Product datasheet

Anti-SP100 antibody ab43151

Overview

Product name: Anti-SP100 antibody
Description: Rabbit polyclonal to SP100
Host species: Rabbit
Tested applications: Suitable for: IHC-P, WB, ChIP
Species reactivity: Reacts with: Human
Immunogen: Synthetic peptide conjugated to KLH derived from within residues 250 - 350 of Human SP100. Read Abcam's proprietary immunogen policy (Peptide available as ab44037.)
Positive control: This antibody gave a positive signal in the following human lysates: HeLa Whole Cell; Ramos Whole Cell; Hodgkin's Lymphoma Whole Cell - tumor tissue; Lymphoma Whole Cell - tumor tissue; MCF7 Whole Cell and ZR-75-1 Nuclear.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: Preservative: 0.02% Sodium Azide
Constituents: 1% BSA, PBS, pH 7.4
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab43151 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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**Application notes**

IHC-P: 1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol (see Abreview).

WB: Use at a concentration of 1 µg/ml. Detects a band of approximately 97 kDa (predicted molecular weight: 100 kDa).

Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

**Target**

**Function**

May play a role in the control of gene expression.

**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.

**Sequence similarities**

Contains 2 HMG box DNA-binding domains.
Contains 1 HSR domain.
Contains 1 SAND domain.

**Domain**

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.

**Post-translational modifications**

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

**Cellular localization**

Nucleus > PML body. Found in the nuclear body, also known as nuclear domain 10 (ND10), PML oncogenic domain (POD), nuclear dots (ND) and KR body. The nuclear body is a nucleoplasmic structure of punctate shape, which varies in size and number. Induction by interferon and may be cell cycle stages modulate the subnuclear localization of the isoforms.

**Images**

*Images*
**Western blot - SP100 antibody (ab43151)**

**All lanes**: Anti-SP100 antibody (ab43151) at 1 µg/ml

**Lane 1**: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2**: Ramos (Human Burkitt's lymphoma cell line) Whole Cell Lysate

**Lane 3**: Human lymphatic tumor tissue lysate (Hodgkin's lymphoma) - total protein (ab29923)

**Lane 4**: Human lymphatic tumor tissue lysate (lymphoma) - total protein (ab30185)

**Lane 5**: MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 6**: ZR751 nuclear extract lysate (ab14916)

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size**: 100 kDa

**Observed band size**: 97 kDa

**Additional bands at**: 32 kDa. We are unsure as to the identity of these extra bands.
ab43151 staining SP100 in human lymphoma tissue sections by IHC-P (formaldehyde-fixed paraffin-embedded sections). Tissue samples were fixed with formaldehyde and blocked with peroxidase for 5 minutes followed by a protein block for 10 minutes at 20°C. Antigen retrieval was by heat mediation in target retrieval solution. Samples were incubated with primary antibody 1/2000 for 45 minutes at 20°C. An HRP-conjugated Goat polyclonal to rabbit IgG was used as secondary antibody.

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