abcam

ab267466

Anti-SFRP1 antibody [EPR23092-253]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23092-253
Purification technique	Affinity purification Protein A
Concentration	0.497 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Human

Dilution info	1/30
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information SFRP1

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. SFRP1 decreases intracellular beta-catenin levels (By similarity). Has antiproliferative effects on vascular cells, in vitro and in vivo, and can induce, in vivo, an angiogenic response. In vascular cell cycle, delays the G1 phase and entry into the S phase (By similarity). In kidney development, inhibits tubule formation and bud growth in metanephroi (By similarity). Inhibits WNT1/WNT4-mediated TCF-dependent transcription.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SFRP1 also known as Secreted Frizzled-Related Protein 1 is a protein that functions mechanically by modulating Wnt signaling pathways. This protein weighs approximately 35 kiloDaltons. SFRP1 acts as a modulator by binding to Wnt ligands preventing them from interacting with their cell surface receptors. It is expressed in various tissues including the kidney retina lung and heart.
Biological function summary	The secreted glycoprotein SFRP1 plays a role in cellular processes such as cell growth differentiation and apoptosis. As a member of the soluble frizzled-related proteins it acts to inhibit Wnt signaling pathways which are critical in maintaining cellular homeostasis. SFRP1 commonly interacts in the extracellular environment where it forms part of a regulatory complex that includes other extracellular matrix components to achieve its function.
Pathways	The role SFRP1 plays is important in the Wnt signaling pathway and the regulation of β-catenin activity. These pathways are involved in embryonic development and tissue regeneration. SFRP1 directly interacts with other proteins like frizzled receptors and Wnt ligands to maintain balance in signaling. This modulation further influences gene expression patterns and cellular behavior.
Associated diseases and disorders	An imbalance or alteration in SFRP1 activity is associated with cancer and osteoporosis. Its underexpression or lack of function can lead to abnormal cellular proliferation which is linked to tumorogenesis. In cancer SFRP1's interaction with the Wnt signaling pathway and its related proteins such as β-catenin highlights its

role in maintaining normal cell function. Abnormal regulation also impacts bone density where SFRP1's regulatory function on Wnt S signaling may affect bone formation and lead to osteoporosis.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

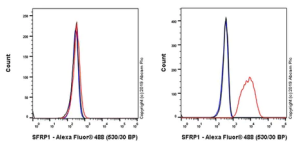
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

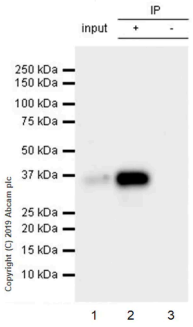
7 product images



Flow Cytometry (Intracellular) - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 Flow Cytometry (Intracellular) staining using rabbit Anti-SFRP1 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized MCF7 (Human breast adenocarcinoma epithelial cell, Left) treated with 5µg/ml BFA for 2h / SK-MEL-28 (Human malignant melanoma, Right) treated with 5µg/ml BFA for 2h labeling SFRP1 with ab267466 at 1/500 (Red) compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 was used as the secondary antibody.
Negative control: MCF7 (PMID: 14968126).



Immunoprecipitation - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 was immunoprecipitated from 0.35 mg human kidney lysate with ab267466 at 1/30 dilution (2µg in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab267466 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Human kidney lysate 10µg

Lane 2: ab267466 IP in human kidney lysate

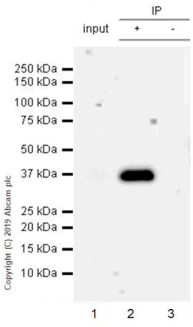
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab267466 in human kidney lysate

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

Exposure time: 30 seconds.

All lanes:
Immunoprecipitation - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

Predicted band size: 35 kDa



Immunoprecipitation - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 was immunoprecipitated from 0.35 mg mouse kidney lysate with ab267466 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab267466 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Mouse kidney lysate 10µg

Lane 2: ab267466 IP in mouse kidney lysate

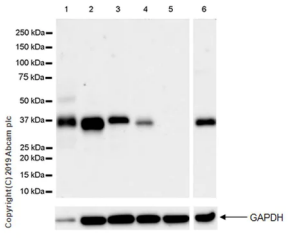
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab267466 in mouse kidney lysate

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

Exposure time: 3 mins.

All lanes:
Immunoprecipitation - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

Predicted band size: 35 kDa



Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 Western blot staining using rabbit Anti-SFRP1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 22927647, 11741940).

Negative control: MCF7 (PMID:15289865).

Exposure time: 92 seconds.

All lanes:
Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466) at 1/1000 dilution

Lane 1:

Human breast lysate at 20 µg

Lane 2:
Human kidney lysate at 20 µg

Lane 3:
Human heart lysate at 20 µg

Lane 4:
SK-MEL-28 (human malignant melanoma) whole cell lysate at 20 µg

Lane 5:
MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 6:
Mouse kidney lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 35 kDa

Observed band size: 35 kDa



Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 Western blot staining using rabbit Anti-SFRP1 antibody

ab267466 was shown to react with SFRP1 in wild-type A549 cells in Western blot with loss of signal observed in SFRP1 knockout cell line ab277906. Wild-type A549 and SFRP1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with ab267466 overnight at 4 °C at a 1/1000 dilution. Blots were incubated with secondary antibodies at 0.2ug/mL before imaging.

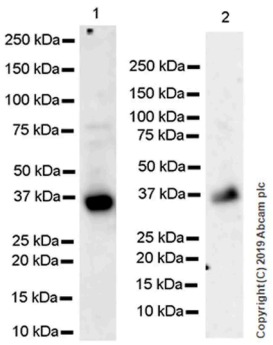
These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.

All lanes:
Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466) at 1/1000 dilution

Lanes 1 - 2:
Western blot - Human SFRP1 knockout A549 cell line (ab277906)

Lane 1:
Wild-type A549 lysate at 20 µg

Lane 2:
SFRP1 Knockout A549 lysate at 20 µg



Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

SFRP1 Western blot staining using rabbit Anti-SFRP1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 22927647, 11741940).

Exposure time: 92 seconds.

All lanes:
Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466) at 1/1000 dilution

Lane 1:
Rat kidney lysate at 20 µg

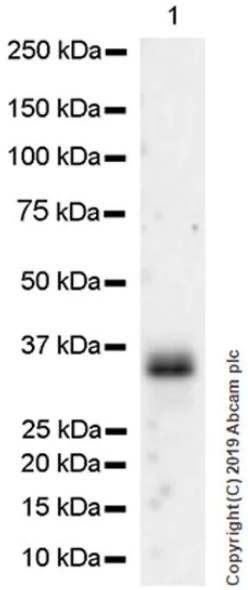
Lane 2:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 35 kDa

Observed band size: 35 kDa



Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Exposure time: 114 seconds.

All lanes:
Western blot - Anti-SFRP1 antibody [EPR23092-253] (ab267466) at 1/5000 dilution

All lanes:
Recombinant human sFRP-1 protein, 20 ng

Secondary

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

Predicted band size: 35 kDa

Observed band size: 35 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.