

## Caveolin-1 Polyclonal Antibody

**Catalog # AP68869** 

### **Specification**

# Caveolin-1 Polyclonal Antibody - Product Information

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

# Caveolin-1 Polyclonal Antibody - Additional Information

Gene ID 857

Clonality

**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**

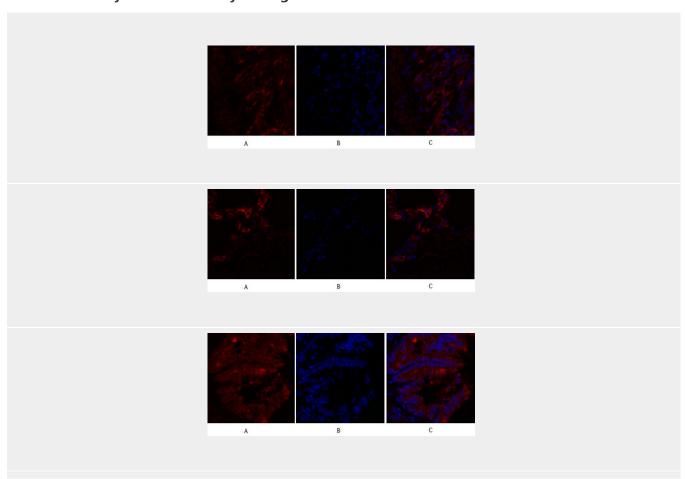
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

# Caveolin-1 Polyclonal Antibody - Protocols

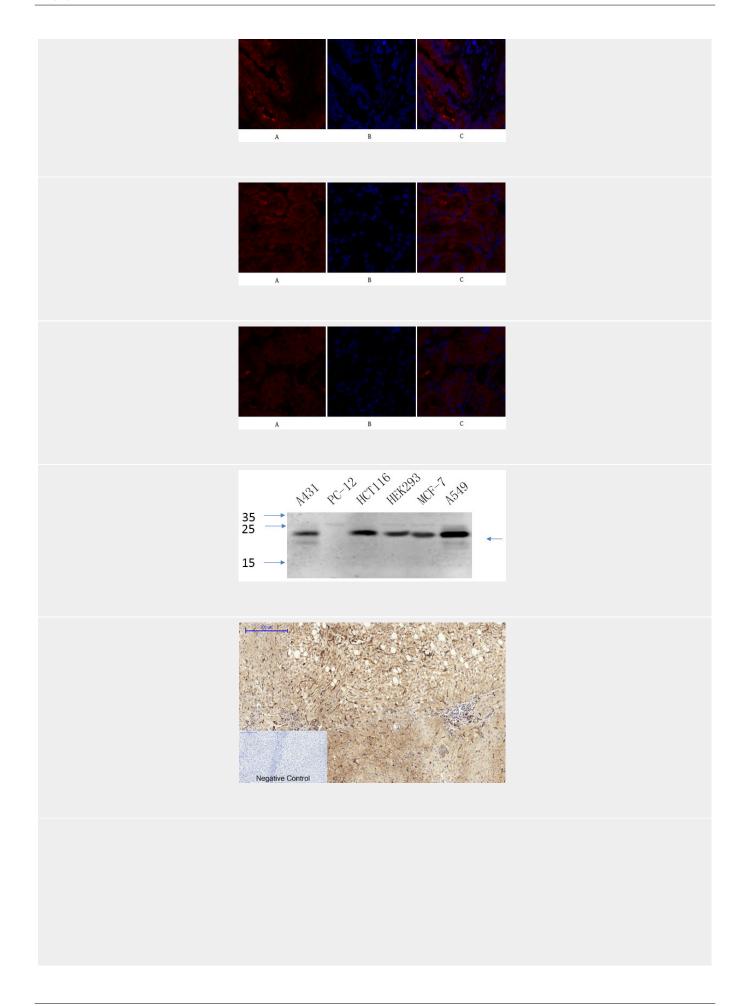
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

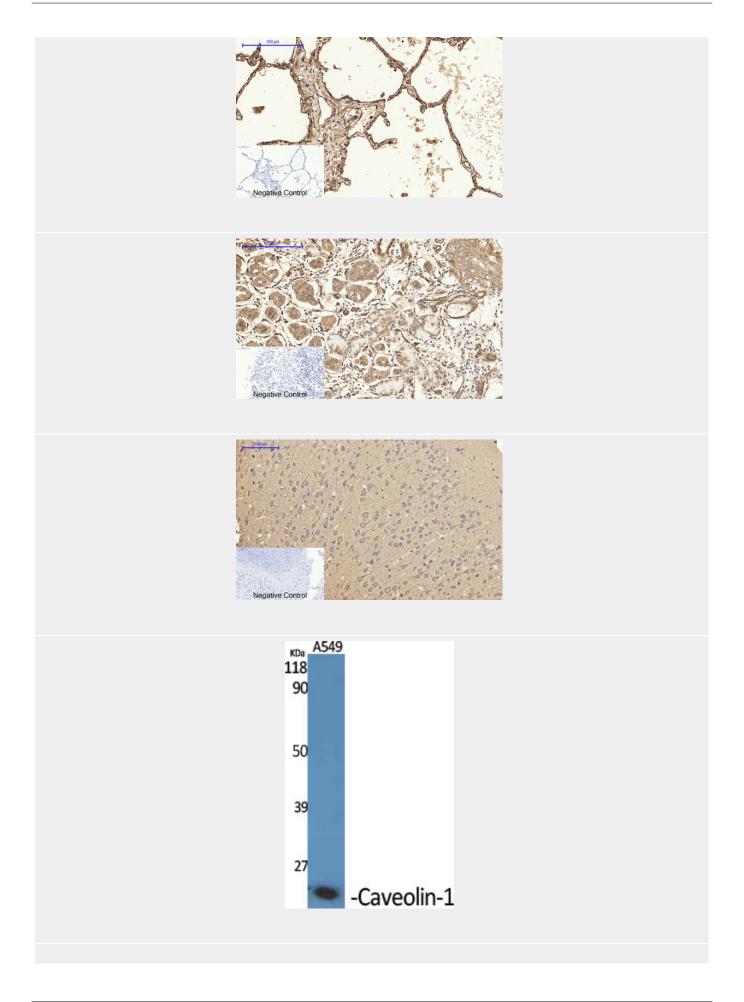
# Caveolin-1 Polyclonal Antibody - Images













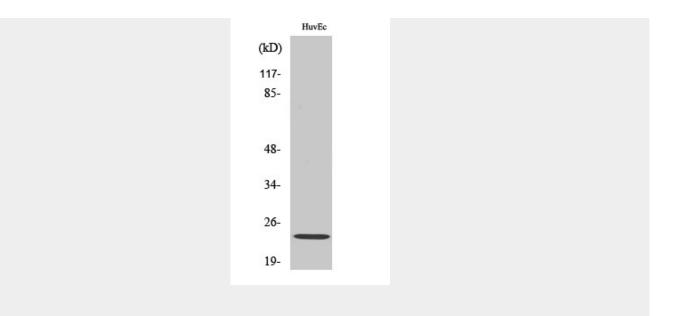
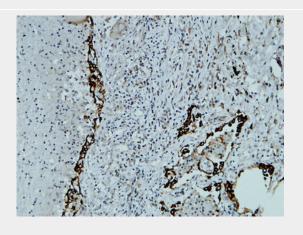
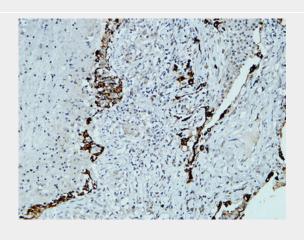
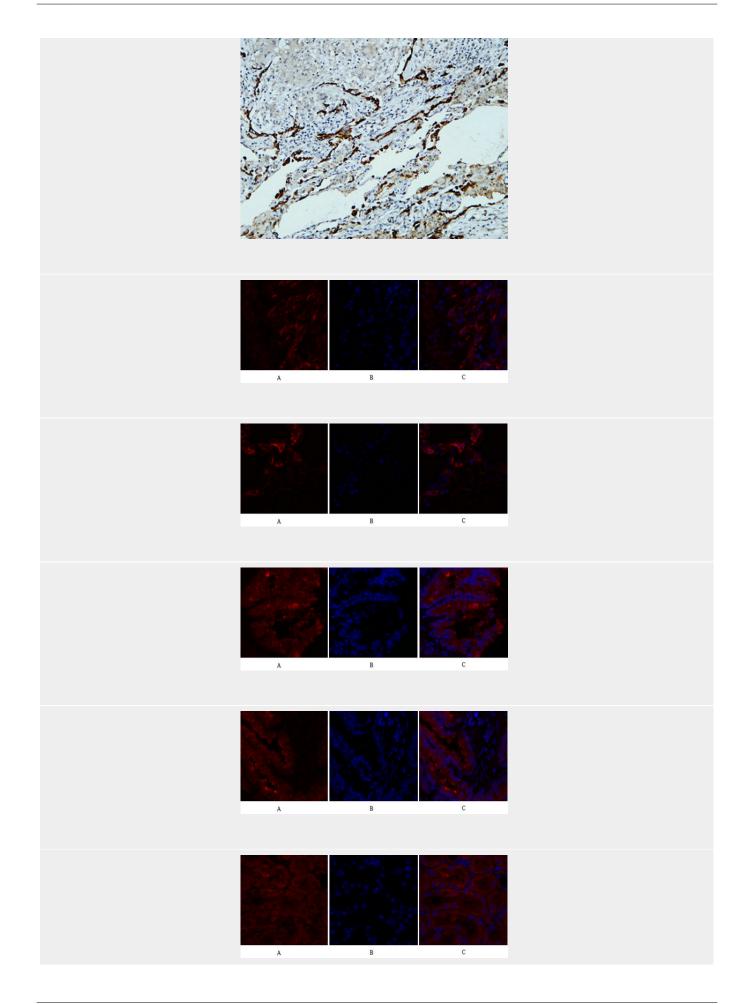


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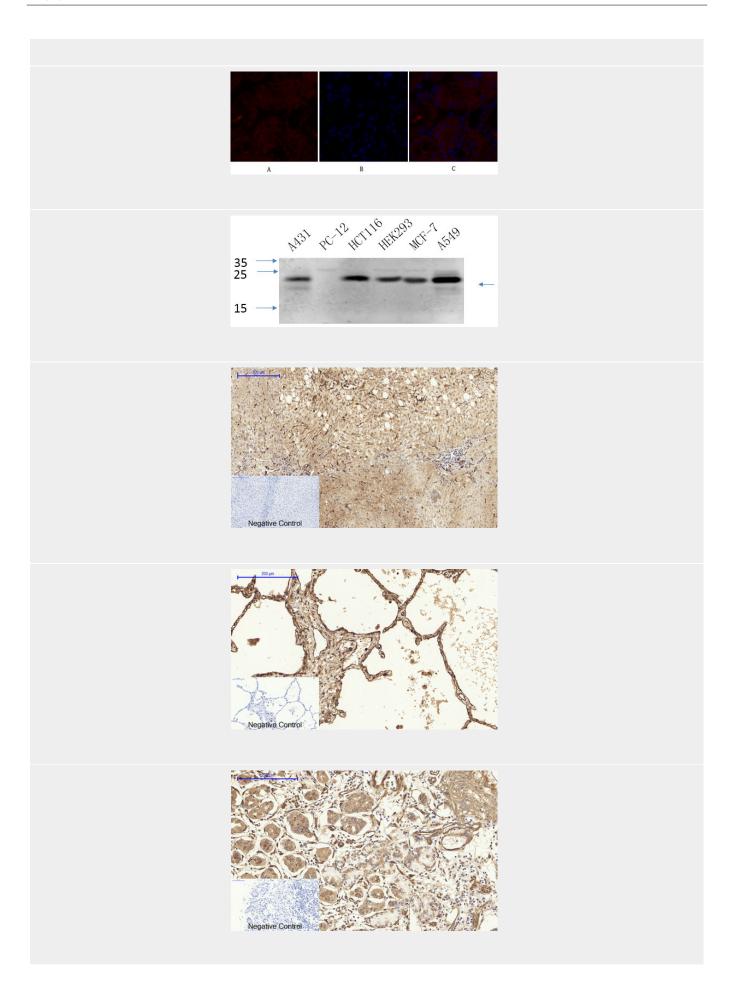




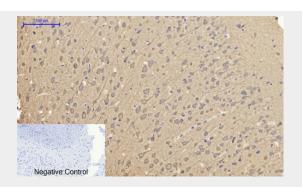


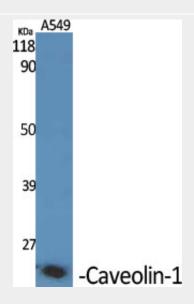












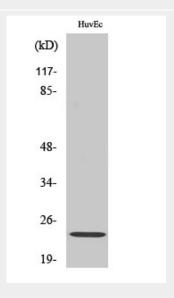
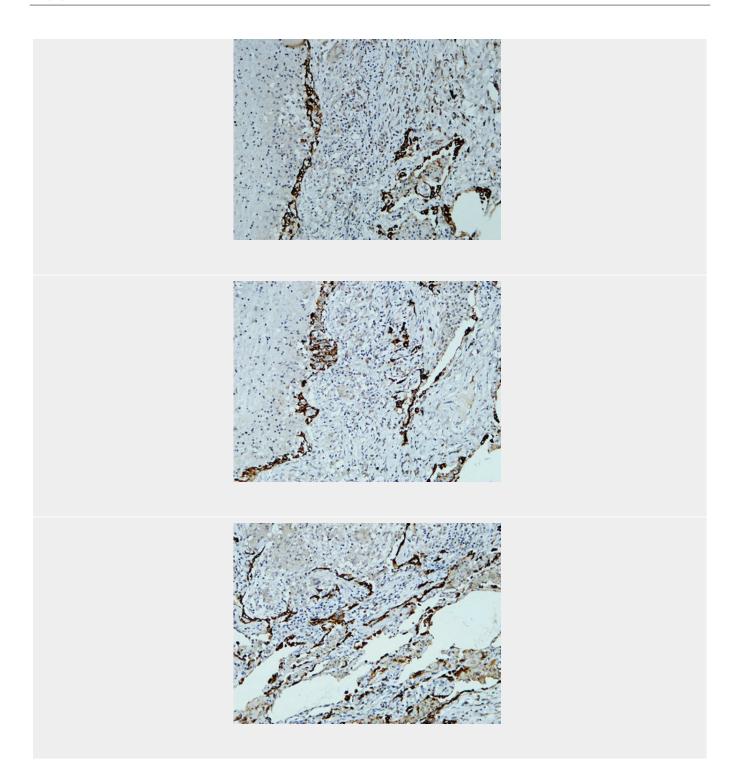


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Caveolin-1 Polyclonal Antibody - Background

May act as a scaffolding protein within caveolar membranes (PubMed:11751885). 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:19262564). 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:17287217). 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:25893292).