

## SP140 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12872C

### Specification

# SP140 Antibody (Center) - Product Information

IF, IHC-P, WB,E <u>Q13342</u> <u>NP\_009168.4</u> Human Rabbit Polyclonal Rabbit IgG 98223 272-301

# SP140 Antibody (Center) - Additional Information

Gene ID 11262

**Other Names** Nuclear body protein SP140 {ECO:0000312|HGNC:HGNC:17133}, Lymphoid-restricted homolog of Sp100, LYSp100, Nuclear autoantigen Sp-140, Speckled 140 kDa, SP140 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=17133" target="\_blank">HGNC:17133</a>)

### Target/Specificity

This SP140 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 272-301 amino acids from the Central region of human SP140.

**Dilution** IF~~1:10~50 IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

SP140 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# SP140 Antibody (Center) - Protein Information



Name SP140 (HGNC:17133)

**Function** Component of the nuclear body, also known as nuclear domain 10, PML oncogenic domain, and KR body (PubMed:<u>8910577</u>). May be involved in the pathogenesis of acute promyelocytic leukemia and viral infection (PubMed:<u>8910577</u>). May play a role in chromatin-mediated regulation of gene expression although it does not bind to histone H3 tails (PubMed:<u>24267382</u>).

#### **Cellular Location**

Nucleus. Nucleus, PML body Cytoplasm. Note=Localized to nuclear structures termed LANDS, for LYSp100-associated nuclear domains. LANDS are globular, electron-dense structures most often found in the nucleoplasm, but also found at the nuclear membrane and in the cytoplasm, suggesting that these structures may traffic between the cytoplasm and the nucleus (PubMed:8695863). Also colocalizes with PML in a subset of PML nuclear bodies (PubMed:8910577)

#### **Tissue Location**

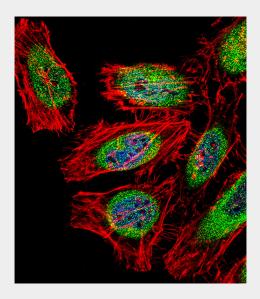
High levels in spleen and peripheral blood leukocytes, much lower levels in tonsils, thymus, prostate, ovary, small intestine, and colon (PubMed:8695863, PubMed:8910577). Very low levels in heart, brain, placenta, lung, liver, skeletal muscle, kidney, and pancreas (PubMed:8910577). Not detected in brain, liver and muscle (PubMed:8695863).

# SP140 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

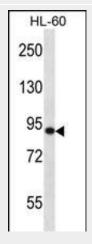
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### SP140 Antibody (Center) - Images

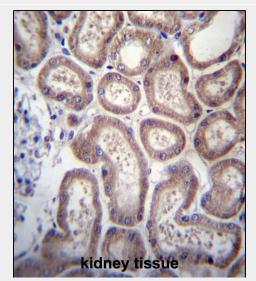




Fluorescent confocal image of Hela cell stained with SP140 Antibody (Center)(Cat#AP12872c).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SP140 primary antibody (1:25, 1 h at  $37^{\circ}$ C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min). SP140 immunoreactivity is localized to Cytoplasm and Nucleus significantly.



SP140 Antibody (Center) (Cat. #AP12872c) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the SP140 antibody detected the SP140 protein (arrow).



SP140 Antibody (Center) (Cat. #AP12872c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SP140 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# SP140 Antibody (Center) - Background

Component of the nuclear body, also known as nuclear domain 10, PML oncogenic domain, and KR body. May be involved in the pathogenesis of acute promyelocytic leukemia and viral infection.

# SP140 Antibody (Center) - References

Slager, S.L., et al. Cancer Epidemiol. Biomarkers Prev. 19(4):1098-1102(2010) Di Bernardo, M.C., et al. Nat. Genet. 40(10):1204-1210(2008) Madani, N., et al. J. Virol. 76(21):11133-11138(2002)



Bloch, D.B., et al. J. Biol. Chem. 271(46):29198-29204(1996) Dent, A.L., et al. Blood 88(4):1423-1426(1996)