

Goat anti-Caveolin 1, Biotinylated Antibody Peptide-affinity purified goat antibody Catalog # AF4386a

Specification

Goat anti-Caveolin 1, Biotinylated Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, ICC, Pep-ELISA <u>003135</u> <u>NP_001744.2</u>, <u>NP_001166366.1</u> Human Goat Polyclonal 20472

Goat anti-Caveolin 1, Biotinylated Antibody - Additional Information

Gene ID 857

Other Names CAV1; caveolin 1; BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21; caveolin 1, caveolae protein, 22kDa; cell growth-inhibiting protein 32

Dilution WB~~1:1000 ICC~~N/A Pep-ELISA~~N/A

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

This antibody is expected to recognize both reported isoforms (NP_001744.2; NP_001166366.1). Reported variants represent identical protein: NP_001166367.1, NP_001166368.1, NP_001166366.1. No cross-reactivity expected to Caveolin 2 and Caveolin 3

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat anti-Caveolin 1, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-Caveolin 1, Biotinylated 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 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

Goat anti-Caveolin 1, Biotinylated Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat anti-Caveolin 1, Biotinylated Antibody - Images