

## Goat anti-Caveolin 1, Biotinylated Antibody

Peptide-affinity purified goat antibody Catalog # AF4386a

## **Product Information**

Primary AccessionQ03135Other AccessionNP_001744.2, NP_001166366.1ReactivityHuman
Reactivity Human
•
Host Goat
Clonality Polyclonal
Clone Names CAV1
Calculated MW 20472

## **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.

## **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: <u>17287217</u> ). 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: <u>25893292</u> ). 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

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