abcam

Product datasheet

Anti-S100A9 antibody [EPR3555] ab92507

Recombinant RabMAb

22 References 7 Images

Overview

Product name	Anti-S100A9 antibody [EPR3555]
Description	Rabbit monoclonal [EPR3555] to S100A9
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF, Flow Cyt (Intra) **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Breast cancer, Human tonsil, Human spleen and peripheral blood lymphocytes lysates, Human breast carcinoma tissue and Human spleen tissue.IF: DU145 cell lineFlow Cyt (intra): Jurkat cells
General notes	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**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR3555
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab92507 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
WB		1/1000 - 1/5000. Predicted molecular weight: 13 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol. Boil slides seven times for five minutes each in pH 6 citrate buffer.
ICC/IF		1/100 - 1/250.
Flow Cyt (Intra)		1/200.

Application notes Is unsuitable for IP.

Target

Function Calcium-binding protein. Has antimicrobial activity towards bacteria and fungi. Important for resistance to invasion by pathogenic bacteria. Up-regulates transcription of genes that are under the control of NF-kappa-B. Plays a role in the development of endotoxic shock in response to bacterial lipopolysaccharide (LPS) (By similarity). Promotes tubulin polymerization when unphosphorylated. Promotes phagocyte migration and infiltration of granulocytes at sites of wounding. Plays a role as a pro-inflammatory mediator in acute and chronic inflammation and up-regulates the release of IL8 and cell-surface expression of ICAM1. Extracellular calprotectin binds to target cells and promotes apoptosis. Antimicrobial and proapoptotic activity is inhibited by zinc ions.

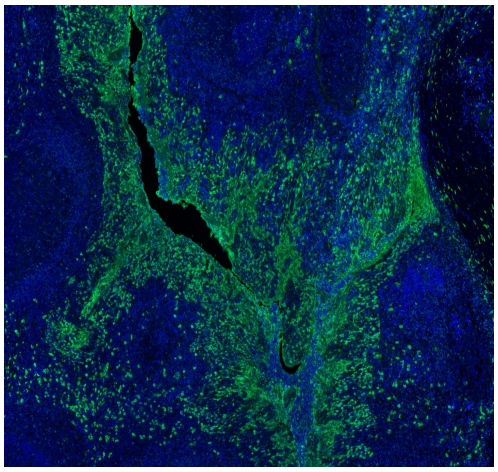
Tissue specificity Expressed by macrophages in acutely inflammed tissues and in chronic inflammation. Detected in peripheral blood leukocytes, in neutrophils and granulocytes. Detected at sites of vascular inflammation (at protein level). Also expressed in epithelial cells constitutively or induced during dermatoses.

Sequence similarities Belongs to the S-100 family.
Contains 2 EF-hand domains.

Post-translational modifications Phosphorylated. Phosphorylation inhibits activation of tubulin polymerization.

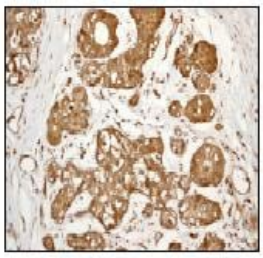
Cellular localization Secreted. Cytoplasm. Cytoplasm > cytoskeleton. Cell membrane. Associates with tubulin filaments in activated monocytes. Targeted to the cell surface upon calcium influx. Released from blood leukocytes upon exposure to CSF2/GM-CSF, bacterial lipopolysaccharide (LPS) and during inflammatory processes. Serum levels are high in patients suffering from chronic inflammation.

Images



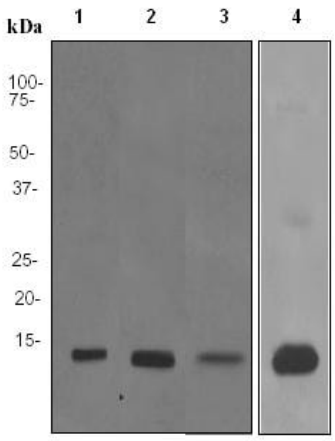
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody [EPR3555] (ab92507)

Anti-S100A9 antibody [EPR3555] (ab92507) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling S100A9 with ab92507 at a dilution of 1:500. Heat mediated antigen retrieval was performed using AR9 antigen retrieval solution, and microwave treatment for 15 min at 20% power. Anti-Rabbit/Mouse HRP polymer (PerkinElmer Opal Polymer HRP Ms Plus Rb) was used as secondary antibody. Opal tyramide amplification was performed using Opal 520 fluorophore. Counterstained with DAPI stain. Image scanned with Vectra 3.0 and analyzed via Phenochart software. This image was courteously provided by Dr. Houssein Abdul Sater, Georgia Cancer Center.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody [EPR3555] (ab92507)

ab92507, at a 1/250 dilution, staining S100A9 in paraffin embedded Human breast carcinoma tissue by Immunohistochemistry.



Western blot - Anti-S100A9 antibody [EPR3555] (ab92507)

All lanes : Anti-S100A9 antibody [EPR3555] (ab92507) at 1/1000 dilution

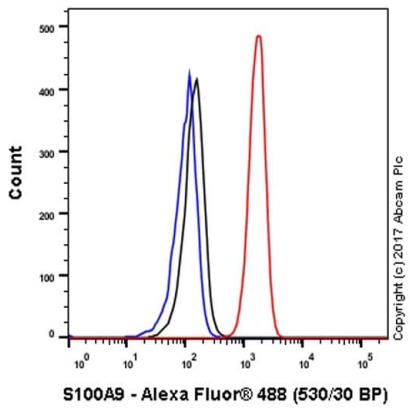
Lane 1 : Breast cancer lysate
Lane 2 : Human tonsil lysate
Lane 3 : Human spleen lysate
Lane 4 : Peripheral blood lymphocytes lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti-rabbit IgG at 1/2000 dilution

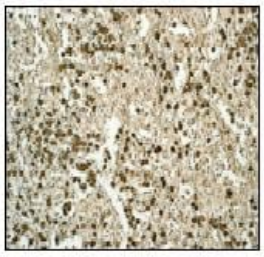
Predicted band size: 13 kDa

Observed band size: 14 kDa



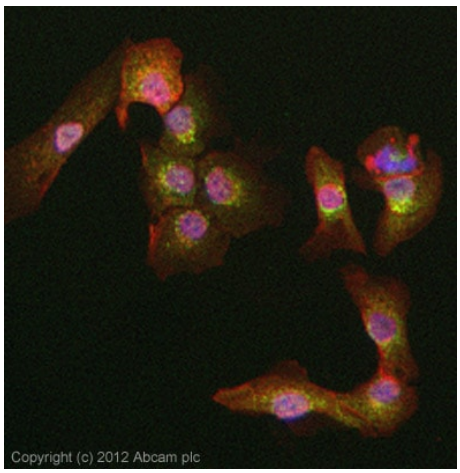
Flow Cytometry (Intracellular) - Anti-S100A9 antibody [EPR3555] (ab92507)

Intracellular Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling S100A9 (red) with purified ab92507 at a 1/200 dilution (10ug/mL). Cells were fixed with 80% methanol and permeabilized with 0.1% Tween-20. A goat anti rabbit IgG (Alexa Fluorr® 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (Black) (**ab172730**). Blue (unlabeled control) - Cell without incubation with primary antibody and secondary antibody (Blue).



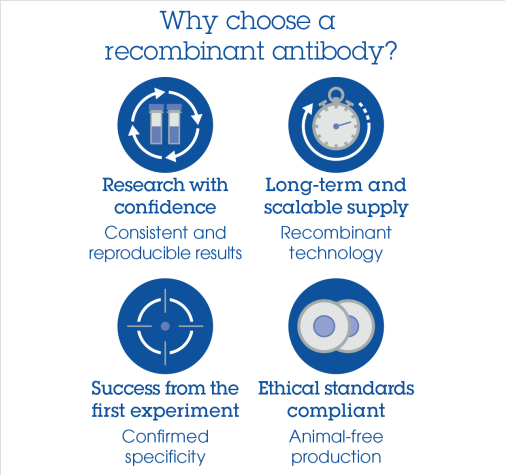
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody [EPR3555] (ab92507)

ab92507, at a 1/250 dilution, staining S100A9 in paraffin embedded Human spleen tissue by Immunohistochemistry.



Immunocytochemistry/ Immunofluorescence - Anti-S100A9 antibody [EPR3555] (ab92507)

ICC/IF image of ab92507 stained DU145 cells. The cells were 4% paraformaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab92507, 1/200) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgM (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Anti-S100A9 antibody [EPR3555] (ab92507)

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