abcam

ab249483

Anti-S100A11 antibody [EPR11171(B)] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR11171(B)
Purification technique	Affinity purification
Concentration	0.955 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information S100A11

Function	Facilitates the differentiation and the cornification of keratinocytes.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249483 is the carrier-free version of ab169530.

Patented technology

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

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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 conjugation kits 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.

Compatibility

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	S100A11 also known as Calgizzarin or MLN 70 is a calcium-binding protein of the S100 family. It has a molecular mass of approximately 11 kDa. S100A11 can be found in a wide range of tissues including skin placenta and heart. It exhibits the ability to bind calcium ions through its EF-hand motifs which influences its activity and stability. These calcium-binding domains make S100A11 an important regulator of various intracellular processes by responding to changes in calcium ion concentrations.
Biological function summary	The functions of S100A11 include involvement in cell proliferation differentiation and migration. S100A11 often operates as part of a protein complex facilitating these cellular processes by interacting with other signaling molecules. It can shuttle between the cytoplasm and nucleus influencing gene expression and cellular dynamics. S100A11 has also shown involvement in smooth muscle contraction and skin barrier function regulation.
Pathways	The activity involving S100A11 spans multiple biological pathways including the calcium signaling pathway and the epithelial cell signaling pathway. Through these pathways S100A11 maintains critical cellular homeostasis and function. In the calcium signaling pathway it interacts with proteins like annexins and calcyclin to modulate cellular responses to calcium influx. In epithelial cell signaling it affects pathways related to cell adhesion and communication integrating signals that dictate cell behavior in response to external stimuli.
Associated diseases and disorders	S100A11 is relevant to cancer progression and inflammatory skin disorders. Its overexpression in various cancers such as bladder and prostate cancer suggests a role in tumor growth and metastasis. During the cancerous process S100A11 interacts with the p53 protein which impacts cell cycle regulation and survival. Additionally in inflammatory skin conditions like psoriasis S100A11 influences keratinocyte activity contributing to abnormal skin scaling and inflammation through interactions with filaggrin and keratin proteins.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

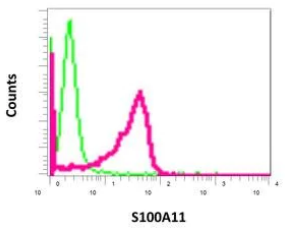
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

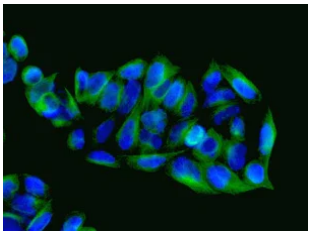
4 product images



Flow Cytometry (Intracellular) - Anti-S100A11 antibody [EPR11171(B)] - BSA and Azide free (ab249483)

S100A11 Flow Cytometry (Intracellular) staining using rabbit Anti-S100A11 antibody

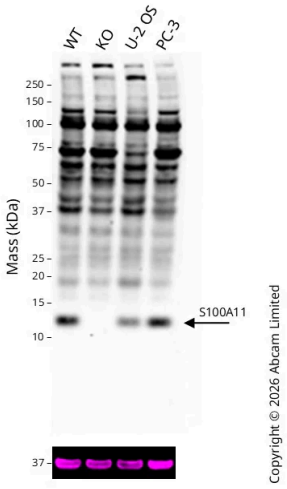
This data was developed using ab169530, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized HACAT cells labeling S100A11 with ab169530 at 1/10 dilution (red) compared to a rabbit IgG negative control (green).



Immunocytochemistry/ Immunofluorescence - Anti-S100A11 antibody [EPR11171(B)] - BSA and Azide free (ab249483)

S100A11 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-S100A11 antibody

This data was developed using ab169530, the same antibody clone in a different buffer formulation.Immunofluorescent analysis of BxPC-3 cells labeling S100A11 with ab169530 at 1/250 dilution. DAPI nuclear staining (blue).



Western blot - Anti-S100A11 antibody [EPR11171(B)] - BSA and Azide free (ab249483)

S100A11 Western blot staining using rabbit Anti-S100A11 antibody

This data was developed using ab169530, the same antibody clone in a different buffer formulation.

Western blot: Anti-S100A11 antibody [EPR11171(B)] ab169530 staining at 1/1000 dilution; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 12 kDa in Wild-type HeLa cell lysates with no signal observed at this size in S100A11 knockout HeLa cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3pc Milk in TBS-0.1 % Tween 20 (TBS-T) before incubation with primary antibodies overnight at 4 C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit HRP (H+L) and Goat anti-Mouse 680RD at 1/20,000 dilution. This blot was developed using a high-sensitivity ECL substrate, allowing for the detection of proteins in the mid-femtogram range.
All lanes:
Western blot - Anti-S100A11 antibody [EPR11171(B)] (ab169530) at 1/1000 dilution

Lane 1:

Wild-type HeLa at 20 µg

Lane 2:
Western blot - Human S100A11 knockout HeLa cell line (ab265085) at 20 µg

Lane 3:
U-2 OS at 20 µg

Lane 4:
PC-3 at 20 µg

Secondary

All lanes:
Goat anti-Rabbit HRP (H+L) & Goat anti-Mouse 680RD at 1/20000 dilution

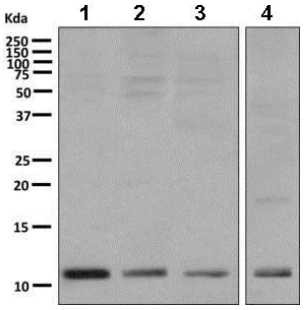
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 12 kDa

Observed band size: 12 kDa

Exposure time: 10s



Western blot - Anti-S100A11 antibody [EPR11171(B)] - BSA and Azide free (ab249483)

S100A11 Western blot staining using rabbit Anti-S100A11 antibody

This data was developed using ab169530, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-S100A11 antibody [EPR11171(B)] (ab169530) at 1/1000 dilution

Lane 1:
SKBR3 cell lysate at 10 µg

Lane 2:
BxPC-3 cell lysate at 10 µg

Lane 3:
PC-3 cell lysate at 10 µg

Lane 4:
HACAT cell lysate at 10 µg

Secondary

All lanes:
HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 11 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.