


Product datasheet

Anti-SA1 antibody ab4455

★★★★★ 1 Abreviews 4 References 4 Images

Overview

Product name	Anti-SA1 antibody
Description	Goat polyclonal to SA1
Host species	Goat
Tested applications	Suitable for: ICC/IF, IP, WB, ICC
Species reactivity	Reacts with: Mouse, Human, Xenopus laevis Predicted to work with: Rhesus monkey 
Immunogen	Synthetic peptide within Human SA1 aa 1-100. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. NP_005853.2 (GeneID 10274). Database link: Q8WVM7
Positive control	WB: HeLa nuclear extract. HeLa, MCF-7, HEK-293T, TCMK-1 and NIH/3T3 whole cell lysate. ICC: HeLa cells. IP: SA1 IP in HeLa whole cell lysate.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab4455 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
IP		Use at 2-10 µg/mg of lysate.
WB		1/1000 - 1/10000. Detects a band of approximately 144 kDa (predicted molecular weight: 144 kDa).
ICC		1/500 - 1/2000.

Target

Function

Component of cohesin complex, a complex required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis.

Sequence similarities

Belongs to the SCC3 family.
Contains 1 SCD (stromalin conservative) domain.

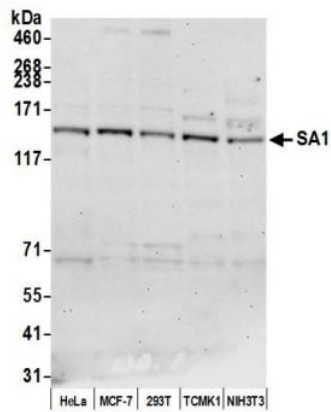
Post-translational modifications

Phosphorylated by PLK. The large dissociation of cohesin from chromosome arms during prophase is partly due to its phosphorylation.

Cellular localization

Nucleus. Chromosome. Chromosome > centromere. Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. At anaphase, the RAD21 subunit of cohesin is cleaved, leading to the dissociation of the complex from chromosomes, allowing chromosome separation.

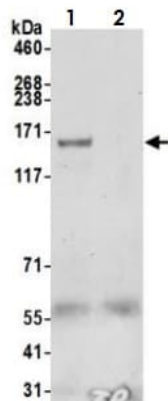
Images



Western blot - Anti-SA1 antibody (ab4455)

Whole cell lysate (15 μ g) from HeLa, MCF-7, HEK-293T, TCMK-1, and NIH/3T3 cells prepared using NETN lysis buffer.

ab4455 used for WB at 0.1 μ g/ml.



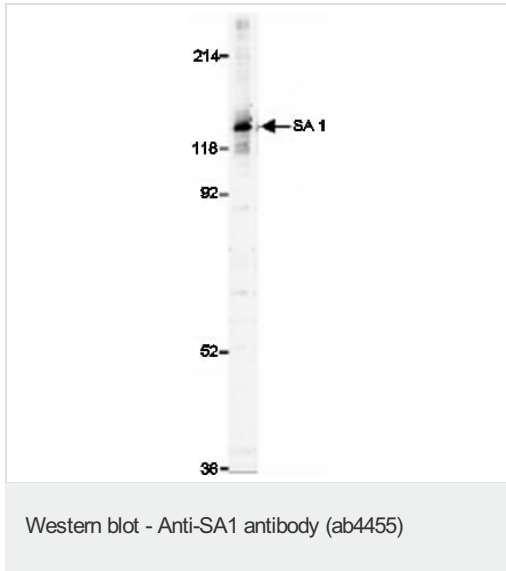
Immunoprecipitation - Anti-SA1 antibody (ab4455)

Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer.

Lane 1: ab4455 used for IP at 6 μ g per reaction.

Lane 2: Control IgG.

For blotting immunoprecipitated SA1, ab4455 was used at 0.1 μ g/ml.



Nuclear Extract from HeLa cells ($\sim 5 \times 10^5$ cells).

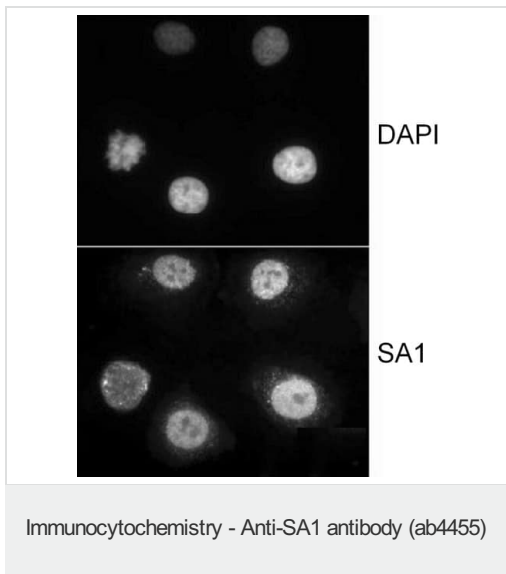
ab4455 at 0.5 $\mu\text{g/ml}$.

Detection: ECL with 15 second exposure.

Nuclear Extract from HeLa cells ($\sim 5 \times 10^5$ cells).

ab4455 at 0.5 $\mu\text{g/ml}$.

Detection: ECL with 15 second exposure.



Immunocytochemistry analysis of HeLa cells (extracted for 5 minutes at 4°C in 0.5% Triton in CSK buffer) labelling SA1 with ab4455 at 1 $\mu\text{g/ml}$.

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