

Anti-Caveolin 1 (pY14) Antibody
Rabbit polyclonal antibody to Caveolin 1 (pY14)
Catalog # AP59979

Specification

Anti-Caveolin 1 (pY14) Antibody - Product Information

Application	WB
Primary Accession	O03135
Other Accession	P49817
Reactivity	Human, Mouse, Rat, Pig, Bovine, SARS, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20472

Anti-Caveolin 1 (pY14) Antibody - Additional Information

Gene ID 857

Other Names

CAV; Caveolin-1

Target/Specificity

Recognizes endogenous levels of Caveolin 1 (pY14) protein.

Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Caveolin 1 (pY14) 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 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). 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

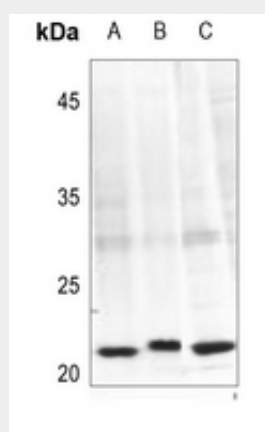
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

Anti-Caveolin 1 (pY14) 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 (pY14) Antibody - Images



Western blot analysis of Caveolin 1 (pY14) expression in SGC7901 (A), SGC7901-H2O2-5min (B), HEK293T (C) whole cell lysates.

Anti-Caveolin 1 (pY14) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Caveolin 1 (pY14). The exact sequence is proprietary.