

**CAV1 / Caveolin 1 Antibody (N-Terminus)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS16653****Specification**

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

Application	IHC, IF, WB
Primary Accession	<a href="#">O03135</a>
Other Accession	<a href="#">857</a>
Reactivity	Human, Mouse, Dog
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Calculated MW	20472

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

CAV1, Caveolin-1, CGL3, CAV, MSTP085, VIP21, BSCL3

**Target/Specificity**

Detects a band of approximately 25 kDa by Western blot in the following cell lysate: hCat, MDCK and 3T3.

**Reconstitution & Storage**

PBS, 20% glycerol, 0.05% sodium azide. Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

**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:&lt;a href="http://www.uniprot.org/citations/11751885" target="\_blank"&gt;11751885&lt;/a&gt;). 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:&lt;a href="http://www.uniprot.org/citations/19262564" target="\_blank"&gt;19262564&lt;/a&gt;). 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 TGFBI-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

#### Volume

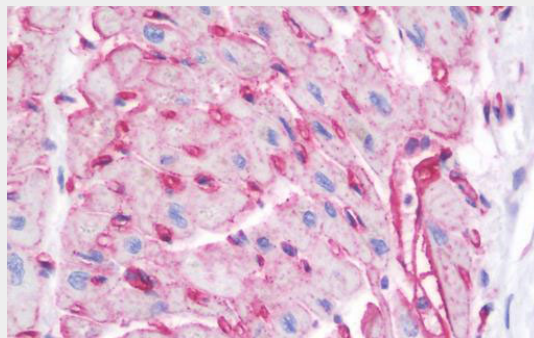
100 µl

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

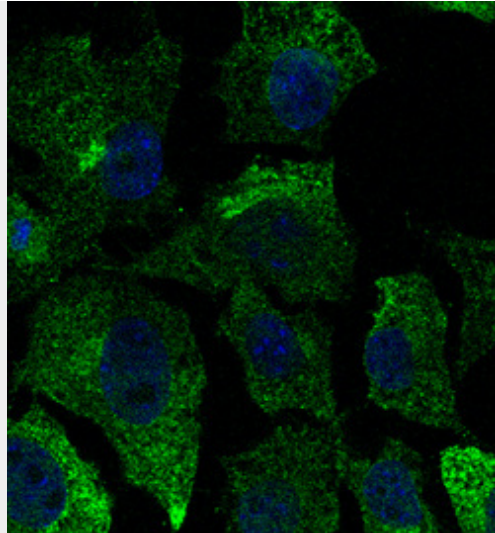
Provided below are standard protocols that you may find useful for product applications.

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

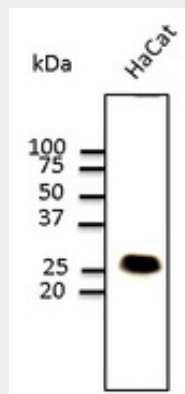
### CAV1 / Caveolin 1 Antibody (N-Terminus) - Images



Anti-CAV1 / Caveolin 1 antibody IHC staining of human heart.



Immunofluorescence - anti-CAV1 antibody - Caveolae Marker in Hepa1-6 cells at 1:50 dilution.



Western blot.

### **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).