

Caveolin-1 Antibody
Rabbit mAb
Catalog # AP90088

Specification

Caveolin-1 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	Q03135
Reactivity	Rat
Clonality	Monoclonal
Other Names	
BSCL3; CGL3; caveolin 1, caveolae protein, 22kDa; Caveolin-1; VIP21; CAV; CAV1.	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	20472 Da

Caveolin-1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Caveolin-1
Description	Caveolin-1 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Caveolin-1 Antibody - Protein Information

Name CAV1

Synonyms CAV

Function

May act as a scaffolding protein within caveolar membranes (PubMed:<a

[11751885](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/17287217)). Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway (By similarity). Negatively regulates TGF β 1-mediated activation of SMAD2/3 by mediating the internalization of TGF β 1 from membrane rafts leading to its subsequent degradation (PubMed:[25893292](http://www.uniprot.org/citations/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

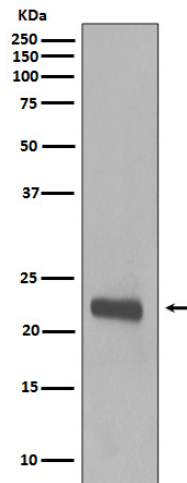
Caveolin-1 Antibody - Protocols

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](#)

Caveolin-1 Antibody - Images





Western blot analysis of Caveolin-1 expression in A431 cell lysate.