B, is an 867 amino acid cytoplasmic and nuclear protein that is highly expressed in spleen and peripheral blood leukocytes. SP140 is a component of the nuclear body that may be involved in trafficking between the nucleus and the cytoplasm. SP140 is induced by interferons and contains a bromo domain, a HSR domain, a PHD-type zinc finger and a SAND domain. It is thought that SP140 may participate in the pathogenesis of acute promyelocytic leukemia and viral infection. SP140 is expressed as three isoforms that are produced by alternative splicing and are designated isoform LYSp100-A, isoform LYSp100-B and isoform SP140.

REFERENCES

- Dent, A.L., et al. 1996. LYSP100-associated nuclear domains (LANDs): description of a new class of subnuclear structures and their relationship to PML nuclear bodies. *Blood* 88: 1423-1426.
- Bloch, D.B., et al. 1996. Identification and characterization of a leukocyte-specific component of the nuclear body. *J. Biol. Chem.* 271: 29198-29204.
- Bloch, D.B., et al. 1999. Structural and functional heterogeneity of nuclear bodies. *Mol. Cell. Biol.* 19: 4423-4430.
- Bloch, D.B., et al. 2000. Sp110 localizes to the PML-Sp100 nuclear body and may function as a nuclear hormone receptor transcriptional coactivator. *Mol. Cell. Biol.* 20: 6138-6146.
- Regad, T. and Chelbi-Alix, M.K. 2001. Role and fate of PML nuclear bodies in response to interferon and viral infections. *Oncogene* 20: 7274-7286.
- Madani, N., et al. 2002. Implication of the lymphocyte-specific nuclear body protein SP140 in an innate response to human immunodeficiency virus type 1. *J. Virol.* 76: 11133-11138.
- Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608602. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Zhou, J.R., et al. 2007. Identification of tumor-associated proteins in laryngeal squamous cell carcinoma by proteomics. *Zhonghua Er Bi Yan Hou Tou Jing Wai Ke Za Zhi* 42: 934-938.
- Granito, A., et al. 2010. PML nuclear body component SP140 is a novel autoantigen in primary biliary cirrhosis. *Am. J. Gastroenterol.* 105: 125-131.

CHROMOSOMAL LOCATION

Genetic locus: SP140 (human) mapping to 2q37.1.

SOURCE

SP140 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SP140 of human origin.

STORAGE

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

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-109035 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SP140 (E-14) is recommended for detection of SP140 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).

Suitable for use as control antibody for SP140 siRNA (h): sc-94369, SP140 shRNA Plasmid (h): sc-94369-SH and SP140 shRNA (h) Lentiviral Particles: sc-94369-V.

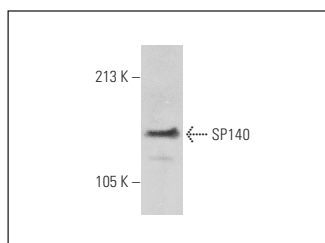
Molecular Weight of SP140: 140 kDa.

Positive Controls: Daudi cell lysate: sc-2415.

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



SP140 (E-14): sc-109035. Western blot analysis of SP140 expression in Daudi 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.