

Anti-human Caveolin-1 antibody
Purified Mouse Monoclonal Antibody
Catalog # ABV11685**Specification**

Anti-human Caveolin-1 antibody - Product Information

Application	WB, FC
Primary Accession	Q03135
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Calculated MW	20472

Anti-human Caveolin-1 antibody - Additional Information**Gene ID** 857**Other Names**

Caveolin-1, CAV1, CAV

Target/Specificity

Caveolin (unconjugated)

Formulation

0.5 mg/ml in Glycine (0.1 M), NaCl (0.5 M), Tris-HCl (0.1 M) with sodium azide (15mM), pH: 7.4.

Handling

The antibody solution should be gently mixed before use

Background Descriptions**Precautions**

Anti-human Caveolin-1 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-human Caveolin-1 antibody - 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:11751885).

<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 TGFBR1-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

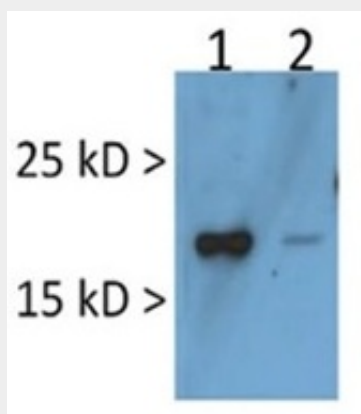
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

Anti-human Caveolin-1 antibody - Protocols

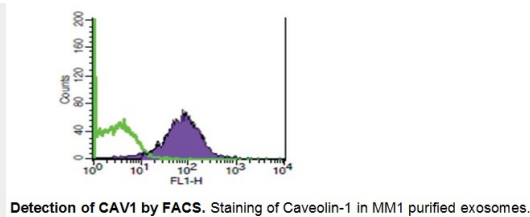
Provided below are standard protocols that you may find useful for product applications.

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

Anti-human Caveolin-1 antibody - Images



Detection of Caveolin-1 Western blotting. 1.MM1(melanoma cell) derived exosome(20ug). 2.MM1 whole lysate(20ug).



Staining of Caveolin-1 in MM1 purified exosomes.

Anti-human Caveolin-1 antibody - Background

The lipid raft-associated protein Caveolin-1 (CAV1) is the major component of the inner surface of caveolae, small invaginations of the plasma membrane. Caveolin is a transmembrane adaptor molecule that can simultaneously recognize GPI-linked proteins and interact with downstream cytoplasmatic signaling molecules. It is highly expressed on exosomes derived from tumor tissues.