

Product datasheet

Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free ab227570

Recombinant RabMAb

[11 References](#) [6 Images](#)

Overview

Product name	Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR3555] to S100A9 - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF 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	<p>ab227570 is the carrier-free version of ab92507.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>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.</p> <p>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.</p> <p>Our Low endotoxin, azide-free formats have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3555
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227570 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 (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 13 kDa.
IHC-P		Use at an assay dependent concentration. 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		Use at an assay dependent concentration.

Application notes Is unsuitable for IP.

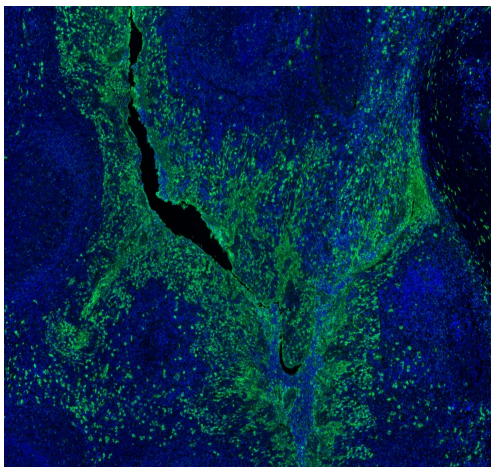
Target

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 inflamed 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.

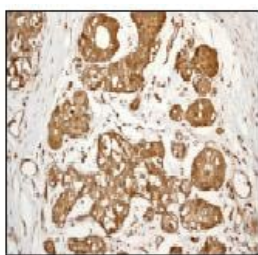
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free (ab227570)

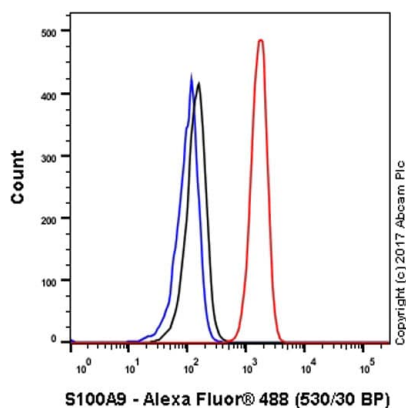
Anti-S100A9 antibody [EPR3555] ([ab92507](#))

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] - Low endotoxin, Azide free (ab227570)

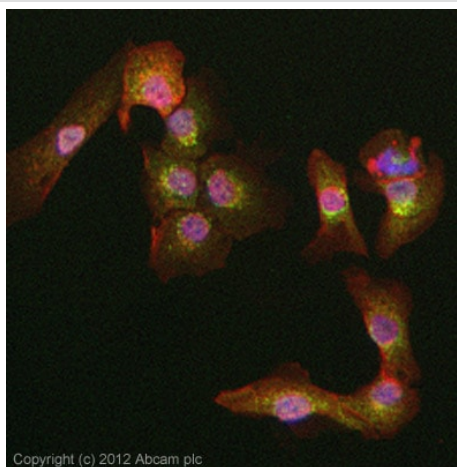
This IHC data was generated using the same anti-S100A9 antibody clone, EPR3555, in a different buffer formulation (cat# [ab92507](#)), [ab92507](#), at a 1/250 dilution, staining S100A9 in paraffin embedded Human breast carcinoma tissue by Immunohistochemistry.



Flow Cytometry (Intracellular) - Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free (ab227570)

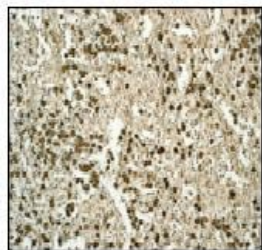
Intracellular Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling S100A9 (red) with purified **ab92507** at a 1/200 dilution (10ug/mL). Cells were fixed with 80% methanol and permeabilized with 0.1% Tween-20. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was 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).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92507**).



Immunocytochemistry/ Immunofluorescence - Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free (ab227570)

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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92507**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody [EPR3555] - Low endotoxin, Azide free (ab227570)

This IHC data was generated using the same anti-S100A9 antibody clone, EPR3555, in a different buffer formulation (cat# **ab92507**).

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

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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