


Product datasheet

Anti-S100A9 antibody ab63818

★★★★★ [6 Abreviews](#) [12 References](#) [5 Images](#)

Overview

Product name	Anti-S100A9 antibody
Description	Rabbit polyclonal to S100A9
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab63818 are tested in IHC-P. Previous batches were additionally validated in ICC/IF and WB. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab92507 .
Tested applications	Suitable for: WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Chimpanzee 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human S100A9. Read Abcam's proprietary immunogen policy (Peptide available as ab74434 .)
Positive control	Recombinant Human S100A9 protein (ab95909) can be used as a positive control in WB. This antibody gave a positive signal in the following Human Tissue Lysates: Lymph node, Thymus, Spleen, Lung This antibody gave a positive result in IHC in the following FFPE tissue: Human Tonsil.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity Immunogen affinity purified
Clonality Polyclonal
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab63818 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)	Use a concentration of 1 µg/ml. Detects a band of approximately 13 kDa (predicted molecular weight: 13 kDa).
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P	★★★★★ (5)	Use a concentration of 0.1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.

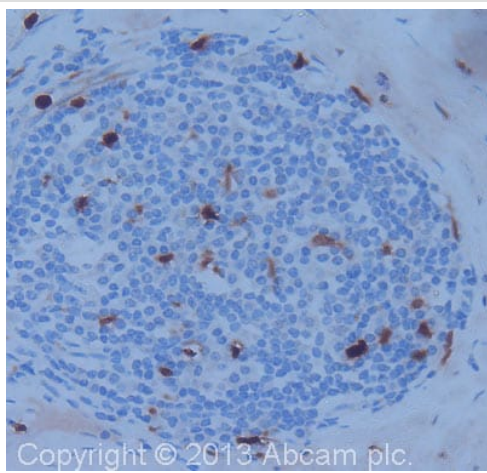
Sequence similarities Belongs to the S-100 family.
Contains 2 EF-hand domains.

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 (ab63818)

IHC image of S100A9 staining in Human Tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab63818, 0.1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-S100A9 antibody (ab63818)

All lanes : Anti-S100A9 antibody (ab63818) at 1 µg/ml

Lane 1 : Human lymph node tissue lysate - total protein ([ab29871](#))

Lane 2 : Human thymus tissue lysate - total protein ([ab30146](#))

Lane 3 : Human spleen tissue lysate - total protein ([ab29699](#))

Lane 4 : Lung (Human) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

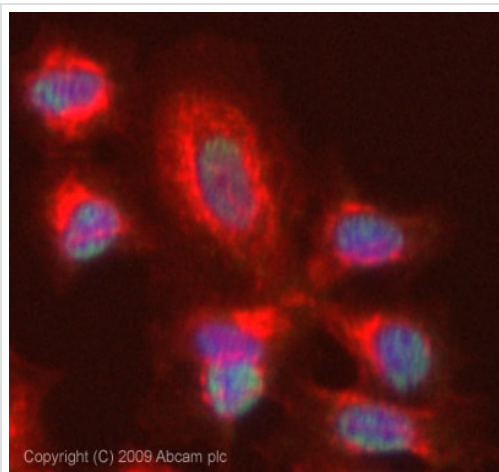
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 13 kDa

Observed band size: 13 kDa

Exposure time: 5 minutes



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Immunocytochemistry/ Immunofluorescence - Anti-S100A9 antibody (ab63818)

ICC/IF image of ab63818 stained MCF7 cells. The cells were 100% methanol fixed (5 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 (ab63818, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 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 antibody also gave a positive result in 100% methanol fixed (5 min) HeLa, HepG2 and Hek293 cells at 5µg/ml, and in 4% PFA fixed (10 min) HeLa, HepG2, Hek293 and MCF7 cells at 5µg/ml.



Western blot - Anti-S100A9 antibody (ab63818)

Anti-S100A9 antibody (ab63818) at 1 µg/ml + Recombinant Human S100A9 protein ([ab95909](#)) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

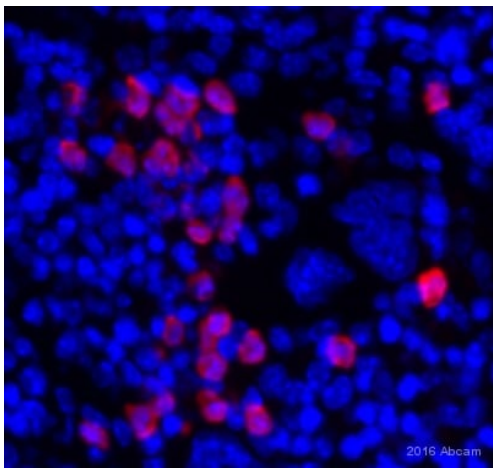
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 13 kDa

Observed band size: 15 kDa

Exposure time: 1 minute



NBF-fixed mouse spleen tissue section stained for S100A9 using ab63818 at 1/5000 dilution in immunohistochemical analysis. heat mediated antigen retrieval with citrate buffer pH 6 was performed before commencing with the IHC protocol. Goat anti-Rb IgG Alexa Fluor® 647 was used as the secondary antibody at 1/600 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A9 antibody (ab63818)

This image is courtesy of an anonymous abreview.

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