

Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody
Catalog # ABO14019

Specification

Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	Q03135
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 857

Other Names

Caveolin-1, CAV1, CAV

Calculated MW

20472 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:20

Subcellular Localization

Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Membrane raft. Colocalized with DPP4 in membrane rafts. Potential hairpin- like structure in the membrane. Membrane protein of caveolae.

Tissue Specificity

Expressed in muscle and lung, less so in liver, brain and kidney.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Caveolin-1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Caveolin-1 CAV1 Rabbit Monoclonal 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 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

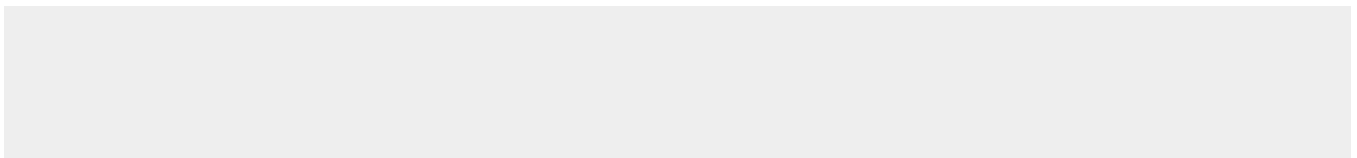
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

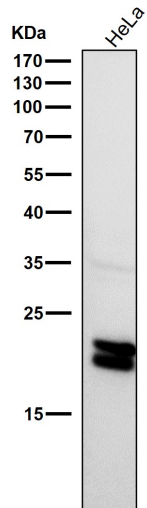
Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody - Protocols

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

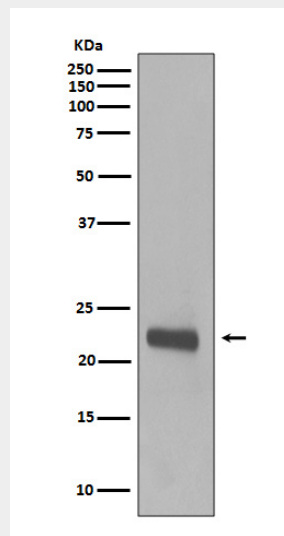
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Caveolin-1 CAV1 Rabbit Monoclonal Antibody - Images

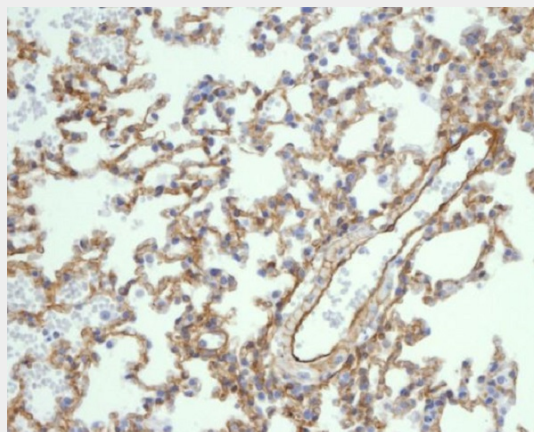




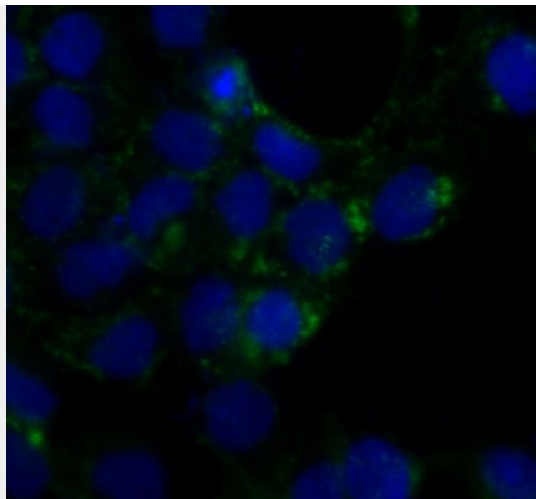
All lanes use the Antibody at 1:2W dilution for 1 hour at room temperature.



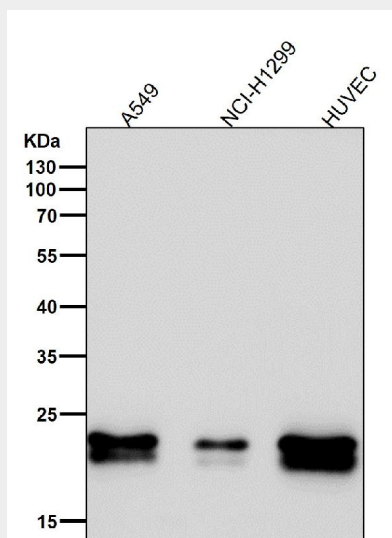
Western blot analysis of Caveolin-1 expression in A431 cell lysate.



Immunohistochemical analysis of paraffin-embedded mouse lung, using Caveolin-1 Antibody.



Immunofluorescent analysis of A431 cells, using Caveolin-1 Antibody.



All lanes use the Antibody at 1:2W dilution for 1 hour at room temperature.