

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

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

Application	IHC, IF, WB
Primary Accession	O03135
Other Accession	857
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: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 TGFBI-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

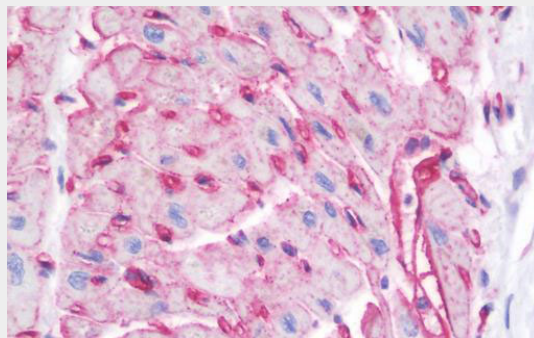
100 µl

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

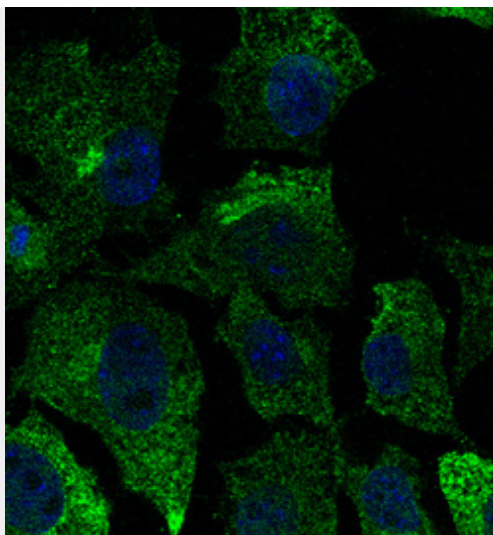
Provided below are standard protocols that you may find useful for product applications.

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

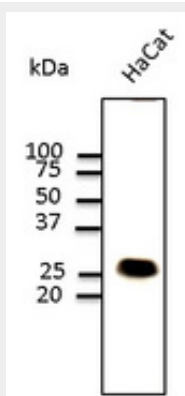
CAV1 / Caveolin 1 Antibody (N-Terminus) - Images



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).
- Kalnina 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).