WB: HeLa cell, A549 cell lysate

WB 1:500-1:2000; E 1:5000



# Phospho-Caveolin-1 (Tyr14) Antibody

Catalog # ABV11985

# **Specification**

## Phospho-Caveolin-1 (Tyr14) Antibody - Product Information

Application WB, E
Primary Accession Q03135

Reactivity Human, Mouse, Rat

Host Rabbit Isotype Rabbit IgG Calculated MW 20472

## Phospho-Caveolin-1 (Tyr14) Antibody - Additional Information

Gene ID 857

Positive Control Application & Usage **Other Names** Caveolin-1, CAV1, CAV

Target/Specificity CAV1

**Antibody Form** Liquid

**Appearance** Colorless liquid

Handling

The antibody solution should be gently mixed before use

Reconstitution & Storage -20°C

**Background Descriptions** 

### **Precautions**

Phospho-Caveolin-1 (Tyr14) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Phospho-Caveolin-1 (Tyr14) Antibody - Protein Information

Name CAV1

**Synonyms** CAV



#### **Function**

May act as a scaffolding protein within caveolar membranes (PubMed:<a href="http://www.uniprot.org/citations/11751885" target="\_blank">11751885</a>). 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:<a href="http://www.uniprot.org/citations/19262564" target="\_blank">19262564</a>). 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:<a href="http://www.uniprot.org/citations/17287217" target="\_blank">17287217</a>). 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:<a href="http://www.uniprot.org/citations/25893292" target="\_blank">25893292</a>). 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**

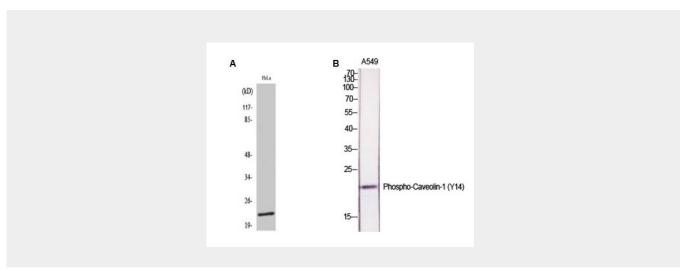
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

### Phospho-Caveolin-1 (Tyr14) 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 Cytomety
- Cell Culture

# Phospho-Caveolin-1 (Tyr14) Antibody - Images



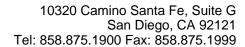




Fig A. WB (WB) analysis of HeLa cells using Fhospho-Caveolin-1 (Y14) Polyclonal Antibody Fig B. WB (WB) analysis of A549 cells using Phospho-Caveolin-1 (Y14) Polyclonal Antibody