

## Anti-SP-100 antibody



**Description** Rabbit polyclonal to SP-100.

Model STJ95739

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IHC, WB

**Immunogen** Synthesized peptide derived from human SP-100

**Immunogen Region** 250-330 aa, Internal

**Gene ID** <u>6672</u>

Gene Symbol SP100

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000

**Specificity** SP-100 Polyclonal Antibody detects endogenous levels of SP-100 protein.

**Tissue Specificity** Widely expressed. Sp100-B is expressed only in spleen, tonsil, thymus,

mature B-cell line and some T-cell line, but not in brain, liver, muscle or non-

lymphoid cell lines.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Nuclear autoantigen Sp-100 Nuclear dot-associated Sp100 protein Speckled

100 kDa

Molecular Weight 100 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:11206OMIM:604585</u>

Alternative Names Nuclear autoantigen Sp-100 Nuclear dot-associated Sp100 protein Speckled

100 kDa

**Function** Together with PML, this tumor suppressor is a major constituent of the PML

bodies, a subnuclear organelle involved in a large number of physiological processes including cell growth, differentiation and apoptosis. Functions as a

transcriptional coactivator of ETS1 and ETS2 according to

PubMed:11909962. Under certain conditions, it may also act as a corepressor of ETS1 preventing its binding to DNA according to PubMed:15247905. Through the regulation of ETS1 it may play a role in angiogenesis, controlling endothelial cell motility and invasion. Through interaction with the MRN complex it may be involved in the regulation of telomeres lengthening. May also regulate TP53-mediated transcription and through CASP8AP2, regulate FAS-mediated apoptosis. Also plays a role in infection by viruses, including human cytomegalovirus and Epstein-Barr virus, through mechanisms that may

involve chromatin and/or transcriptional regulation.

**Sequence and Domain Family** The HSR domain is important for the nuclear body targeting as well as for the

dimerization. Contains one Pro-Xaa-Val-Xaa-Leu (PxVxL) motif, which is required for interaction with chromoshadow domains. This motif requires additional residues -7, -6, +4 and +5 of the central Val which contact the

chromoshadow domain.

Cellular Localization Nucleus. Nucleus, PML body. Cytoplasm. Differences in the subnuclear

localization of the different isoforms seem to exist and may also be cell cycle-

and interferon-dependent. Accumulates in the cytoplasm upon FAS activation.. Isoform Sp100-C: Nucleus. Forms a reticulate or track-like nuclear pattern with denser concentrations at the nuclear lamina and surrounding the nucleoli, a pattern reminiscent of heterochromatin-rich

regions according to PubMed:11313457.

Post-translational Sumoylated. Sumoylation depends on a functional nuclear localization signal

but is not necessary for nuclear import or nuclear body targeting.; Sumoylated. Sumoylated with SUMO1. Sumoylation depends on a functional nuclear localization signal but is not necessary for nuclear import or nuclear body

targeting. Sumoylation may stabilize the interaction with CBX5.

**Modifications**