abcam

Product datasheet

Anti-SA2 antibody [EPR10994(B)] - BSA and Azide free ab249176



Recombinant

RabMAb

2 Images

Overview

Product name Anti-SA2 antibody [EPR10994(B)] - BSA and Azide free

Description Rabbit monoclonal [EPR10994(B)] to SA2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa and HCT116 cell lysates.

General notes ab249176 is the carrier-free version of **ab155081**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the

need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

1

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR10994(B)

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab249176 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 141 kDa.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IP.

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

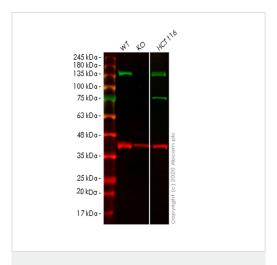
Phosphorylated by PLK. The large dissociation of cohesin from chromosome arms during

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. In germ cells, cohesin complex dissociates from chromatin at prophase I, and may be replaced by a meiosis-specific cohesin complex.

Images



Western blot - Anti-SA2 antibody [EPR10994(B)] - BSA and Azide free (ab249176)

All lanes : Anti-SA2 antibody [EPR10994(B)] (<u>ab155081</u>) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: STAG2 knockout HeLa cell lysate

Lane 3: HCT116 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

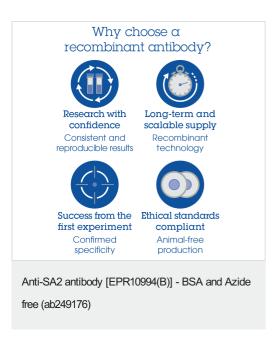
All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 141 kDa **Observed band size:** 141 kDa

This data was developed using the same antibody clone in a different buffer formulation (ab155081).

Lanes 1-3: Merged signal (red and green). Green - <u>ab155081</u> observed at 141 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

<u>ab155081</u> Anti-SA2 antibody [EPR10994(B)] was shown to specifically react with SA2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <u>ab265461</u> (knockout cell lysate <u>ab257707</u>) was used. Wild-type and SA2 knockout samples were subjected to SDS-PAGE. <u>ab155081</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



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