abcam

ab275040

Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR23482-38
Purification technique	Affinity purification Protein A
Concentration	1.051 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Recombinant fragment - Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant fragment - Human, Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant fragment - Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat, Recombinant fragment - Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant fragment - Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information S100A7

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

ab275040 is the carrier-free version of ab275026.

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	Psoriasin also known as S100A7 is a member of the S100 protein family. It has a molecular mass of approximately 11.4 kDa. This protein exhibits calcium binding properties that influence its function. Psoriasin primarily expresses in keratinocytes which are predominant in the epidermis of the skin. Additionally it appears in various epithelia like mucous membranes. The expression levels rise in certain skin conditions suggesting it has a role in skin physiology.
Biological function summary	Psoriasin acts as an antimicrobial peptide contributing to the skin's defense system against microbial invasion. It helps in controlling the growth of bacteria like E. coli and fungi. The protein does not function as part of a larger complex. Instead it operates independently to maintain the integrity of the skin barrier.

	Psoriasin also shows involvement in the inflammatory response of the skin where it interact with other immune system players.
Pathways	Several biological systems involve psoriasin including inflammation and skin homeostasis pathways. It interacts closely with other S100 proteins such as S100A8 and S100A9 which are part of the inflammatory process. These interactions can regulate immune cell migration and cytokine production highlighting its active role in modulating skin immune responses. Psoriasin serves as an important component in maintaining the balance between immune protection and inflammation within these pathways.
Associated diseases and disorders	Psoriasin associates with psoriasis and breast cancer. In psoriasis it significantly increases aligning with its role in inflammation and skin barrier maintenance. The upregulation of psoriasin in psoriasis has been linked to overexpression of related proteins like S100A8 contributing to the chronic inflammatory state. In breast cancer particularly in certain carcinoma contexts its presence suggests a role in cancer cell survival. Researchers study its interaction with proteins in the cancer microenvironment to better understand its influence on tumor progression.

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

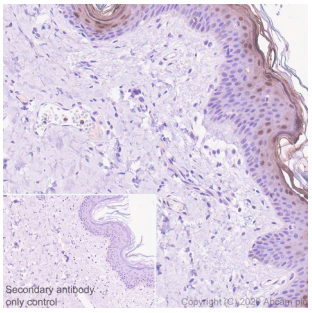
We do not recommend this combination. It is not covered by our product promise.

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.

8 product images



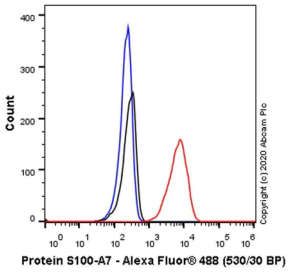
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

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

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human skin tissue labeling Psoriasin with ab275026 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human skin (PMID: 18223693). The section was incubated with ab275026 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

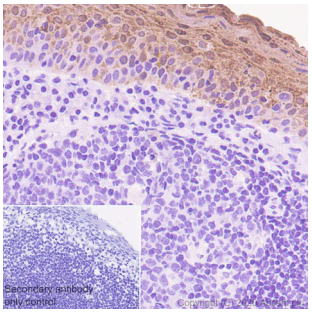


Flow Cytometry (Intracellular) - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

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

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized MDA-MB-468 (Human breast adenocarcinoma epithelial cell) cells labelling Psoriasin with ab275026 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control 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.



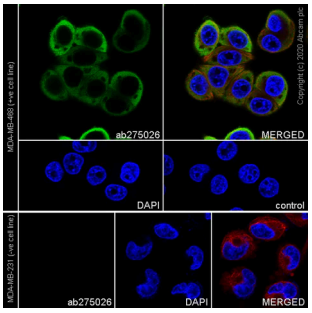
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

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

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling Psoriasin with ab275026 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human tonsil. The section was incubated with ab275026 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

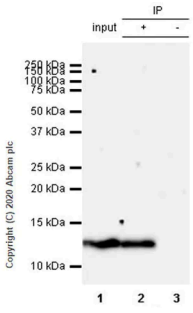
Psoriasin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Psoriasin antibody

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MDA-MB-468 cells labelling Psoriasin with ab275026 at 1/250 (2.132 µg/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in MDA-MB-468 cells.

Negative control: MDA-MB-231 (PMID: 15994944).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunoprecipitation - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Psoriasin was immunoprecipitated from 0.35 mg MDA-MB-468 (human breast adenocarcinoma epithelial cell), whole cell lysate with ab275026 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab275026 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: MDA-MB-468 whole cell lysate 10 µg.

Lane 2: ab275026 IP in MDA-MB-468 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab275026 in MDA-MB-468 whole cell lysate.

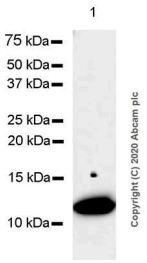
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 76 seconds.

All lanes:
Immunoprecipitation - Anti-Psoriasin antibody [EPR23482-38] (ab275026)

Predicted band size: 11 kDa

Observed band size: 12 kDa



Western blot - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 81 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 20596736, 12855640, 26055798).

All lanes:
Western blot - Anti-Psoriasin antibody [EPR23482-38] (ab275026) at 1/1000 dilution

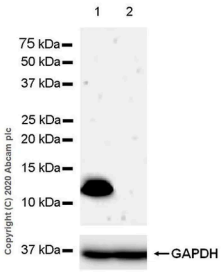
All lanes:
Human tonsil tissue lysate at 20 µg

Secondary

All lanes:
VeriBlot for IP secondary antibody(HRP)(ab131366) at 1/1000 dilution

Predicted band size: 11 kDa

Observed band size: 12 kDa



Western blot - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

Psoriasin Western blot staining using rabbit Anti-Psoriasin antibody

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer:5% NFDM/TBST.

Exposure time: 3 minutes.

The expression profile observed is consistent with what has been described in the literature (PMID: 20596736, 12855640, 26055798).

Negative control: MDA-MB-231 (PMID: 12855640).

All lanes:
Western blot - Anti-Psoriasin antibody [EPR23482-38] (ab275026) at 1/1000 dilution

Lane 1:
MDA-MB-468 (human breast adenocarcinoma epithelial cell), whole cell lysate at 20 µg

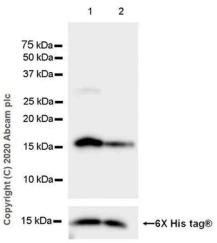
Lane 2:
MDA-MB-231 (human breast adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 11 kDa

Observed band size: 12 kDa



Western blot - Anti-Psoriasin antibody [EPR23482-38] - BSA and Azide free (ab275040)

This data was developed using ab275026, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 8 seconds.

This antibody reacts with Psoriasin (Protein S100-A7) and Protein S100-A7A.
Linking with 6x His tag leads to the shift of the bands .
Both recombinant proteins were made in house and extracted from *E.coli* expressing Psoriasin (Protein S100-A7) or Protein S100-A7A.

All lanes:
Western blot - Anti-Psoriasin antibody [EPR23482-38] (ab275026) at 1/1000 dilution

Lane 1:
His-tagged human recombinant Psoriasin (Protein S100-A7) protein, 500 ng

Lane 2:
His-tagged human recombinant S100-A7A protein, 500 ng

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 11 kDa

Observed band size: 16 kDa

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