

Rabbit Anti-Caveolin-1 Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52245

Specification

Rabbit Anti-Caveolin-1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, FC <u>003135</u> Human, Mouse, Rat Rabbit Polyclonal

Rabbit Anti-Caveolin-1 Polyclonal Antibody - Additional Information

Gene ID 857

Other Names CGL3; PPH3; BSCL3; LCCNS; VIP21; MSTP085; Caveolin-1; CAV1; CAV

Dilution WB~~1:100~1:500<br \>IHC-P~~1:100~1:500<br \>FC~~1:20~1:100

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Rabbit Anti-Caveolin-1 Polyclonal 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: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

Rabbit Anti-Caveolin-1 Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Rabbit Anti-Caveolin-1 Polyclonal Antibody - Images



Lane 1: mouse lung lysates Lane 2: mouse muscle lysates probed with Anti Caveolin-1 Polyclonal Antibody, Unconjugated (AP52245) at 1:200 in 4°C. Followed by conjugation to secondary antibody at 1:3000 90min in 37°C. Predicted band 20kD. Observed band size: 20kD.





Formalin-fixed and paraffin embedded mouse eye labeled with Anti Caveolin-1 Polyclonal Antibody, Unconjugated (AP52245) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



Formalin-fixed and paraffin embedded human lung carcinoma labeled with Anti-Caveolin-1 Polyclonal Antibody, Unconjugated AP52245 at 1:200 followed by conjugation to the secondary antibody and DAB staining.



RSC96 cells probed with Caveolin-1 Polyclonal Antibody, Unconjugated AP52245 at 1:100 for 30 minutes followed by incubation with a conjugated secondary (PE Conjugated) (green) for 30 minutes compared to control cells (blue), secondary only (light blue) and isotype control (orange).

Rabbit Anti-Caveolin-1 Polyclonal Antibody - Background



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