

CAV1 / Caveolin 1 Antibody (aa129-178)
Rabbit Polyclonal Antibody
Catalog # ALS16134**Specification**

CAV1 / Caveolin 1 Antibody (aa129-178) - Product Information

Application	IHC, IF, WB
Primary Accession	Q03135
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20kDa KDa

CAV1 / Caveolin 1 Antibody (aa129-178) - Additional Information**Gene ID** 857**Other Names**

Caveolin-1, CAV1, CAV

Target/Specificity

Caveolin-1 Antibody detects endogenous levels of total Caveolin-1 protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

CAV1 / Caveolin 1 Antibody (aa129-178) is for research use only and not for use in diagnostic or therapeutic procedures.

CAV1 / Caveolin 1 Antibody (aa129-178) - 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

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

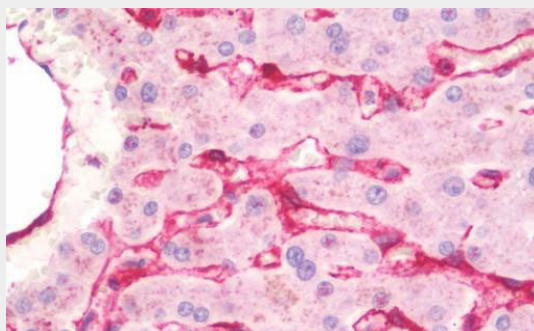
50 µl

CAV1 / Caveolin 1 Antibody (aa129-178) - Protocols

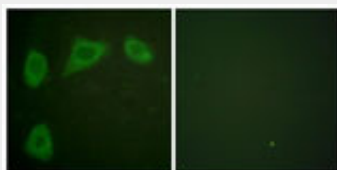
Provided below are standard protocols that you may find useful for product applications.

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

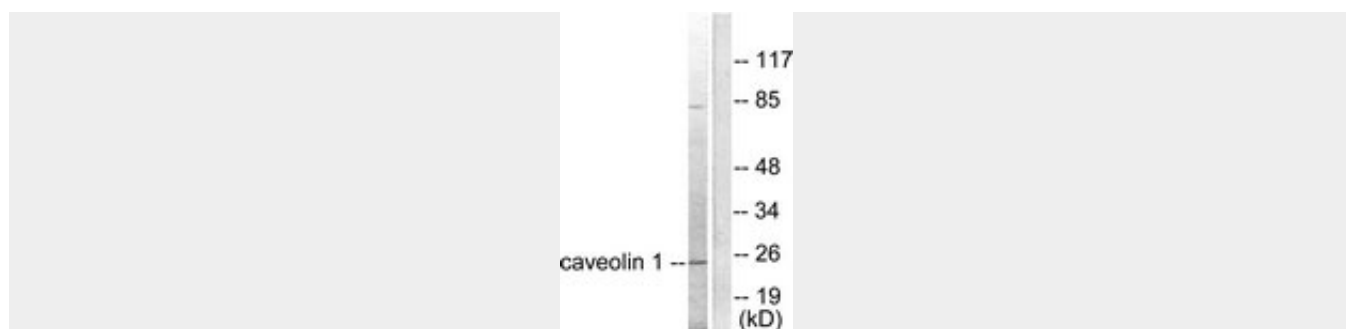
CAV1 / Caveolin 1 Antibody (aa129-178) - Images



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



Immunofluorescence of HUVEC cells, using Caveolin-1 Antibody.



Western blot of extracts from HUVEC cells, using Caveolin-1 Antibody.

CAV1 / Caveolin 1 Antibody (aa129-178) - 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 (aa129-178) - 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).