# abcam

## Product datasheet

# Anti-SA2 antibody [EPR17865] - C-terminal ab201451



ייבע RabMAb

★★★★★ 2 Abreviews 1 References 画像数 13

#### 製品の概要

製品名 Anti-SA2 antibody [EPR17865] - C-terminal

製品の詳細 Rabbit monoclonal [EPR17865] to SA2 - C-terminal

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa, HCT116, MCF-7, K562, C6, Raw264.7 and NIH3T3 cell lysates; Human fetal brain

and Mouse spleen lysates; IHC-P: Human breast carcinoma, human tonsil, mouse and rat spleen

tissue; IF: MCF-7 and K562 cells.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 EPR17865

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab201451の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/25000.
WB	**** <u>(2)</u>	1/1000. Detects a band of approximately 141 kDa (predicted molecular weight: 141 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/500.

#### ターゲット情報

機能 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.

**配列類似性** Belongs to the SCC3 family.

Contains 1 SCD (stromalin conservative) domain.

翻訳後修飾 Phosphorylated by PLK. The large dissociation of cohesin from chromosome arms during

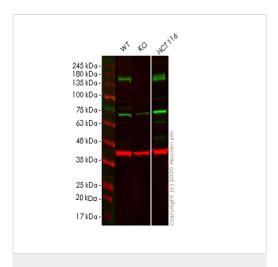
prophase is partly due to its phosphorylation.

細胞内局在 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.

#### 画像



Western blot - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

**All lanes :** Anti-SA2 antibody [EPR17865] - C-terminal (ab201451) at 1/1000 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.

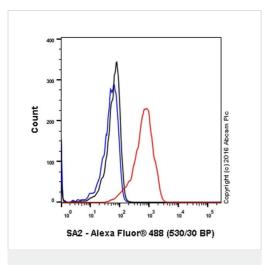
#### Secondary

**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

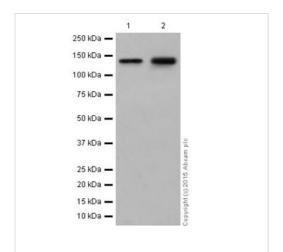
**Lanes 1-3:** Merged signal (red and green). Green - ab201451 observed at 141 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab201451 Anti-SA2 antibody [EPR17865] - C-terminal was shown to specifically react with SA2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab265461">ab265461</a> (knockout cell lysate <a href="mailto:ab257707">ab257707</a>) was used. Wild-type and SA2 knockout samples were subjected to SDS-PAGE. ab201451 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8201451</a> and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

Intracellular Flow Cytometry analysis of K562 (human chronic myelogenous leukemia) labelling SA2 with purified ab201451 at 1/25000 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Alexa Fluor<sup>®</sup> 488 goat antirabbit lgG (1/2000) was used as the secondary antibody. Black-lsotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

**All lanes :** Anti-SA2 antibody [EPR17865] - C-terminal (ab201451) at 1/10000 dilution

**Lane 1 :** MCF-7 (Human breast adenocarcinoma cell line) cell lysate

**Lane 2**: K562 (Human chronic myelogenous leukemia cells from bone marrow) cell lysate

Lysates/proteins at 10 µg per lane.

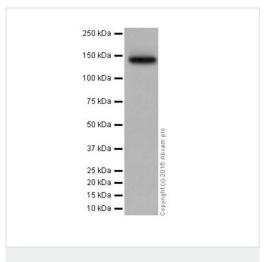
#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

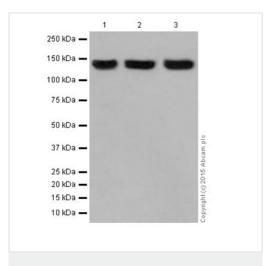
**Predicted band size:** 141 kDa **Observed band size:** 141 kDa

Exposure time: 3 minutes

5% NFDM/TBST: Blocking and diluting buffer.



Western blot - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)



Western blot - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

Anti-SA2 antibody [EPR17865] - C-terminal (ab201451) at 1/1000 dilution + Human fetal brain lysate at 10 µg

#### Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

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

Exposure time: 1 minute

5% NFDM/TBST: Blocking and diluting buffer.

**All lanes :** Anti-SA2 antibody [EPR17865] - C-terminal (ab201451) at 1/10000 dilution

Lane 1: C6 (Rat glial tumor cells) cell lysate

Lane 2: Raw264.7 (Mouse macrophage cells transformed with

Abelson murine leukemia virus) cell lysate

Lane 3: NIH 3T3 (Mouse embyro fibroblast cells) cell lysate

Lysates/proteins at 10 µg per lane.

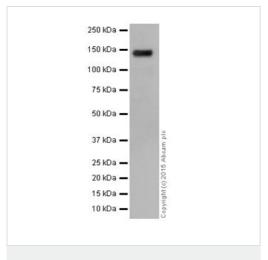
#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

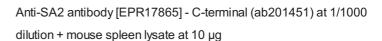
**Predicted band size:** 141 kDa **Observed band size:** 141 kDa

Exposure time: 3 minutes

5% NFDM/TBST: Blocking and diluting buffer.



Western blot - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)



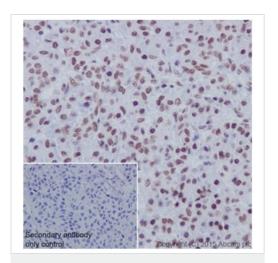
#### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

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

Exposure time: 1 minute

5% NFDM/TBST: Blocking and diluting buffer.



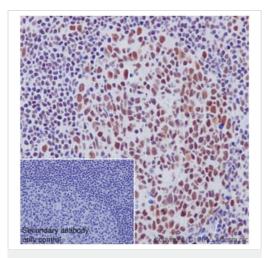
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling SA2 using ab201451 at 1/2000 dilution. A Goat Anti-Rabbit IgG H&L (HRP) (ab97051) was used as secondary at 1/500 dilution. Counterstain: Hematoxylin. Inset image: negative control obtained using PBS instead of ab201451, and secondary antibody only.

Note: Nuclear staining on Human breast carcinoma tissue was

observed.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SA2 antibody

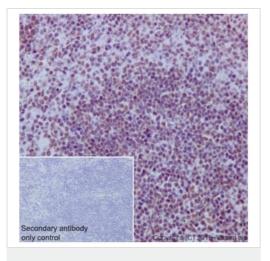
[EPR17865] - C-terminal (ab201451)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling SA2 using ab201451 at 1/2000 dilution. A Goat Anti-Rabbit lgG H&L (HRP) (ab97051) was used as secondary at 1/500 dilution. Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab201451, and secondary antibody.

Note: Nuclear staining on Human tonsil tissue was observed.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SA2 antibody

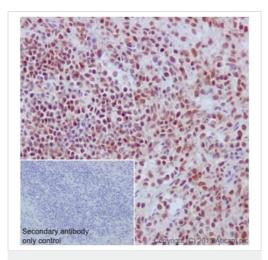
[EPR17865] - C-terminal (ab201451)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling SA2 using ab201451 at 1/2000 dilution. A Goat Anti-Rabbit IgG H&L (HRP) (ab97051) was used as secondary at 1/500 dilution. Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab201451, and secondary antibody.

Note: Nuclear staining on mouse spleen tissue was observed.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SA2 antibody

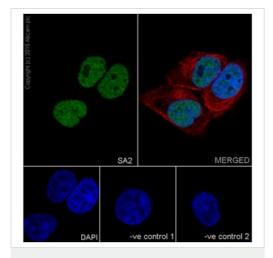
[EPR17865] - C-terminal (ab201451)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling SA2 using ab201451 at 1/2000 dilution. A Goat Anti-Rabbit lgG H&L (HRP) (ab97051) was used as secondary at 1/500 dilution. Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab201451, and secondary antibody.

Note: Nuclear staining on rat spleen tissue was observed.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

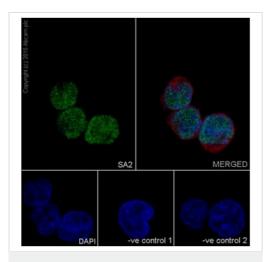
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling SA2 with ab201451 at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green).

Confocal image showing nuclear staining on MCF7 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with <a href="mailto:ab7291">ab7291</a> (anti-Tubulin mouse mAb) at 1/1000 dilution and <a href="mailto:ab150120">ab150120</a> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

ab201451 at 1/500 dilution followed by <u>ab150120</u>
 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
 <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-SA2 antibody [EPR17865] - C-terminal (ab201451)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling SA2 with ab201451 at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green).

Confocal image showing nuclear staining on K562 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with <a href="mailto:ab7291">ab7291</a> (anti-Tubulin mouse mAb) at 1/1000 dilution and <a href="mailto:ab150120">ab150120</a> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

ab201451 at 1/500 dilution followed by <u>ab150120</u>
 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
 <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- · We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors