abcam

ab180593

Anti-S100A11 antibody [EPR11172]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11172
Purification technique	Affinity purification Protein A
Concentration	0.708 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/3000
Notes	**Unpurified format:** 1/50 - 1/100. For anitgen retireval heat up to 98°C, below boiling, and then let cool for 10-20 min.

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/400
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Rat
Dilution info	1/80 - 1/150
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	1/80 - 1/150
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information S100A11

Function	Facilitates the differentiation and the cornification of keratinocytes.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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

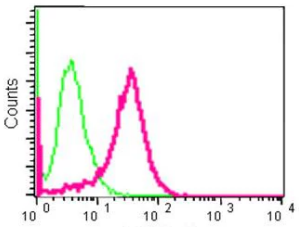
We do not recommend this combination. It is not covered by our product promise.

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.

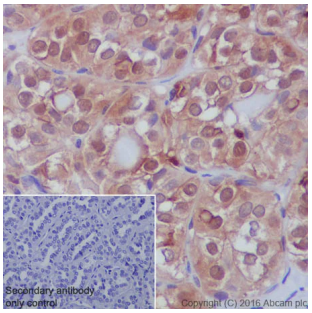
6 product images



Flow Cytometry (Intracellular) - Anti-S100A11 antibody [EPR11172] (ab180593)

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

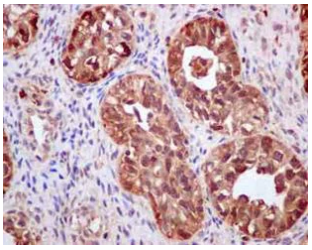
Intracellular Flow Cytometry analysis of PC-3 cells using ab180593 at a 1/150 dilution (red) or a Rabbit monoclonal IgG (negative) (green). Goat anti rabbit IgG (FITC) secondary used at a 1/150 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A11 antibody [EPR11172] (ab180593)

S100A11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-S100A11 antibody

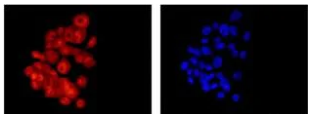
ab180593 staining S100A11 in human thyroid carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraffin and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/3000. A goat anti-rabbit IgG H&L (HRP) ab97051 was used as the secondary antibody at a dilution of 1/500.
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A11 antibody [EPR11172] (ab180593)

S100A11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-S100A11 antibody

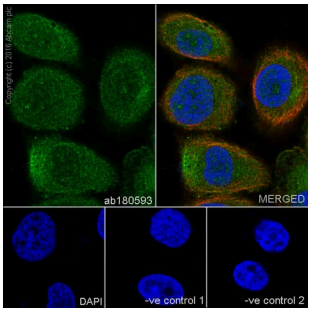
Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue labeling S100A11 with ab180593 at a 1/100 dilution. Prediluted ImmunoHistoprobe HRP Polymer for Rabbit IgG secondary used. Counterstained with Hematoxylin.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-S100A11 antibody [EPR11172] (ab180593)

S100A11 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-S100A11 antibody

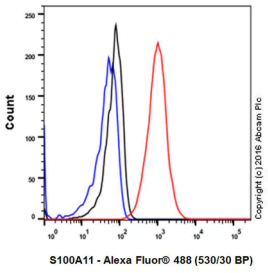
Immunofluorescence analysis of BxPC-3 cells (fixative 4% paraformaldehyde) labeling S100A11 with ab180593 at a 1/100 dilution (left image), and counterstained with Dapi (right image). Goat anti rabbit IgG (Dylight 555) secondary used at a 1/200 diution.



Immunocytochemistry/ Immunofluorescence - Anti-S100A11 antibody [EPR11172] (ab180593)

S100A11 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-S100A11 antibody

ab180593 staining S100A11 in PC-3 (human prostate adenocarcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/400. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. ab7291 (1/1000) and ab150120 (1/1000) were used as counterstains for primary antibody ab180593 and secondary antibody ab150077 respectively and DAPI was used as a nuclear counterstain.
Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (ab150120)
Negative control 2: Mouse primary antibody (ab7291) and anti-rabbit secondary antibody (ab150077)



Flow Cytometry (Intracellular) - Anti-S100A11 antibody [EPR11172] (ab180593)

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

ab180593 staining S100A11 in PC-12 (rat adrenal gland pheochromocytoma) cell line by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/180. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.
Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

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