

Phospho-Caveolin-1 (Tyr14) Antibody

Catalog # ABV11985

Product Information

Application WB, E **Primary Accession** Q03135

Reactivity Human, Mouse, Rat

Host Rabbit Isotype Rabbit IgG Calculated MW 20472

Additional Information

Gene ID 857

Positive ControlWB: HeLa cell, A549 cell lysateApplication & UsageWB 1:500-1:2000; E 1:5000Other NamesCaveolin-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.

Protein Information

Name CAV1

Synonyms CAV

Function May act as a scaffolding protein within caveolar membranes

(PubMed:<u>11751885</u>). 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:<u>19262564</u>). 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 TGFB1-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

Images

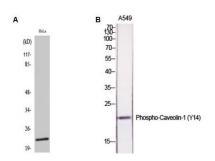


Fig A. WB (WB) analysis of HeLa cells using Fhospho-Caveolin-1 (Y14) Polyclonal Antibody Fig B. WB (WB) analysis of A549 cells using Phospho-Caveolin-1 (Y14) Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.