

## Product datasheet

### Recombinant Cow S100A9 protein (Tagged) ab235975

1 Image

#### Description

<b>Product name</b>	Recombinant Cow S100A9 protein (Tagged)
<b>Purity</b>	> 85 % SDS-PAGE.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P28783</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Cow
<b>Sequence</b>	EDKMSQMESSIETIINIFHQYSVRLGHYDTLIQKEFKQLVQK ELPNFLKK QKKNEAAINEIMEDLDTNVDKQLSFEEFIMLVARLTVASHE EMHNTAPPG QGHRHGPGYGKGGSGSCSGQGSPDQGSHDLGSHGHGH GSHSHGGHGHSHGG HGSHSH
<b>Predicted molecular weight</b>	35 kDa including tags
<b>Amino acids</b>	2 to 156
<b>Tags</b>	His tag N-Terminus
<b>Additional sequence information</b>	N-terminal 6xHis-SUMO-tag and C-terminal Myc-tag.

#### Specifications

Our **Abpromise guarantee** covers the use of **ab235975** in the following tested applications.

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

**Applications** SDS-PAGE

**Form** Liquid

#### Preparation and Storage

**Stability and Storage** Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.  
pH: 7.2

Constituents: Tris buffer, 50% Glycerol (glycerin, glycerine)

## 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.

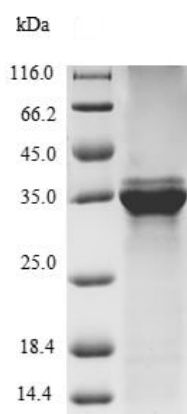
### Post-translational modifications

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



SDS-PAGE - Recombinant Cow S100A9 protein  
(Tagged) (ab235975)

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis  
with 5% enrichment gel and 15% separation gel of ab235975.

### **Our Abpromise to you: Quality guaranteed and expert technical support**

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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