

# Phospho-Caveolin-1 (Y14) Antibody

Rabbit mAb Catalog # AP93259

### **Specification**

# Phospho-Caveolin-1 (Y14) Antibody - Product Information

Application WB
Primary Accession Q03135
Clonality Monoclonal

**Other Names** 

BSCL3; CAV; CAV1; Caveolin1; CGL3; LCCNS; PPH3; VIP21;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 20472 Da

### Phospho-Caveolin-1 (Y14) Antibody - Additional Information

Dilution WB~~1:1000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Phospho-Caveolin-1 (Y14)

Description May act as a scaffolding protein within

caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By

similarity).

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

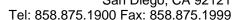
#### Phospho-Caveolin-1 (Y14) Antibody - Protein Information

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 (Y14) 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 (Y14) Antibody - Images