

## Product datasheet

# Fibroblast Marker (Vimentin, alpha smooth muscle Actin, Hsp47, S100A4) Antibody Panel - Human, Mouse ab254015

Recombinant

★★★★★ 1 Abreviews 1 References 11 Images

### Overview

**Product name** Fibroblast Marker (Vimentin, alpha smooth muscle Actin, Hsp47, S100A4) Antibody Panel - Human, Mouse

**Species reactivity** **Reacts with:** Mouse, Human

**Product overview** Fibroblast Marker (Vimentin, alpha smooth muscle Actin, Hsp47, S100A4) Antibody Panel - Human, Mouse ab254015 contains multiple trial-sized versions of anti-human and mouse antibody clones against Vimentin, alpha smooth muscle Actin, Hsp47, S100A4, specifically selected for high performance in various applications. This panel contains 4 recombinant rabbit monoclonal antibodies against human and mouse Vimentin, alpha smooth muscle Actin, Hsp47, S100A4. They are provided as a sampler panel to allow you to easily evaluate each in your required applications.

For guidelines on how to use each antibody within the panel, please consult the individual datasheet for each antibody.

Panel contains:

- Rabbit monoclonal [EPR3776] to Vimentin (20 µL) [ab92547](#)
- Rabbit monoclonal [E184] to alpha smooth muscle Actin (20 µL) [ab32575](#)
- Rabbit monoclonal [EPR4217] to Hsp47 (20 µL) [ab109117](#)
- Rabbit monoclonal [EPR14639(2)] to S100A4 (20 µL) [ab197896](#)

**Notes** [Explore our range of antibody sample panels](#) designed to provide you with a variety of trial-size antibodies in a convenient and cost-effective format.

Directly conjugated versions of our antibodies are available and ready to use for multicolor flow cytometry or immunocytochemistry analysis. [Carrier-free formulations](#) are also available for easy conjugation to labels of your choice. Please refer to the 'Associated products' section below.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

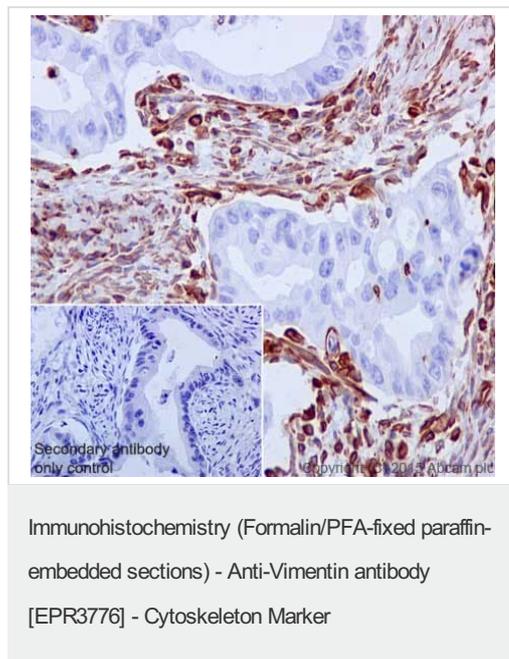
## Properties

**Storage instructions** Store at -20°C. Please refer to protocols.

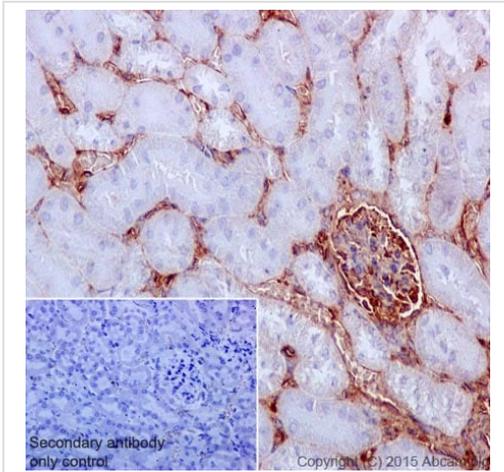
Components	1 kit
<a href="#">ab32575</a> - Anti-alpha smooth muscle Actin antibody [E184]	2 x 10µl
<a href="#">ab109117</a> - Anti-Hsp47 antibody [EPR4217]	2 x 10µl
<a href="#">ab197896</a> - Anti-S100A4 antibody [EPR14639(2)]	2 x 10µl
<a href="#">ab92547</a> - Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker	2 x 10µl

**Cellular localization** Vimentin: Cytoplasm. alpha smooth muscle Actin: Cytoplasm > cytoskeleton. Hsp47: Endoplasmic reticulum lumen.

## Images

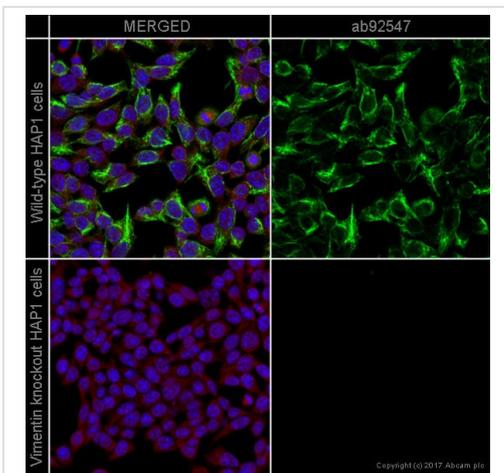


Immunohistochemical staining of paraffin embedded human cervical carcinoma with purified [ab92547](#) at a working dilution of 1/250. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody [EPR3776]

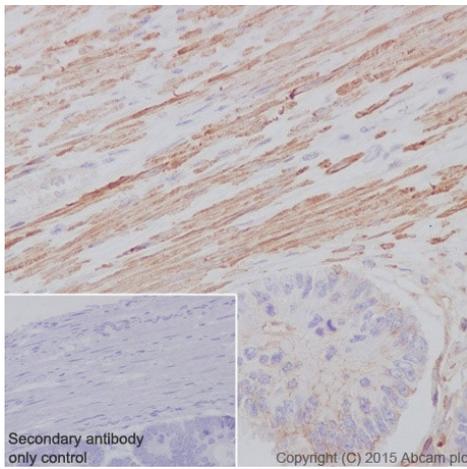
Immunohistochemical staining of paraffin embedded mouse kidney with purified [ab92547](#) at a working dilution of 1/250. The secondary antibody used is [Goat Anti-Rabbit IgG H&L \(HRP\) \(ab97051\) secondary antibody](#) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker

[ab92547](#) staining Vimentin in wild-type HAP1 cells (top panel) and VIM knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with [ab92547](#) at 0.5µg/ml and [ab195889](#) at 1/250 dilution (shown in pseudocolour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with [Goat Anti-Rabbit IgG H&L \(Alexa Fluor® 488\) preadsorbed \(ab150081\) secondary antibody](#) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

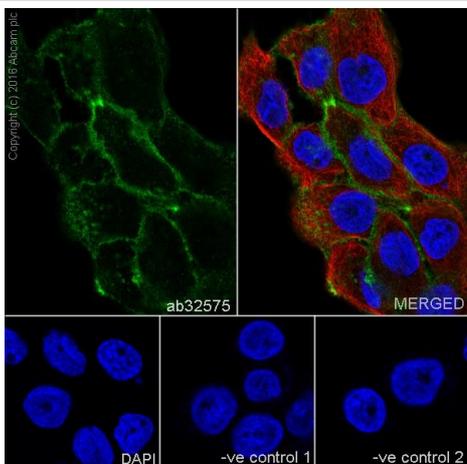


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha smooth muscle Actin antibody [E184]

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human smooth muscle tissue labeling alpha smooth muscle Actin with purified [ab32575](#) at a dilution of 1/200. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. [ab97051](#), an HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500)

Negative control using PBS instead of primary antibody.

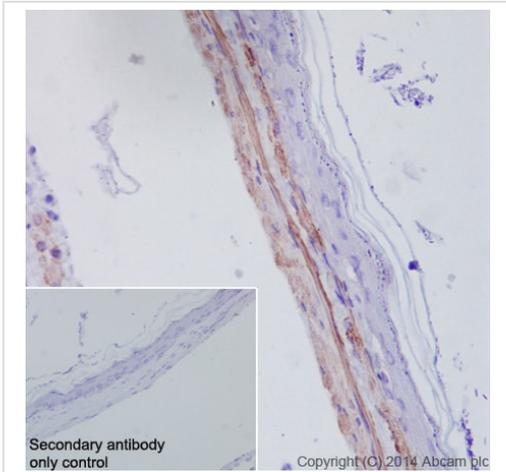
Counterstained with hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-alpha smooth muscle Actin antibody [E184]

Immunocytochemistry/Immunofluorescence analysis of A431 (human epidermoid carcinoma) cells labeling alpha smooth muscle Actin (green) with purified [ab32575](#) at 1/500. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. [ab150077](#), Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were counterstained with [ab7291](#), anti-Tubulin (mouse mAb) at 1/1000 followed by [ab150120](#) Alexa Fluor<sup>®</sup>594 goat anti-mouse secondary (1/1000). Nuclei were counterstained with DAPI (blue).

For negative control 1, rabbit primary antibody and anti-mouse secondary antibody ([ab150120](#)) were used. For negative control 2, [ab7291](#) (mouse primary antibody) was used followed by anti-rabbit secondary antibody ([ab150077](#)).

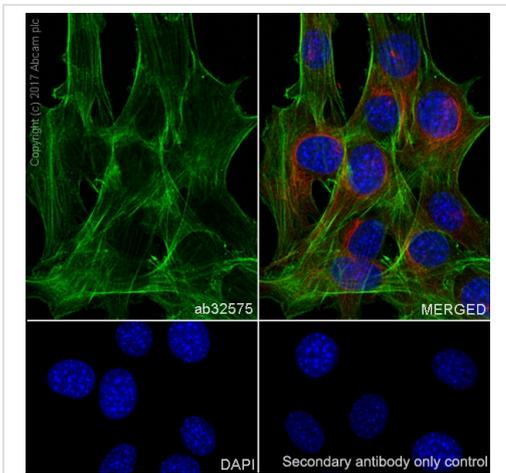


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha smooth muscle Actin antibody [E184]

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse smooth muscle tissue labeling alpha smooth muscle Actin with purified [ab32575](#) at a dilution of 1/200. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. [ab97051](#), an HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500).

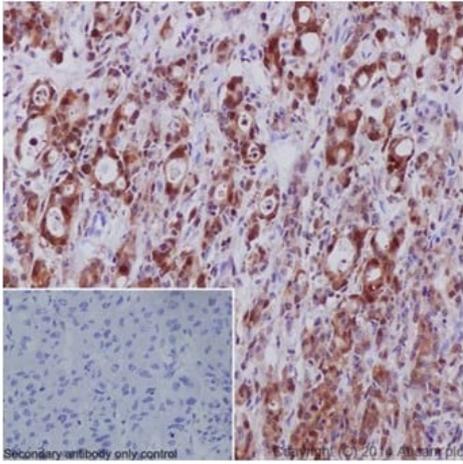
Negative control using PBS instead of primary antibody.

Counterstained with hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-alpha smooth muscle Actin antibody [E184]

Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3(Mouse embryonic fibroblast) cells labeling alpha smooth muscle Actin with purified [ab32575](#) at 1/500 dilution (5.2  $\mu\text{g/ml}$ ). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5  $\mu\text{g/ml}$ ). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/1000 dilution (2  $\mu\text{g/ml}$ ) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

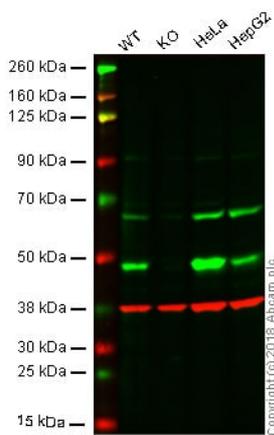


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100A4 antibody [EPR14639(2)]

Immunohistochemical analysis of paraffin-embedded Human gastric carcinoma tissue labeling S100A4 using [ab197896](#) at 1/2000 dilution. Goat Anti-Rabbit IgG H&L (HRP) [ab97051](#) was used as a secondary antibody at 1/500 dilution. Cells were counterstained with Hematoxylin.

Inset image: negative control obtained using PBS instead of [ab197896](#) and secondary antibody only.

Note: Cytoplasm and nuclear staining on human gastric carcinoma tissue was observed.



Western blot - Anti-Hsp47 antibody [EPR4217]

**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

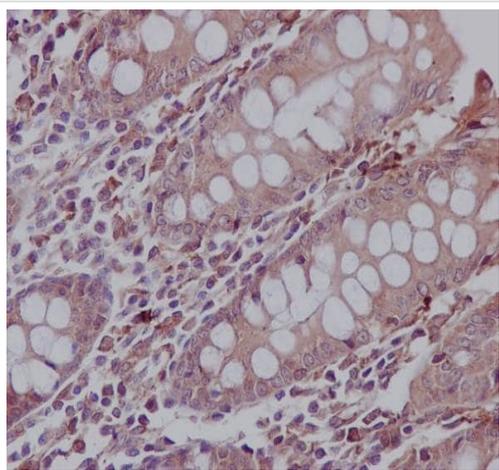
**Lane 2:** Hsp47 knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** HeLa whole cell lysate (20 µg)

**Lane 4:** HepG2 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - Anti-Hsp47 antibody [EPR4217] ([ab109117](#)) observed at 46 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

[ab109117](#) was shown to recognize Hsp47 in wild-type HAP1 cells as signal was lost at the expected MW in Hsp47 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Hsp47 knockout samples were subjected to SDS-PAGE. [ab109117](#) and [ab9484](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp47 antibody

[EPR4217]

[ab109117](#) staining Hsp47 in Human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/300). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin.

### 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

Fibroblast Marker (Vimentin, alpha smooth muscle Actin, Hsp47, S100A4) Antibody Panel - Human, Mouse (ab254015)

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

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