

# Anti-Caveolin 1 (pY14) Antibody

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

# **Specification**

# Anti-Caveolin 1 (pY14) Antibody - Product Information

Application WB, IP
Primary Accession Q03135
Other Accession P49817

Reactivity Human, Mouse, Rat, Pig, Bovine, SARS,

Host Rabbit
Clonality Polyclonal
Calculated MW 20472

## Anti-Caveolin 1 (pY14) Antibody - Additional Information

### Gene ID 857

# **Other Names**

CAV; Caveolin-1

# **Target/Specificity**

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

#### **Dilution**

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

# **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:<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**

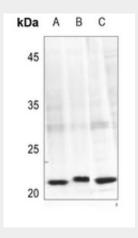
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

## 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
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- 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





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