

## Product datasheet

# Recombinant Human S100A9 protein ab95909

[3 References](#) [2 Images](#)

### Description

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<b>Product name</b>	Recombinant Human S100A9 protein
<b>Purity</b>	> 90 % SDS-PAGE. ab95909 is purified using conventional chromatography techniques.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P06702</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MTCKMSQLER NIETIINTFH QYSVKLGHPD TLNQGEFKEL VRKDLQNFLK KENKNEKVIE HIMEDLDTNA DKQLSFEEFI MLMARLTWAS HEKMHEGDEG PGHHHKPGLG EGTPLEHHHH HH
<b>Predicted molecular weight</b>	14 kDa including tags
<b>Amino acids</b>	1 to 114
<b>Tags</b>	His tag C-Terminus

### Specifications

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Our **Abpromise guarantee** covers the use of **ab95909** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Mass Spectrometry Western blot
<b>Mass spectrometry</b>	MALDI-TOF-TOF
<b>Form</b>	Liquid

### Preparation and Storage

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**Stability and Storage** 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.

pH: 8.00

Constituents: 0.316% Tris HCl, 10% Glycerol, 0.58% Sodium chloride

## General Info

### 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.

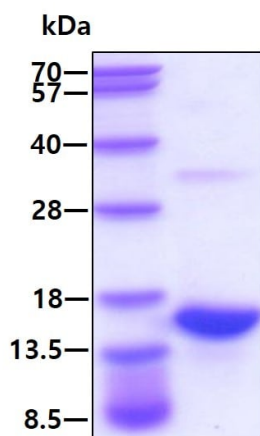
### Post-translational modifications

Phosphorylated. Phosphorylation inhibits activation of tubulin polymerization.

### Cellular localization

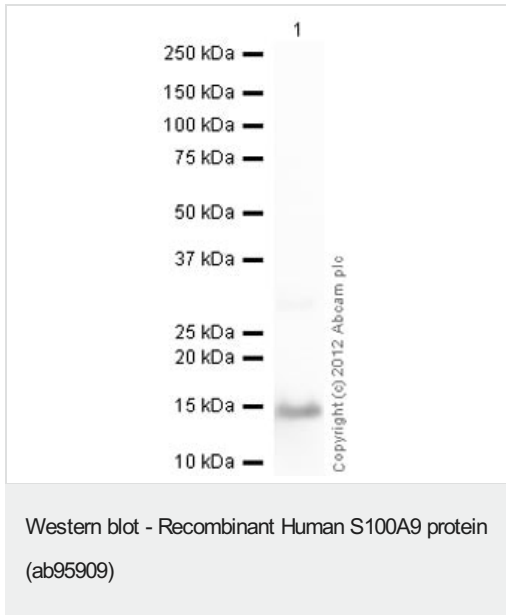
Secreted. Cytoplasm. Cytoplasm > cytoskeleton. Cell membrane. Associates with tubulin filaments in activated monocytes. Targeted to the cell surface upon calcium influx. Released from blood leukocytes upon exposure to CSF2/GM-CSF, bacterial lipopolysaccharide (LPS) and during inflammatory processes.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

## Images



15% SDS-PAGE showing ab95909 at approximately 14.3kDa (3µg).

Western blot - Recombinant Human S100A9 protein (ab95909)



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.

**Exposure time:** 1 minute

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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