

Product datasheet

Anti-SmarcAL1 antibody [EPR23912-44] ab259972

Recombinant RabMAb

5 Images

Overview

Product name	Anti-SmarcAL1 antibody [EPR23912-44]
Description	Rabbit monoclonal [EPR23912-44] to SmarcAL1
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB Unsuitable for: ChIP, ICC, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human SmarcAL1 aa 1-100. The exact sequence is proprietary. Database link: Q9NZC9
Positive control	WB: HeLa, HEK-293T, NIH/3T3, C6 and PC-12 whole cell lysates. Flow Cyt: HeLa and NIH/3T3 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 .

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23912-44

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab259972** 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
Flow Cyt		1/50. Use at 1/500 for NIH/3T3.
WB		1/1000. Detects a band of approximately 105 kDa (predicted molecular weight: 106 kDa).

Application notes

Is unsuitable for ChIP, ICC, IHC-P or IP.

Target

Function

ATP-dependent annealing helicase that catalyzes the rewinding of the stably unwound DNA. Rewinds single-stranded DNA bubbles that are stably bound by replication protein A (RPA). Acts throughout the genome to reanneal stably unwound DNA, performing the opposite reaction of many enzymes, such as helicases and polymerases, that unwind DNA.

Tissue specificity

Ubiquitously expressed, with high levels in testis.

Involvement in disease

Defects in SMARCAL1 are a cause of Schimke immuno-osseous dysplasia (SIOD) [MIM:242900]. SIOD causes spondyloepiphyseal dysplasia, renal dysfunction and T-cell immunodeficiency. Approximately half of all patients also exhibit hyperthyroidism, while around half also exhibit episodal cerebral ischemia.

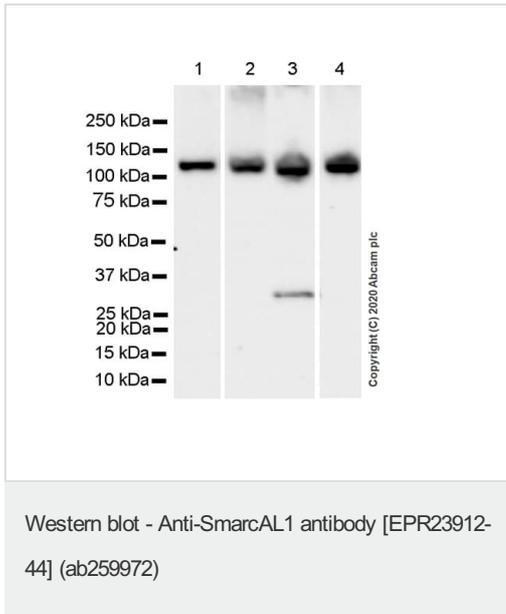
Sequence similarities

Belongs to the SNF2/RAD54 helicase family. SMARCAL1 subfamily.
Contains 2 HARP domains.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.

Cellular localization

Nucleus.

Images



All lanes : Anti-SmarckAL1 antibody [EPR23912-44] (ab259972) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

Lane 2 : HEK-293T (human embryonic kidney epithelial cell), whole cell lysate

Lane 3 : NIH/3T3 (mouse embryonic fibroblast), whole cell lysate

Lane 4 : PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 106 kDa

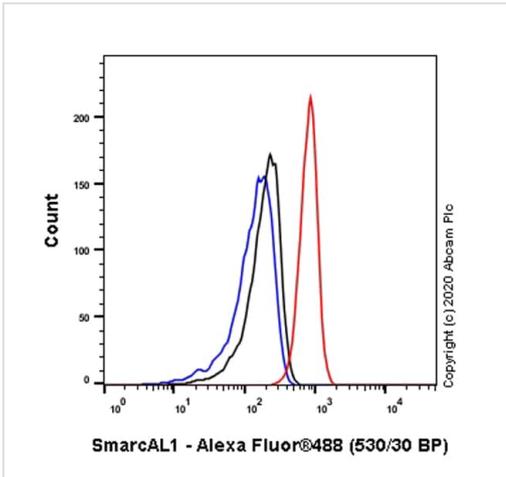
Observed band size: 105 kDa

[why is the actual band size different from the predicted?](#)

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

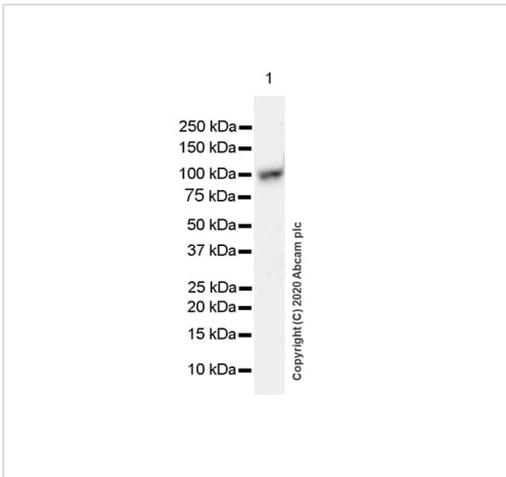
Lysates were made freshly and used in WB test immediately to minimize protein degradation.

Exposure times: Lane 1: 92 seconds; Lanes 2-3: 48 seconds; Lane 4: 26 seconds.



Flow Cytometry - Anti-SmarcAL1 antibody
[EPR23912-44] (ab259972)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cells labelling SmarcAL1 with ab259972 at 1/50 dilution (1 µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-SmarcAL1 antibody [EPR23912-44] (ab259972)

Anti-SmarcAL1 antibody [EPR23912-44] (ab259972) at 1/1000 dilution + C6 (rat glial tumor glial cell), whole cell lysate at 20 µg

Secondary

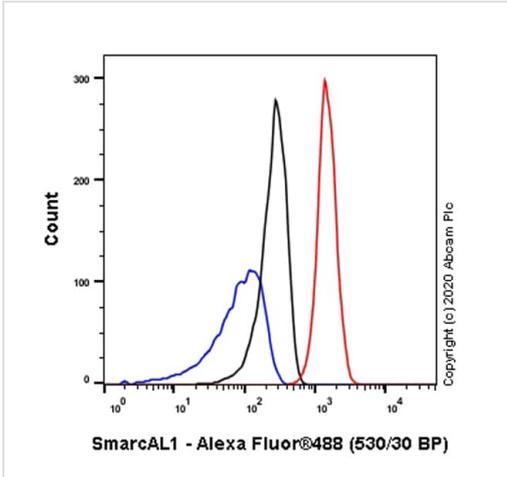
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 106 kDa

Observed band size: 105 kDa [why is the actual band size different from the predicted?](#)

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

Exposure time: 3 minutes.



Flow Cytometry - Anti-SmarcAL1 antibody
[EPR23912-44] (ab259972)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling SmarcAL1 with ab259972 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-SmarcAL1 antibody [EPR23912-44] (ab259972)

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

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