


## Product datasheet

### Anti-Caveolin-1 antibody [SP43] - C-terminal ab227636

Recombinant RabMAb

[13 Images](#)

#### Overview

<b>Product name</b>	Anti-Caveolin-1 antibody [SP43] - C-terminal
<b>Description</b>	Rabbit monoclonal [SP43] to Caveolin-1 - C-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rabbit, Cow, Dog, Pig 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human lung carcinoma, placenta, liver hepatocellular carcinoma, lung, skeletal muscle, liver, cerebellum, cerebral cortex, colon and HK lymphoma tissues
<b>General notes</b>	<b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b>

#### 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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
<b>Purity</b>	Protein A/G purified
<b>Purification notes</b>	Purified from TCS by protein A/G.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SP43
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab227636 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
IHC-P		1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Primary antibody incubation for 30 minutes at room temperature.

## Target

### Function

May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway.

### Tissue specificity

Expressed in muscle and lung, less so in liver, brain and kidney.

### Involvement in disease

Defects in CAV1 are the cause of congenital generalized lipodystrophy type 3 (CGL3) [MIM:612526]; also called Berardinelli-Seip congenital lipodystrophy type 3 (BSCL3). Congenital generalized lipodystrophies are autosomal recessive disorders characterized by a near absence of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and early onset of diabetes.

### Sequence similarities

Belongs to the caveolin family.

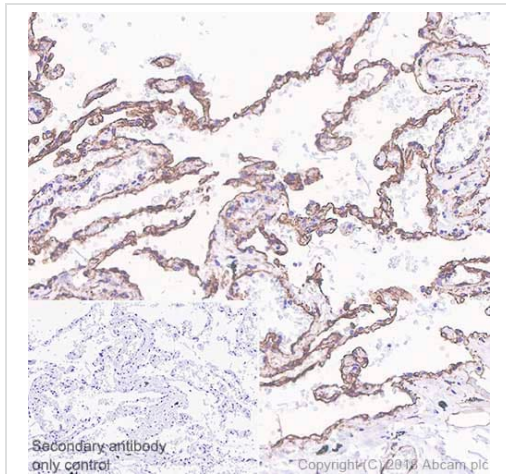
### Post-translational modifications

The initiator methionine for isoform Beta is removed during or just after translation. The new N-terminal amino acid is then N-acetylated.

### Cellular localization

Golgi apparatus membrane. Cell membrane. Membrane > caveola. Membrane raft. Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.

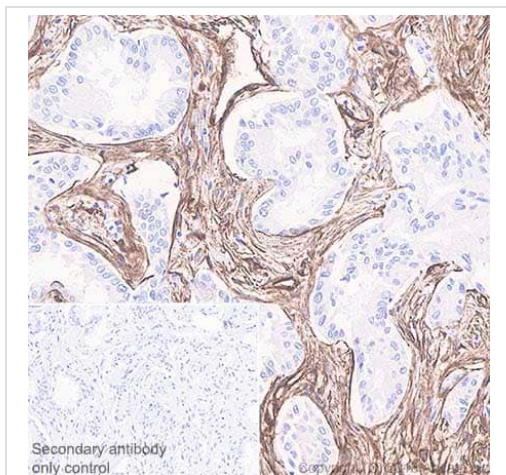
## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung tissue sections labeling Caveolin-1 with ab227636 at 1/50 dilution (4.70 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on human lung, performed on a Leica Biosystems BOND™ RX instrument.

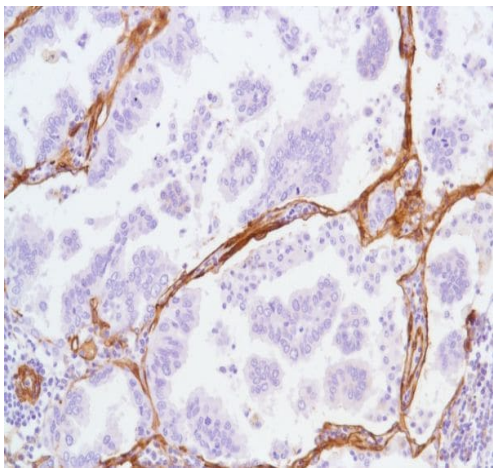
The section was incubated with ab227636 for 30 mins at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

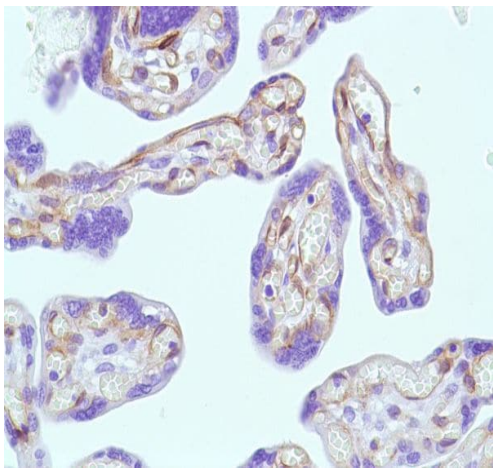
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling Caveolin-1 with ab227636 at 1/50 dilution (4.70 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the stromal cells in the human lung carcinoma, performed on a Leica Biosystems BOND™ RX instrument.

The section was incubated with ab227636 for 30 mins at room temperature.



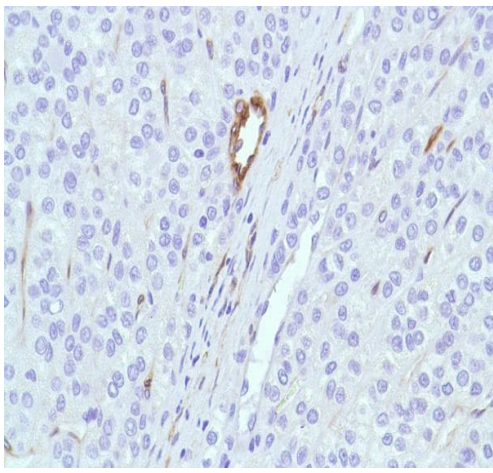
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
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Formalin-fixed, paraffin-embedded human lung carcinoma tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



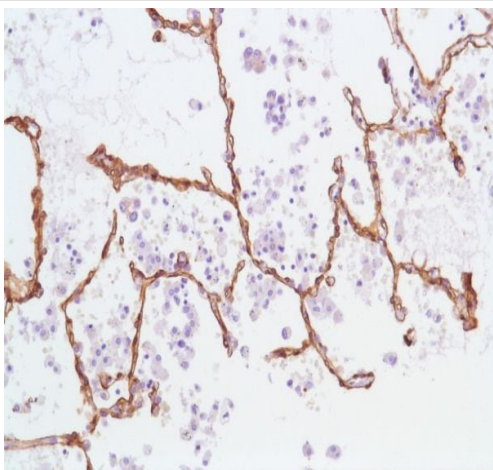
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
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Formalin-fixed, paraffin-embedded human placenta tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
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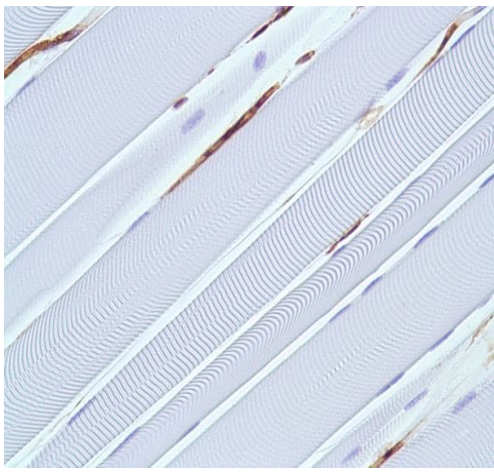
Formalin-fixed, paraffin-embedded human liver hepatocellular carcinoma tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
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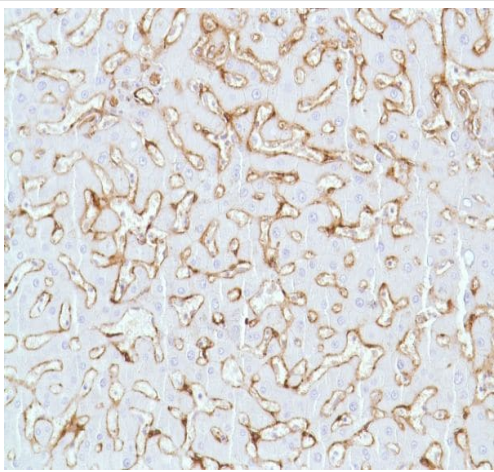
Formalin-fixed, paraffin-embedded human lung tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.





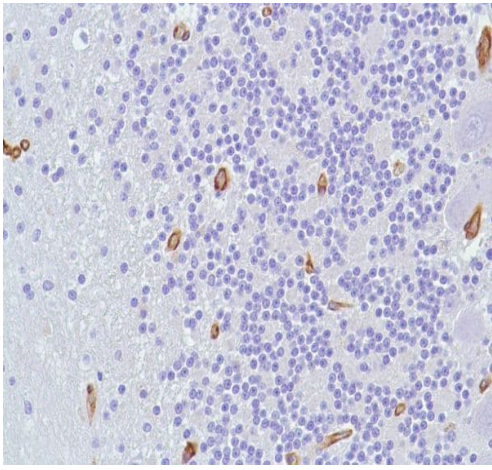
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Formalin-fixed, paraffin-embedded human skeletal muscle tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



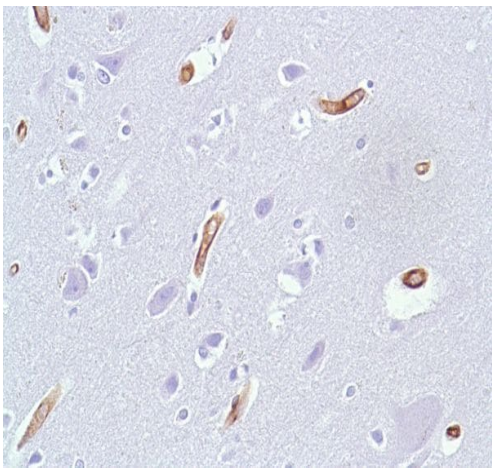
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Formalin-fixed, paraffin-embedded human liver tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



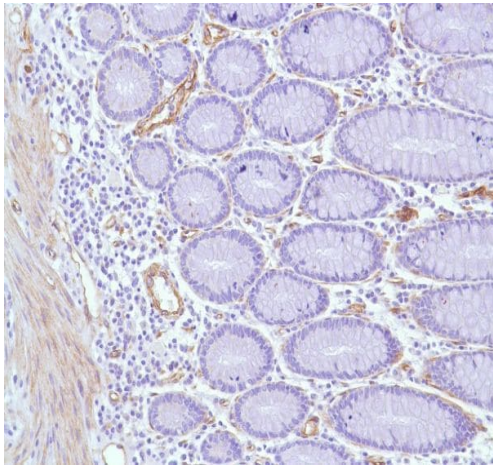
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
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Formalin-fixed, paraffin-embedded human cerebellum tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



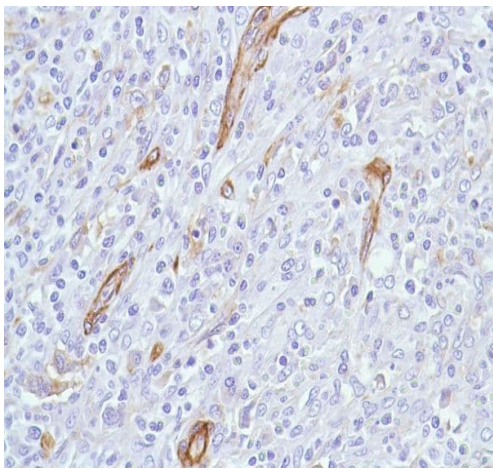
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Formalin-fixed, paraffin-embedded human cerebral cortex tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Formalin-fixed, paraffin-embedded human colon tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody  
[SP43] - C-terminal (ab227636)

Formalin-fixed, paraffin-embedded human HK lymphoma tissue stained for Caveolin-1 using ab227636 at 1/50 dilution in immunohistochemical analysis.



### 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-Caveolin-1 antibody [SP43] - C-terminal  
(ab227636)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

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- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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