

### Caveolin-1 Polyclonal Antibody

**Catalog # AP68869** 

#### **Specification**

# Caveolin-1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF
003135
Human, Mouse, Rat
Rabbit
Polyclonal

## Caveolin-1 Polyclonal Antibody - Additional Information

Gene ID 857

**Other Names** 

CAV1; CAV; Caveolin-1

**Dilution** 

WB~~WB 1:500-2000, IF 1:50-300, IHC 1:50-300

IHC-P~~N/A

IF~~WB 1:500-2000, IF 1:50-300, IHC 1:50-300

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** 

-20°C

### Caveolin-1 Polyclonal Antibody - Protein Information

Name CAV1

Synonyms CAV

#### **Function**

May act as a scaffolding protein within caveolar membranes (PubMed:<a href="http://www.uniprot.org/citations/11751885" target="\_blank">11751885</a>). Forms a stable heterooligomeric complex with CAV2 that targets to lipid rafts and drives caveolae formation. Mediates the recruitment of CAVIN proteins (CAVIN1/2/3/4) to the caveolae (PubMed:<a href="http://www.uniprot.org/citations/19262564" target="\_blank">19262564</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/17287217" target="\_blank">17287217</a>). Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway (By similarity). Negatively regulates TGFB1-mediated activation of SMAD2/3 by mediating the internalization of TGFBR1 from



membrane rafts leading to its subsequent degradation (PubMed:<a href="http://www.uniprot.org/citations/25893292" target="\_blank">25893292</a>). Binds 20(S)-hydroxycholesterol (20(S)-OHC) (By similarity).

#### **Cellular Location**

Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Membrane raft. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:P33724} Note=Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae

#### **Tissue Location**

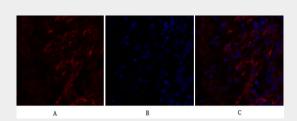
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

### Caveolin-1 Polyclonal Antibody - Protocols

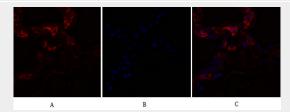
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Caveolin-1 Polyclonal Antibody - Images

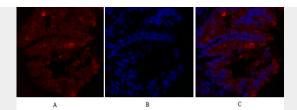


Immunofluorescence analysis of human-lung tissue. 1,Caveolin-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

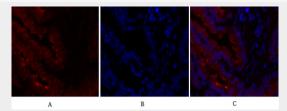


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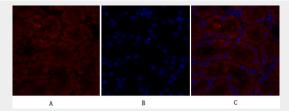




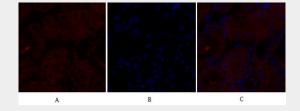
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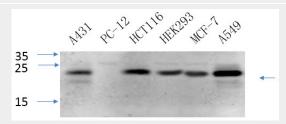
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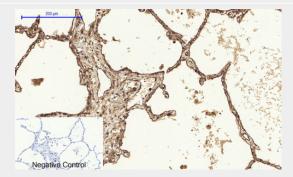
Western Blot analysis of various cells using primary antibody diluted at 1:1000(4°C overnight).



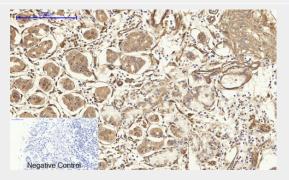
Secondary antibody $\square$ Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute $^{\text{\tiny M}}$  Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Caveolin-1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

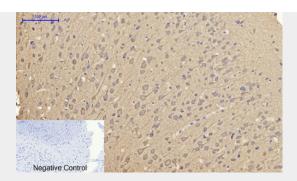


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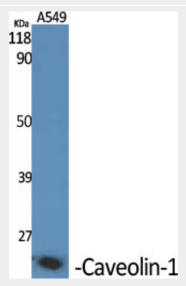


Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,Caveolin-1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

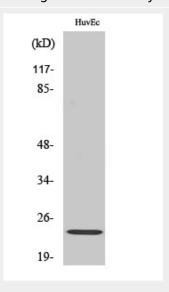




Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,Caveolin-1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of various cells using Caveolin-1 Polyclonal Antibody diluted at 1□1000

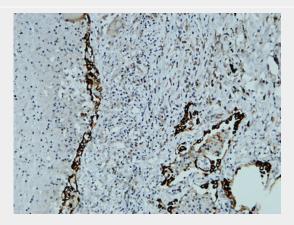


Western Blot analysis of HuvEc cells using Caveolin-1 Polyclonal Antibody diluted at 1□1000

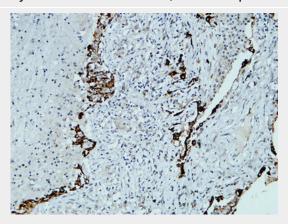
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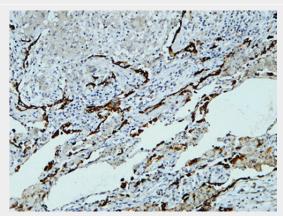
Western blot analysis of various cell Lysate, antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded Human lung. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

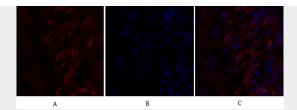


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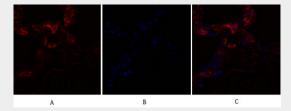


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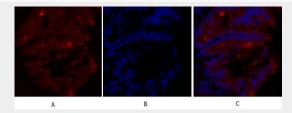




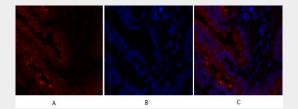
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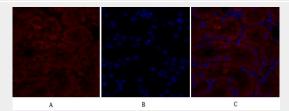
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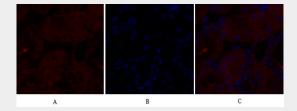
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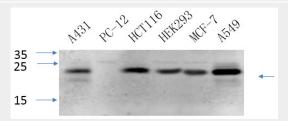
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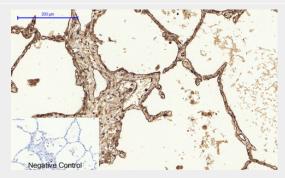
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Western Blot analysis of various cells using primary antibody diluted at  $1:1000(4^{\circ}\text{C} \text{ overnight})$ . Secondary antibody Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000,  $25^{\circ}\text{C}$ , 1 hour). Cell lysate was extracted by Minute Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech, MN, USA).



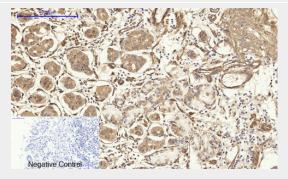
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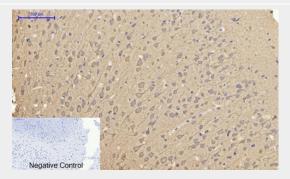
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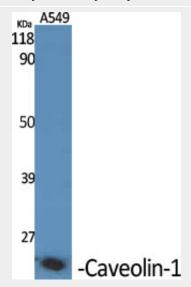
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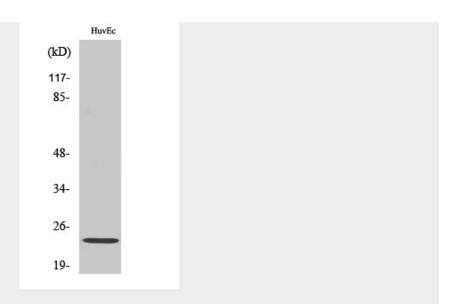


Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,Caveolin-1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of various cells using Caveolin-1 Polyclonal Antibody diluted at 1□1000

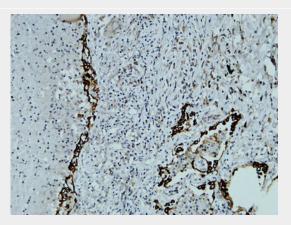




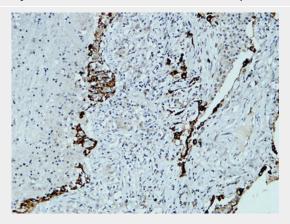
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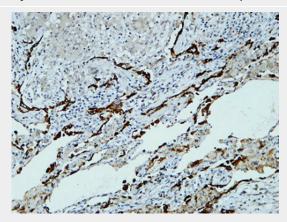
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