

## Basic Information

<b>Product Name</b>	Anti-Caveolin-1/CAV1 Antibody	
<b>Gene Name</b>	CAV1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human Caveolin-1, different from the related rat and mouse sequences by three amino acids.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	22 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

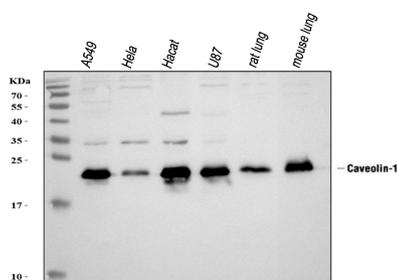
CAV1, Caveolin-1, is a protein that in humans is encoded by the CAV1 gene. The CAV1 gene is mapped to 7q31.2. The scaffolding protein encoded by this gene is the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 MAP kinase cascade. CAV1 and CAV2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. By using alternative initiation codons in the

same reading frame, two isoforms(alpha and beta) are encoded by a single transcript from this gene.

## Reference

Anti-Caveolin-1/CAV1 Antibody 被引用在1文献中。

## Selected Validation Data



Western blot analysis of anti- Caveolin-1/CAV1 antibody (PA1514).

The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,

Lane 2: human Hela whole cell lysates,

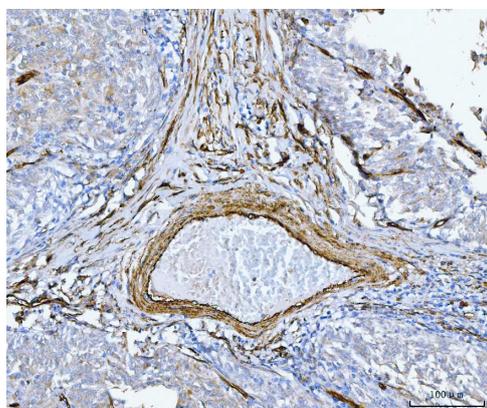
Lane 3: human Hacat whole cell lysates,

Lane 4: human U-87 MG whole cell lysates,

Lane 5: rat lung tissue lysates,

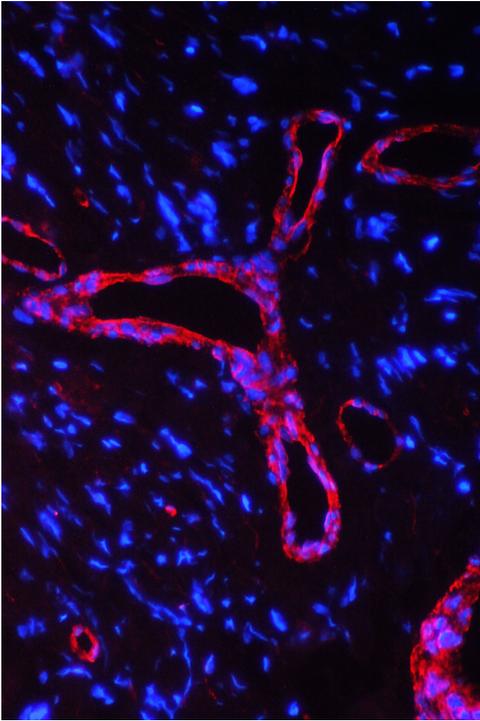
Lane 6: mouse lung tissue lysates.

Use rabbit anti- Caveolin-1/CAV1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for Caveolin-1/CAV1 at approximately 22KD. The expected band size for Caveolin-1/CAV1 is at 20KD.

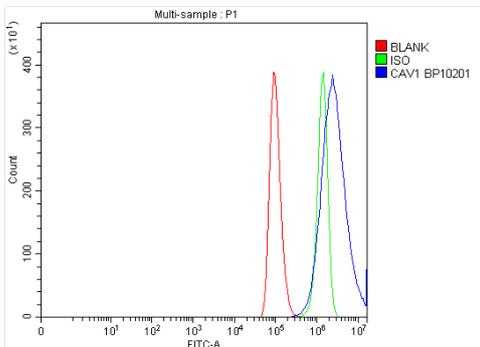


IHC analysis of Caveolin-1/CAV1 using anti-Caveolin-1/CAV1 antibody (PA1514).

Caveolin-1/CAV1 was detected in a paraffin-embedded section of human melanoma tissue. The tissue section was incubated with rabbit anti-Caveolin-1/CAV1 Antibody (PA1514) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- Caveolin-1/CAV1 antibody (PA1514). detected in paraffin-embedded section of human glioma tissue. The tissue section were stained using the Fluoro550-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1135) and counterstained with DAPI (blue).



Flow Cytometry analysis of A549 cells using anti-Caveolin-1/CAV1 antibody (PA1514).

Overlay histogram showing A549 cells stained with PA1514 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caveolin-1/CAV1 Antibody (PA1514) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.