

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2418

Product Information

Application	WB
Primary Accession	Q03135
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB455
Calculated MW	20472
Gene Name	CAV1
Aliases	CAV1; Caveolin 1; Caveolin 1, Caveolae Protein, 22kDa; Caveolin-1; CAV; Caveolin 1, Caveolae Protein, 22kD; Cell Growth-Inhibiting Protein 32; MSTP085; BSCL3; LCCNS; VIP21; CGL3; PPH3
Immunogen	A synthesized peptide derived from human Caveolin-1

Additional Information

Gene ID	857
Other Names	Caveolin-1, CAV1, CAV

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 TGFBR1-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}. Cytoplasm. Note=Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae. In the presence of DSG2 localizes to the cytoplasm away from cell borders (PubMed:26918609)
Tissue Location	Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

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