


## Product datasheet

# Anti-SA1 antibody ab4457

[17 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Anti-SA1 antibody
<b>Description</b>	Goat polyclonal to SA1
<b>Host species</b>	Goat
<b>Tested applications</b>	<b>Suitable for:</b> ChIP, WB, ICC, IP, ChIP/Chip
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human, Xenopus laevis <b>Predicted to work with:</b> Rabbit, Horse, Guinea pig, Cow, Dog, Pig, Chimpanzee, Ferret, Rhesus monkey 
<b>Immunogen</b>	Synthetic peptide corresponding to Human SA1 aa 1150-1200.
<b>General notes</b>	<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&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab4457 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
ChIP		Use at an assay dependent concentration. PubMed: 18550811
WB		1/2000 - 1/10000. Detects a band of approximately 144 kDa (predicted molecular weight: 144 kDa).
ICC		1/500 - 1/2000.
IP		Use at 2-10 µg/mg of lysate.
ChIP/Chip		Use at an assay dependent concentration. PubMed: 18550811

## Target

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### 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

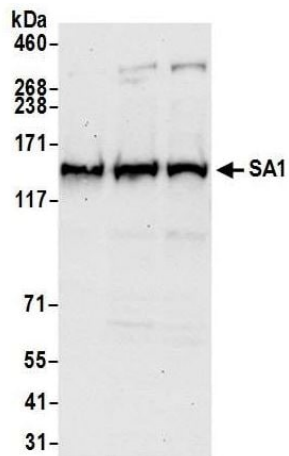
Phosphorylated by PLK. The large dissociation of cohesin from chromosome arms during prophase is partly due to its phosphorylation.

### 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

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Western blot - Anti-SA1 antibody (ab4457)

**All lanes :** Anti-SA1 antibody (ab4457) at 1/10000 dilution

**Lane 1 :** HeLa Whole cell lysate

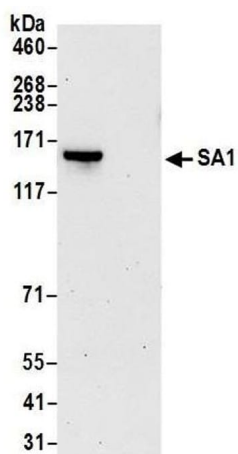
**Lane 2 :** 293T Whole cell lysate

**Lane 3 :** Jurkat Whole cell lysate

Lysates/proteins at 50 µg per lane.

**Predicted band size:** 144 kDa

Detection: Chemiluminescence with an exposure time of 30 seconds.

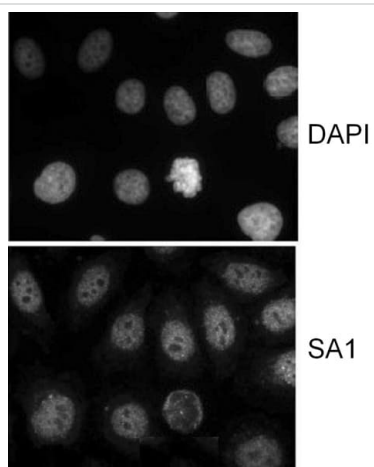


Immunoprecipitation - Anti-SA1 antibody (ab4457)

SA1 was immunoprecipitated from HeLa whole cell lysate with 6 µg/mg lysate ab4457. Western blot was performed from the immunoprecipitate using ab4457 at 0.1 µg/ml dilution.

Lane 1: ab4457 IP in HeLa whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.



Immunocytochemistry - Anti-SA1 antibody (ab4457)

Immunocytochemistry analysis of HeLa cells (extracted for 5 minutes at 4°C in 0.5% Triton in CSK buffer) labelling SA1 with ab4457 at 1µg/ml.

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