

**CAV1 / Caveolin 1 Antibody (N-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10606****Specification**

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**CAV1 / Caveolin 1 Antibody (N-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q03135</a>
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20kDa KDa

**CAV1 / Caveolin 1 Antibody (N-Terminus) - Additional Information****Gene ID** 857**Other Names**

Caveolin-1, CAV1, CAV

**Target/Specificity**

Human CAV1 / Caveolin. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

CAV1 / Caveolin 1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**CAV1 / Caveolin 1 Antibody (N-Terminus) - 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 TGF $\beta$ 1-mediated activation of SMAD2/3 by mediating the internalization of TGF $\beta$ 1 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

#### Volume

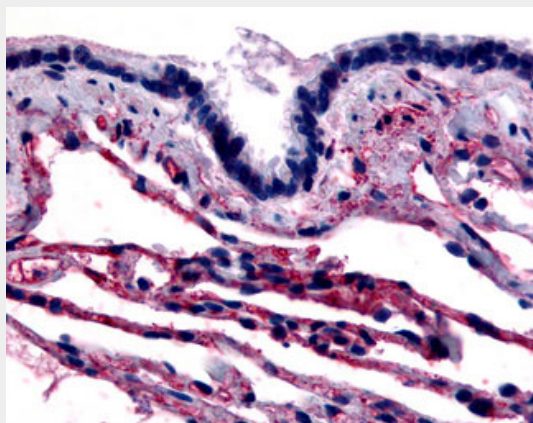
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### CAV1 / Caveolin 1 Antibody (N-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CAV1 / Caveolin 1 Antibody (N-Terminus) - Images



Anti-CAV1 / Caveolin antibody ALS10606 IHC of human respiratory epithelium and alveoli.

### CAV1 / Caveolin 1 Antibody (N-Terminus) - Background

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.

#### **CAV1 / Caveolin 1 Antibody (N-Terminus) - References**

- Glenney J.R. Jr., et al. FEBS Lett. 314:45-48(1992).  
Hurlstone A.F., et al. Oncogene 18:1881-1890(1999).  
Engelman J.A., et al. FEBS Lett. 448:221-230(1999).  
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.  
Vainonen J.P., et al. Biochem. Biophys. Res. Commun. 320:480-486(2004).