

# Anti-SP100 Antibody

**Catalog # ABO11595** 

## **Specification**

# **Anti-SP100 Antibody - Product Information**

Application WB
Primary Accession P23497
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Nuclear autoantigen Sp-100(SP100) detection. Tested with WB in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

#### **Anti-SP100 Antibody - Additional Information**

**Gene ID** 6672

#### **Other Names**

Nuclear autoantigen Sp-100, Nuclear dot-associated Sp100 protein, Speckled 100 kDa, SP100

# **Calculated MW**

100417 MW KDa

#### **Application Details**

Western blot, 0.1-0.5 μg/ml, Human<br>

#### **Subcellular 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.

#### **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.

#### **Protein Name**

Nuclear autoantigen Sp-100

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human SP100(664-677aa YTLKVLMENKFLPE).





Purification Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 2 HMG box DNA-binding domains.

## **Anti-SP100 Antibody - Protein Information**

#### Name SP100

#### **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:<a href="http://www.uniprot.org/citations/11909962" target="\_blank">11909962</a>. Under certain conditions, it may also act as a corepressor of ETS1 preventing its binding to DNA according to PubMed:<a href="http://www.uniprot.org/citations/15247905" target="\_blank">15247905</a>. 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.

#### **Cellular Location**

Nucleus. Nucleus, PML body. Nucleus, nuclear body. Cytoplasm Note=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

#### **Tissue Location**

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

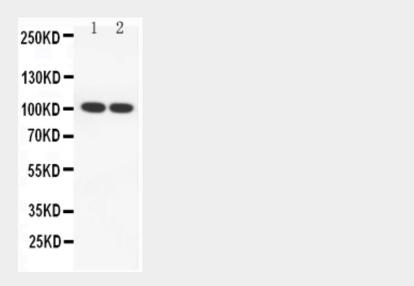
### **Anti-SP100 Antibody - Protocols**

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

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



# • <u>Cell Culture</u> Anti-SP100 Antibody - Images



Anti-SP100 antibody, ABO11595, All Western blottingAll lanes: Anti-SP100(ABO11595) at 0.5ug/mlLane 1: U937 Whole Cell Lysate at 40ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 100KDObserved bind size: 100KD

#### Anti-SP100 Antibody - Background

SP100, also known as LYSP100B, INCLUDED, encodes a subnuclear organelle and major component of the PML(promyelocytic leukemia)-SP100 nuclear bodies. SP100 and PML are covalently modified by the SUMO-1 modifier, which is considered crucial to nuclear body interactions. The encoded protein binds heterochromatin proteins and is though to play a role in tumorigenesis, immunity, and gene regulation. It has been found that HP1 expression is enhanced when SP100 synthesis is induced by interferon. SP100 can function as a transcriptional coactivator of ETS1 and ETS2, and under certain conditions, it may also act as a corepressor of ETS1 preventing its binding to DNA.