

## Product datasheet

# Human S100A4 knockout A549 cell lysate ab261674

5 Images

### Overview

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|                             |  |
|-----------------------------|--|
| <b>Product name</b>         | Human S100A4 knockout A549 cell lysate   |
| <b>Product overview</b>     | Knockout cell lysate achieved by CRISPR/Cas9.  |
| <b>Parental Cell Line</b>   | A549   |
| <b>Organism</b>             | Human  |
| <b>Mutation description</b> | Knockout achieved by CRISPR/Cas9; X = 1 bp insertion; Frameshift = 95%   |
| <b>Passage number</b>       | <20  |
| <b>Knockout validation</b>  | Next Generation Sequencing (NGS), Western Blot (WB)  |
| <b>Reconstitution notes</b> | To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT.<br><i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i> |

**Notes**

**Lysate preparation:** Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

**User storage instructions:** Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

**[See here for more information on knockout cell lysates.](#)**

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It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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**Tested applications**                      **Suitable for:** WB

## Properties

**Storage instructions** Store at -80°C. Please refer to protocols.

| Components  | 1 kit     |
|---|-----------|
| ab280424 - Human S100A4 knockout A549 cell lysate | 1 x 100µg |
| ab259782 - Human wild-type A549 cell lysate       | 1 x 100µg |

**Cell type** epithelial  
**Disease** Carcinoma  
**Gender** Male

## Target

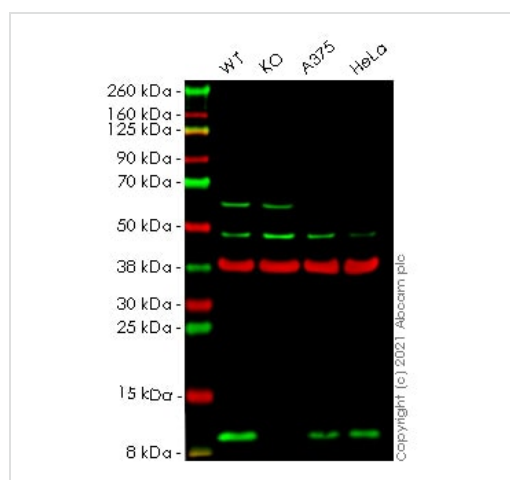
**Tissue specificity** Ubiquitously expressed.  
**Sequence similarities** Belongs to the S-100 family.  
Contains 2 EF-hand domains.

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab261674 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          |           | Use at an assay dependent concentration. |

## Images



Western blot - Human S100A4 knockout A549 cell lysate (ab261674)

**Lane 1:** Wild-type A549 (Human lung carcinoma cell line) whole cell lysate 20 µg

**Lane 2:** S100A4 knockout A549 (Human lung carcinoma cell line) whole cell lysate 20 µg

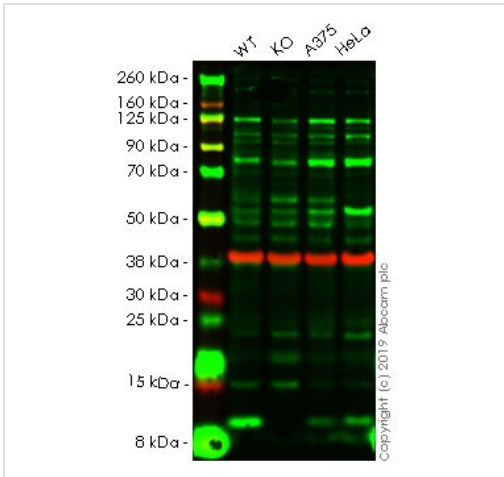
**Lane 3:** A-375 (Human malignant melanoma cell line) whole cell lysate 20 µg

**Lane 4:** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 µg

**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.



Western blot - Human S100A4 knockout A549 cell lysate (ab261674)

**Lane 1:** Wild-type A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

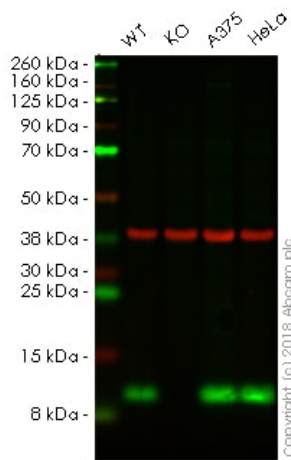
**Lane 2:** S100A4 knockout A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

**Lane 3:** A-375 (Human malignant melanoma cell line) whole cell lysate 20 ug

**Lane 4:** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 ug

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab41532** observed at 12 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

**ab41532** was shown to recognize S100A4 in wild-type A549 cells as signal was lost at the expected MW in S100A4 knockout cell line **ab261865** (knockout cell lysate ab261674). Additional cross-reactive bands were observed in the wild-type and knockout samples. Wild-type and S100A4 knockout samples were subjected to SDS-PAGE. Ab41532 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/250 dilution and 1/20000 dilution respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human S100A4 knockout A549 cell lysate (ab261674)

**Lane 1:** Wild-type A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

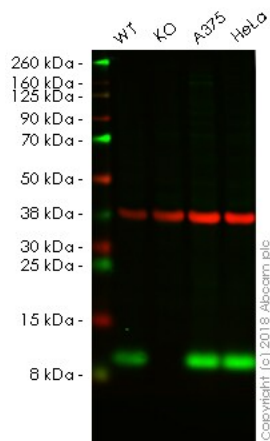
**Lane 2:** S100A4 knockout A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

**Lane 3:** A-375 (Human malignant melanoma cell line) whole cell lysate 20 ug

**Lane 4:** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 ug

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab218512** observed at 12 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

**ab218512** was shown to specifically react with S100A4 in wild-type A549 cells as signal was lost in S100A4 knockout cell line **ab261865** (knockout cell lysate ab261674). Wild-type and S100A4 knockout samples were subjected to SDS-PAGE. Ab218512 and **ab181602** (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1 ug/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human S100A4 knockout A549 cell lysate (ab261674)

**Lane 1:** Wild-type A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

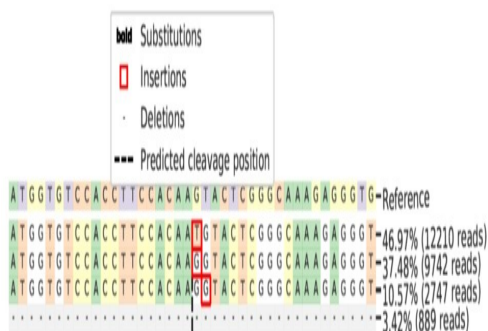
**Lane 2:** S100A4 knockout A549 (Human lung carcinoma cell line) whole cell lysate 20 ug

**Lane 3:** A-375 (Human malignant melanoma cell line) whole cell lysate 20 ug

**Lane 4:** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 ug

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab218511** observed at 12 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

**ab218511** was shown to specifically react with S100A4 in wild-type A549 cells as signal was lost in S100A4 knockout cell line **ab261865** (knockout cell lysate ab261674). Wild-type and S100A4 knockout samples were subjected to SDS-PAGE. Ab218511 and **ab181602** (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1 ug/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Next Generation Sequencing - Human S100A4 knockout A549 cell lysate (ab261674)

Knockout achieved by CRISPR/Cas9; X = 1 bp insertion; Frameshift = 95%

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

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