


Product datasheet

Anti-SFRP4 antibody [EPR9389] ab154167

Recombinant RabMAb

★★★★★ 1 Abreviews 15 References 10 Images

Overview

| | |
|---------------------|---|
| Product name | Anti-SFRP4 antibody [EPR9389] |
| Description | Rabbit monoclonal [EPR9389] to SFRP4 |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, IHC-P, Flow Cyt (Intra), ICC/IF Unsuitable for: IP |
| Species reactivity | Reacts with: Mouse, Human Predicted to work with: Rat  |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | Human ovary cancer, uterus cancer, MCF7 and 293T lysates; Human colon tissue, Human ovarian carcinoma tissue. ICC/IF: A549 cells, RAW264.7 cells. WB: Human ovary cancer tissue lysate, MCF7, THP-1 cell lysate, Mouse ovary tissue lysate, bEnd.3, HC11, Raw 264.7 cell lysate. |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> |

Properties

| | |
|----------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at -20°C. |
| Storage buffer | pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |

| | |
|--------------|---------|
| Clone number | EPR9389 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab154167 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

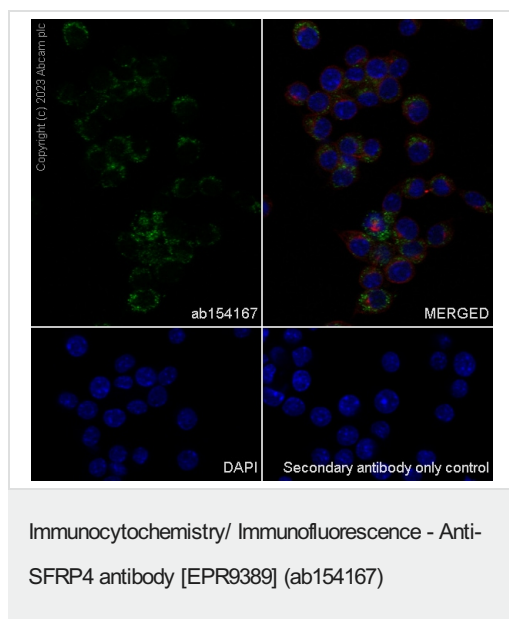
| Application | Abreviews | Notes |
|------------------|-----------|---|
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 40 kDa. |
| IHC-P | ★★★★★ (1) | 1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. |
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |
| ICC/IF | | Use at an assay dependent concentration. |

Application notes Is unsuitable for IP.

Target

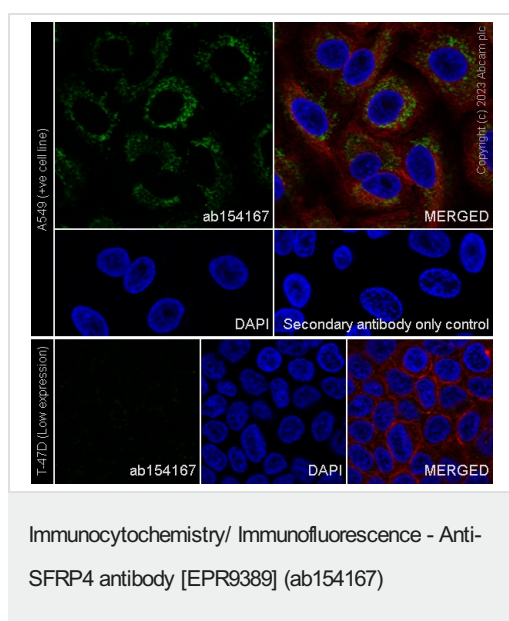
| | |
|------------------------------|--|
| Function | Soluble frizzled-related proteins (sFRPS) function as modulators of Wnt signaling through direct interaction with Wnts. They have a role in regulating cell growth and differentiation in specific cell types. SFRP4 may act as a regulator of adult uterine morphology and function. Increases apoptosis during ovulation possibly through modulation of FZ1/FZ4/WNT4 signaling (By similarity). Has phosphaturic effects by specifically inhibiting sodium-dependent phosphate uptake. |
| Tissue specificity | Expressed in mesenchymal cells. Highly expressed in the stroma of proliferative endometrium. Expressed in cardiomyocytes. Shows moderate to strong expression in ovarian tumors with expression increasing as the tumor stage increases. In ovarian tumors, expression levels are inversely correlated with expression of CTNNB1 (at protein level). |
| Sequence similarities | Belongs to the secreted frizzled-related protein (sFRP) family. Contains 1 FZ (frizzled) domain. Contains 1 NTR domain. |
| Domain | The FZ domain is involved in binding with Wnt ligands. |
| Cellular localization | Secreted. Cytoplasmic in ovarian tumor cells. |

Images



Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) cells labelling SFRP4 with ab154167 at 1/200 (6.805 µg/ml) dilution followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody used at 1/1000 diluting (2 µg/ml) (Green). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 µg/ml) dilution (Red). The Nuclear counterstain was (Blue).

Confocal image showing positive staining in RAW 264.7 cell line. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

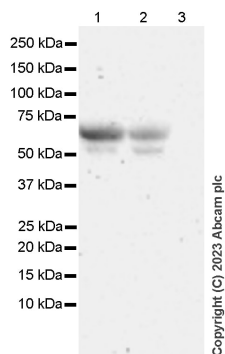


Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A549 (human lung carcinoma epithelial cell) cells labelling SFRP4 with ab154167 at 1/500 (2.722 µg/ml) dilution followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody used at 1/1000 diluting (2 µg/ml)(Green). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 µg/ml) dilution (Red). The Nuclear counterstain was (Blue).

Confocal image showing positive staining in A549 cell line.

Negative control: T-47D.

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



Western blot - Anti-SFRP4 antibody [EPR9389]
(ab154167)

All lanes : Anti-SFRP4 antibody [EPR9389] (ab154167) at 1/1000 dilution

Lane 1 : Raw 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) cell culture supernatant at 10 μ l

Lane 2 : THP-1 (human monocytic leukemia monocyte) cell culture supernatant at 10 μ l

Lane 3 : Blank control

Secondary

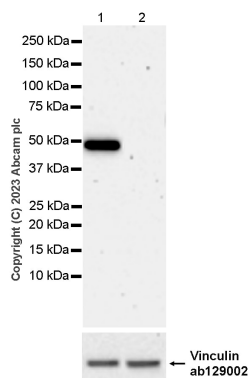
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 40 kDa

Observed band size: 60 kDa

Exposure time: 180 seconds

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



Western blot - Anti-SFRP4 antibody [EPR9389]
(ab154167)

All lanes : Anti-SFRP4 antibody [EPR9389] (ab154167) at 1/1000 dilution

Lane 1 : A549 (human lung carcinoma epithelial cell) while cell lysate

Lane 2 : T-47D (human ductal breast epithelial tumor epithelial cell) while cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 40 kDa

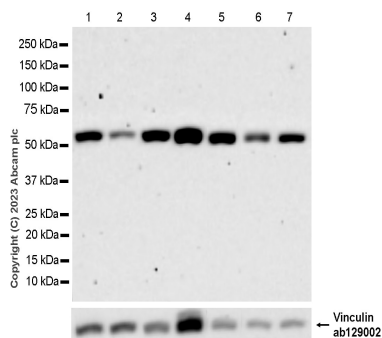
Observed band size: 50 kDa

Exposure time: 180 seconds

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

Negative control: T-47D.

In Western blot, anti-Vinculin antibody ([ab129002](#)) staining at 1/10,000 dilution.



Western blot - Anti-SFRP4 antibody [EPR9389]
(ab154167)

All lanes : Anti-SFRP4 antibody [EPR9389] (ab154167) at 1/1000 dilution

Lane 1 : Human ovary cancer tissue lysate

Lane 2 : MCF7 (human breast adenocarcinoma epithelial cell) while cell lysate

Lane 3 : THP-1 (human monocytic leukemia monocyte) while cell lysate

Lane 4 : Mouse ovary tissue lysate

Lane 5 : bEnd.3 (mouse brain endothelial cell) while cell lysate

Lane 6 : HC11 (mouse mammary gland epithelial cell) while cell lysate

Lane 7 : Raw 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) while cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

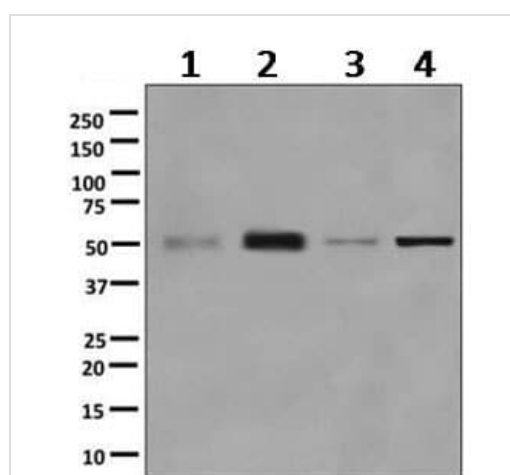
Predicted band size: 40 kDa

Observed band size: 50 kDa

Exposure time: 180 seconds

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

In Western blot, anti-Vinculin antibody ([ab129002](#)) staining at 1/10,000 dilution.



Western blot - Anti-SFRP4 antibody [EPR9389] ([ab154167](#))

All lanes : Anti-SFRP4 antibody [EPR9389] ([ab154167](#)) at 1/1000 dilution

Lane 1 : Human ovary cancer lysate

Lane 2 : Human uterus cancer lysate

Lane 3 : MCF7 lysate

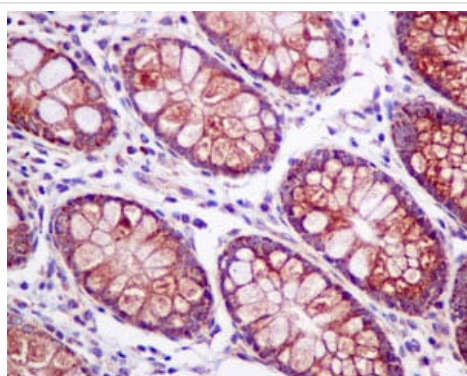
Lane 4 : 293T lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

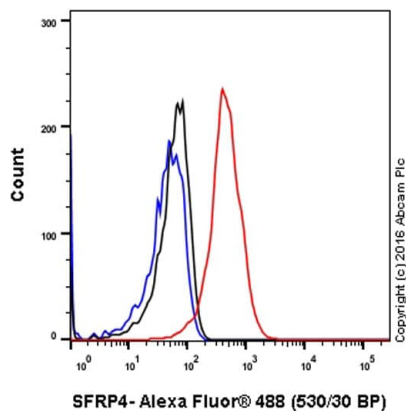
Predicted band size: 40 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SFRP4 antibody [EPR9389] ([ab154167](#))

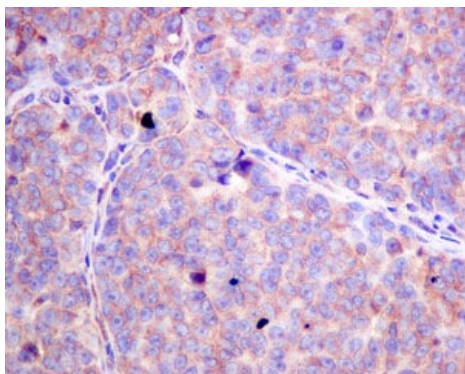
Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling SFRP4 with [ab154167](#) at 1/50 dilution.

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



Flow Cytometry (Intracellular) - Anti-SFRP4 antibody
[EPR9389] (ab154167)

Intracellular Flow Cytometry analysis of MCF-7 (human breast carcinoma) cells labeling SFRP4 with unpurified ab154167 at 1/130 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SFRP4 antibody
[EPR9389] (ab154167)

Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labeling SFRP4 with ab154167 at 1/50 dilution.

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

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-SFRP4 antibody [EPR9389] (ab154167)

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