# abcam

### Product datasheet

## Anti-S100 alpha 2/S100A2 antibody [EPR5392] ab109494

Recombinant RabMAb

#### 12 References 7 Images

Overview

**Product name** Anti-S100 alpha 2/S100A2 antibody [EPR5392]

**Description** Rabbit monoclonal [EPR5392] to S100 alpha 2/S100A2

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P

Species reactivity Reacts with: Human

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen** 

Positive control WB: HACAT, BxPC3, HeLa and A431 cell lysates; IHC: Human skin and human lung carcinoma

tissues IP: HaCaT. ICC/IF: A431 (Human epidermoid carcinoma epithelial cell) cells Flow

cyto(intra): A431 (Human epidermoid carcinoma epithelial cell) 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: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

**Purity** Protein A purified

ClonalityMonoclonalClone numberEPR5392IsotypeIgG

#### **Applications**

**The Abpromise guarantee** Our <u>Abpromise guarantee</u> covers the use of ab109494 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)		1/100 - 1/1000. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
WB		1/1000 - 1/10000. Predicted molecular weight: 11 kDa.
IP		1/10 - 1/100.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

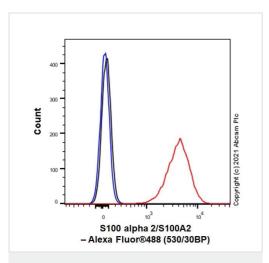
Function	May function as calcium sensor and modulator, contributing to cellular calcium signaling. May function by interacting with other proteins, such as TPR-containing proteins, and indirectly play a role in many physiological processes. May also play a role in suppressing tumor cell growth.		
Tissue specificity	A subset of epithelial cells including normal human mammary epithelial cells and keratinocytes.		
Sequence similarities	Belongs to the S-100 family.  Contains 2 EF-hand domains.		
<b>5</b>			

**Developmental stage**Preferentially expressed in normal human mammary epithelial cells as opposed to tumor-derived

ones. The level of S100L was shown to correlate inversely with tumor progression.

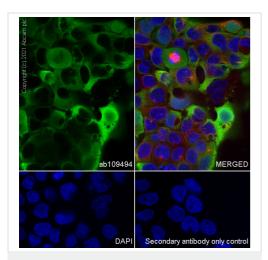
#### **Images**

**Target** 



Flow Cytometry (Intracellular) - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

Intracellular Flow Cytometry analysis of A431 (Human epidermoid carcinoma epithelial cell) cells labeling S100 alpha 2 with purified ab109494 at 1/20 dilution (10 ug/ml) (Red). Cells were fixed with 80% Methanol and permeabilised with 0.1% Tween-20. A Goat anti rabbit lgG (Alexa Fluor® 488, <a href="mailto:ab150081">ab150081</a>) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

Immunocytochemistry/ Immunofluorescence analysis of A431 (Human epidermoid carcinoma epithelial cell) cells labeling S100 alpha 2 using ab109494. The cells were fixed with 100% Methanol then permeabilized with 0.1% Triton X-100. The cells were then incubated with ab109494 at 1:100 dilution followed by a further incubation with a Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 2  $\mu$ g/ml (shown in green). Nuclear DNA was labelled in blue with DAPI. Cells were counterstained using ab195889 Antialpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 dilution (shown in red). Secondary antibody only control: PBS instead of the primary antibody.

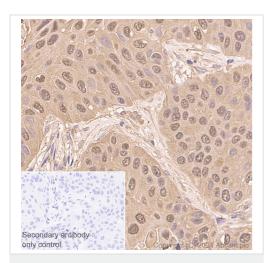


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

Immunohistochemical analysis of Paraffin-embedded sections human skin tissue labelling S100 alpha 2 with ab109494 at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>). Staining on human skin tissue is observed. Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

Immunohistochemical analysis of Paraffin-embedded sections human lung carcinoma tissue labelling S100 alpha 2 with ab109494 at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Staining on human lung carcinoma tissue is observed. Counter stained with Haematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval using Bond  $^{\text{TM}}$  Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

**All lanes :** Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494) at 1/1000 dilution

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 20  $\mu g$ 

Lane 2 : HaCaT (Human skin keratinocyte) whole cell lysate at 15 µg

Lane 3: BxPC-3 (Human pancreas adenocarcinoma epithelial cell) whole cell lysate at 15 µg

**Lane 4 :** A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate at 15  $\mu g$ 

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 11 kDa **Observed band size:** 11 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Immunoprecipitation - Anti-S100 alpha 2/S100A2 antibody [EPR5392] (ab109494)

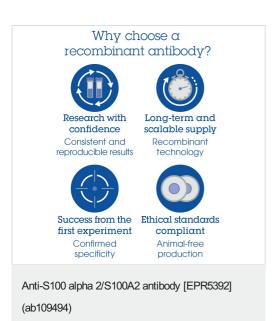
S100 alpha 2/S100A2 was immunoprecipitated from 0.35 mg HaCaT (Human skin keratinocyte) whole cell lysate 10  $\mu$ g with 109494 at 1/20 dilution (1 $\mu$ g). VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: HaCaT (Human skin keratinocyte) whole cell lysate 10  $\mu g$ 

Lane 2: ab109494 IP in HaCaT whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab109494 in HaCaT whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



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

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

- · 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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors