10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

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

Application	**WB, IHC-P, IF**
Primary Accession	Q03135
Other Accession	857
Reactivity	**Human, Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**20472**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200**

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: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:<a

href="http://www.uniprot.org/citations/19262564" target="_blank">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). 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

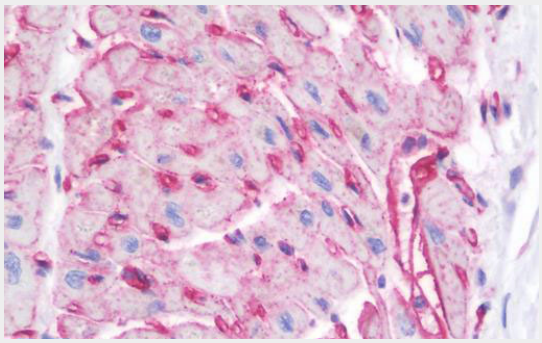
Volume
100 µl

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 Cytomety
- Cell Culture

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



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

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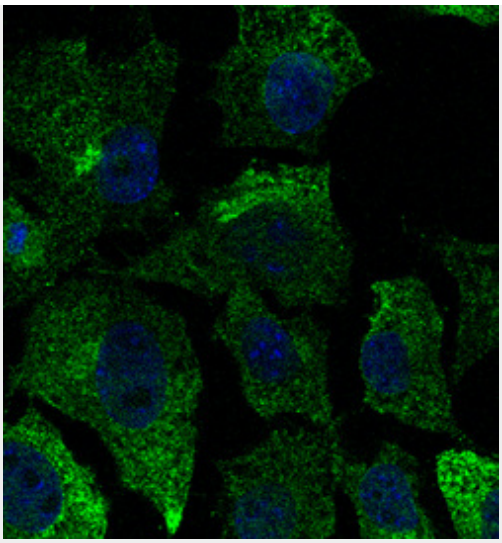
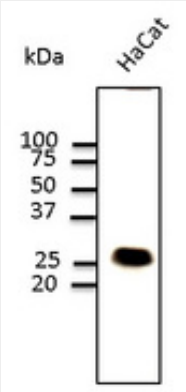


Immunofluorescence - anti-CAV1 antibody - Caveolae Marker in Hepa1-6 cells at 1:50 dilution.



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).