

## Product datasheet

### Anti-S100A4 antibody [EPR2761(2)] ab124805

KO **VALIDATED**

Recombinant

RabMAb<sup>®</sup>

★★★★☆ **8 Abreviews**   **50 References**   **14 Images**

#### Overview

<b>Product name</b>	Anti-S100A4 antibody [EPR2761(2)]
<b>Description</b>	Rabbit monoclonal [EPR2761(2)] to S100A4
<b>Host species</b>	Rabbit
<b>Specificity</b>	Some optimisation may be required for detection of the target protein due to low levels of endogenous expression in some samples. Please see images below for suitable positive controls.
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt (Intra), WB, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human S100A4 aa 50 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <b>P26447</b> (Peptide available as <b>ab232852</b> )
<b>Positive control</b>	Human tonsil, A549, A375, HeLa and Human small intestine lysates; Human tonsil tissue
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <b><a href="#">see here</a></b>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</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

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.

<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2761(2)
<b>Isotype</b>	IgG

## Applications

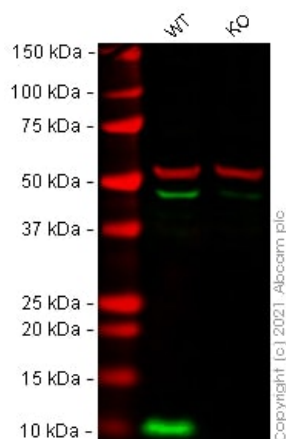
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab124805 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (2)	1/100 - 1/250.
Flow Cyt (Intra)		1/80 - 1/800. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★☆☆☆☆ (1)	1/1000 - 1/10000. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).
IP		1/10 - 1/100.
IHC-P	★★★★★ (4)	1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

## Target

<b>Tissue specificity</b>	Ubiquitously expressed.
<b>Sequence similarities</b>	Belongs to the S-100 family. Contains 2 EF-hand domains.

## Images



Western blot - Anti-S100A4 antibody [EPR2761(2)]  
(ab124805)

**All lanes :** Anti-S100A4 antibody [EPR2761(2)] (ab124805) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** S100A4 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

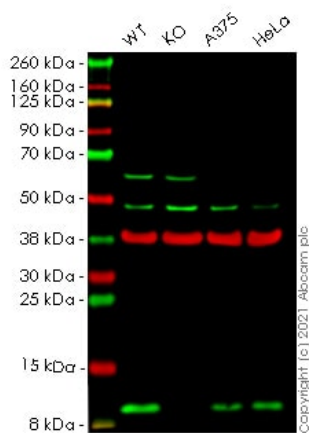
Performed under reducing conditions.

**Predicted band size:** 12 kDa

**Observed band size:** 11 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab124805 observed at 11 kDa. Red - loading control **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

ab124805 was shown to react with S100A4 in wild-type HeLa cells in Western blot with loss of signal observed in S100A4 knockout cell line **ab265709** (S100A4 knockout cell lysate **ab257046**). Wild-type HeLa and S100A4 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab124805 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

**All lanes :** Anti-S100A4 antibody [EPR2761(2)] (ab124805) at 1/1000 dilution

**Lane 1 :** Wild-type A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 2 :** S100A4 knockout A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 3 :** A-375 (Human malignant melanoma cell line) whole cell lysate

**Lane 4 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

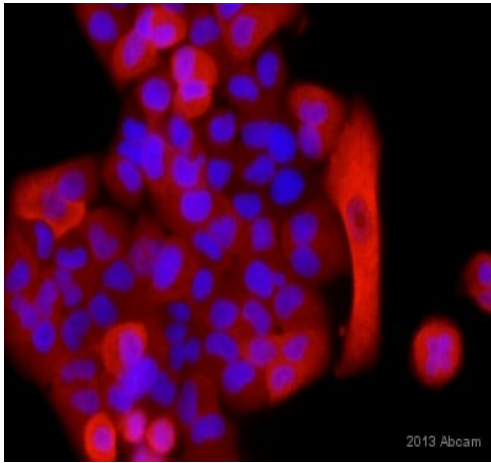
Performed under reducing conditions.

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab124805 observed at 12 kDa. Red - loading control [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

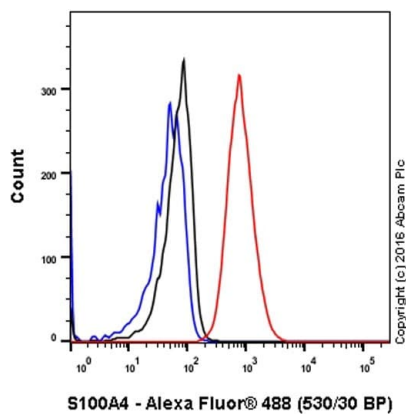
ab124805 was shown to react with S100A4 in wild-type A549 cells in Western blot with loss of signal observed in S100A4 knockout cell line [ab261865](#) (knockout cell lysate [ab261674](#)). Wild-type A549 and S100A4 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab124805 and [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

This image is courtesy of an anonymous Abreview

Unpurified ab124805 staining S100A4 in the A549 cell line from Human lungs by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde and permeabilized with Triton X-100 0.25% in PBS. Samples were incubated with primary antibody (1/100) for 45 minutes at 25°C. A TRITC-conjugated Goat anti-rabbit polyclonal was used as the secondary antibody.

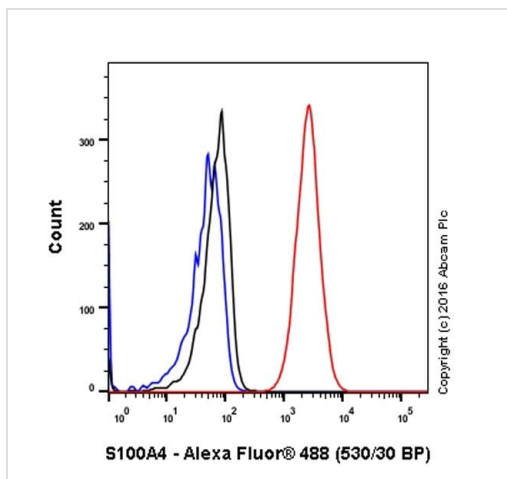


Flow Cytometry (Intracellular) - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

ab124805 staining S100A4 in HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 80% methanol and permeabilised with 0.1% Triton X-100 (in PBS). The sample was incubated with the primary antibody at a dilution of 1/800. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isotype control: **ab172730** rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

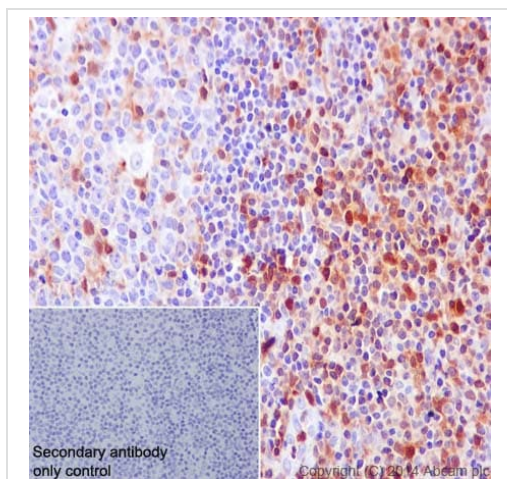


Flow Cytometry (Intracellular) - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

ab124805 staining S100A4 in HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 80% methanol and permeabilised with 0.1% Triton X-100 (in PBS). The sample was incubated with the primary antibody at a dilution of 1/80. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isotype control: **ab172730** rabbit monoclonal IgG (Black)

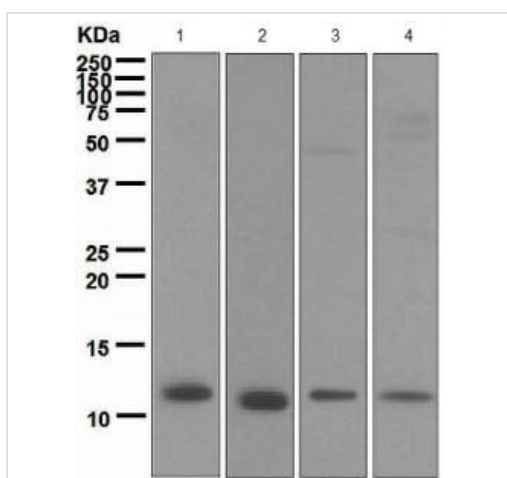
Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

ab124805 staining S100A4 in human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

**Negative control 1:** PBS in place of primary antibody.



Western blot - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

**All lanes :** Anti-S100A4 antibody [EPR2761(2)] (ab124805) at 1/1000 dilution (unpurified)

**Lane 1 :** Human tonsil lysate

**Lane 2 :** A549 cell lysate

**Lane 3 :** A375 cell lysate

**Lane 4 :** Human small intestine lysate

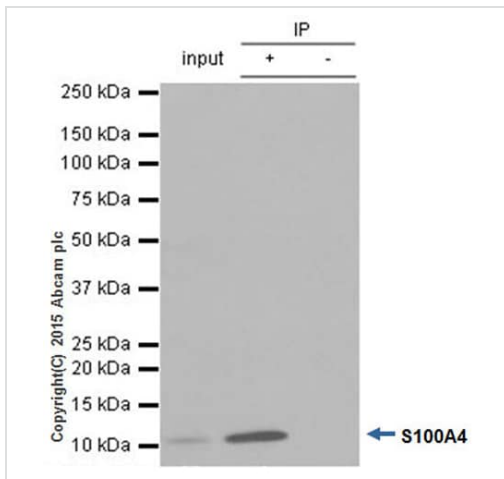
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa



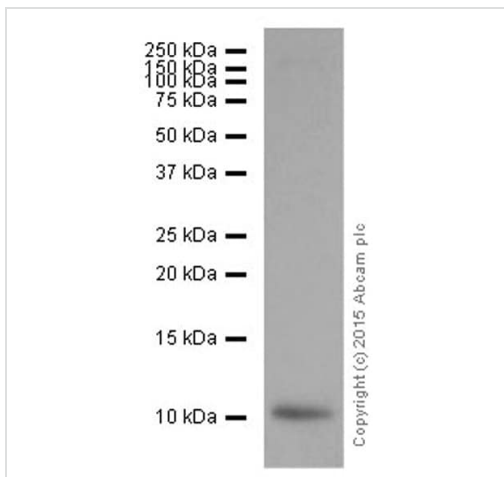
Immunoprecipitation - Anti-S100A4 antibody  
[EPR2761(2)] (ab124805)

ab124805 immunoprecipitating S100A4. 10 µg of cell lysate was incubated with primary antibody at a dilution of 1/30 and Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at a dilution of 1/1500.

**Lane 1:** Human tonsil whole cell lysate (10 µg)

**Lane 2:** Human tonsil whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab124805 in human tonsil whole cell lysate



Western blot - Anti-S100A4 antibody [EPR2761(2)]  
(ab124805)

Anti-S100A4 antibody [EPR2761(2)] (ab124805) + A549 (human lung carcinoma) whole cell lysate at 20 µg

### Secondary

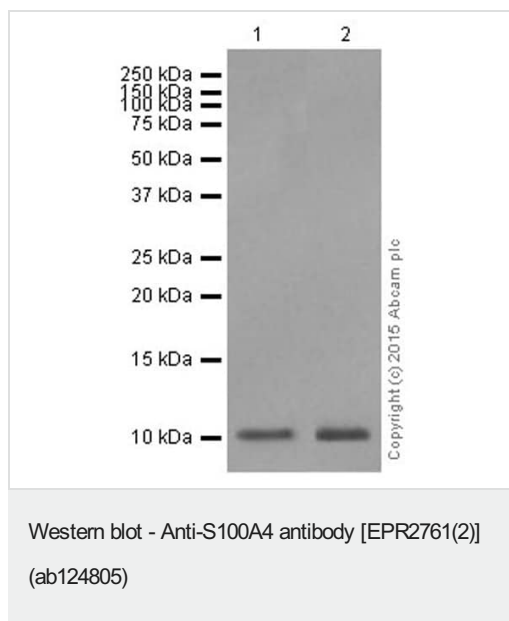
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 12 kDa

**Additional bands at:** 12 kDa. We are unsure as to the identity of these extra bands.

**Blocking buffer:** 5% NFDM /TBST

**Diluting Buffer:** 5% NFDM /TBST



**All lanes :** Anti-S100A4 antibody [EPR2761(2)] (ab124805) at 1/2500 dilution

**Lane 1 :** Human tonsil tissue lysate

**Lane 2 :** A375 (human malignant melanoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

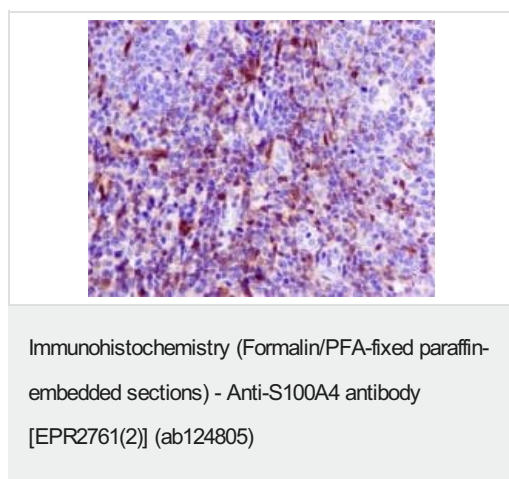
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 12 kDa

**Additional bands at:** 12 kDa. We are unsure as to the identity of these extra bands.

**Blocking Buffer:** 5% NFDM /TBST

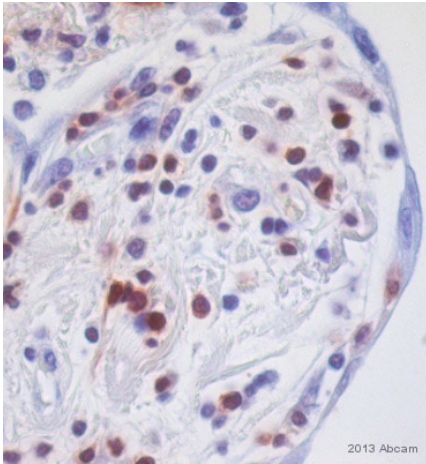
**Diluting Buffer:** 5% NFDM /TBST



Unpurified ab124805, at 1/250 dilution, staining S100A4 in paraffin-embedded Human tonsil tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



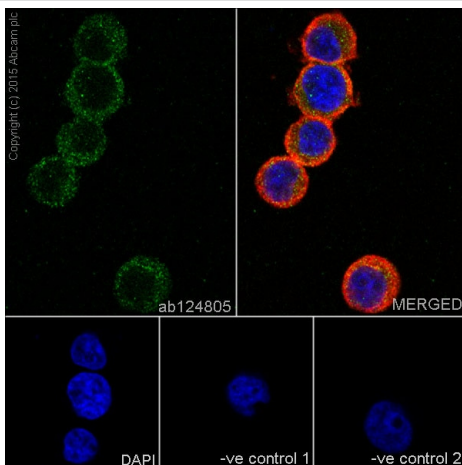


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

This image is courtesy of an anonymous Abreview

Immunohistochemical analysis of Human lung tissue, staining S100A4 with unpurified ab124805.

Tissue was fixed with HOPE and blocked with blocking solution for 5 minutes at 25°C. Samples were incubated with primary antibody (1/1000 in diluent) for 1 hour at 25°C. An undiluted HRP-conjugated goat anti-rabbit polyclonal IgG was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-S100A4 antibody [EPR2761(2)] (ab124805)

ab124805 staining S100A4 in Jurkat (human acute T cell leukemia) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/250. A goat anti rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) was used as the secondary antibody at 1/500. [ab7291](#) and [ab150120](#) were used as counterstains for primary antibody ab124805 and secondary antibody [ab150077](#) respectively and DAPI was used as a nuclear counterstain.

**Negative control 1:** Rabbit primary antibody and anti-mouse secondary antibody ([ab150120](#))

**Negative control 2:** Mouse primary antibody ([ab7291](#)) and anti-rabbit secondary antibody ([ab150077](#))

### 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

Anti-S100A4 antibody [EPR2761(2)] (ab124805)

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

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