

Caveolin-3 Rabbit pAb

Catalog # AP99958

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P56539
Other Accession	P56539
Reactivity	Rat, Human
Predicted	Pig, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17259
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Caveolin-3
Epitope Specificity	1-80/151
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the caveolin family.
SUBUNIT	Homooligomer (By similarity). Interacts with DYSF. Interacts with DLG1 and KCNA5; forms a ternary complex. Interacts with DAG1 (via its C-terminal); the interaction prevents binding of DAG1 with DMD (By similarity). Interacts with TRIM72. Interacts with MUSK; may regulate MUSK signaling.
Post-translational modifications	Sumoylation with SUMO3 by PIAS4 may reduce agonist-induced internalization and desensitization of adrenergic receptor ABRD2 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Caveolae are specialized domains of the plasma membrane that are implicated in the sequestration of a variety of lipid and protein molecules. It has been suggested that these important cellular organelles have a pivotal role in such diverse biochemical processes as lipid metabolism, growth regulation, signal transduction, and apoptosis. Caveolin interacts with and regulates heterotrimeric G-proteins. Currently, there are three members of the caveolin multigene family which are integral membrane proteins that comprise the major structural component of the caveolar membrane in vivo. Caveolin-2 protein is abundantly expressed in fibroblasts and differentiated adipocytes, smooth and skeletal muscle, and endothelial cells. The expression of caveolin-1 is similar to that of caveolin-2 while caveolin-3 expression appears to be limited to muscle tissue types.

Additional Information

Gene ID	859
Other Names	LGMD1C; LQT9; MPDT; RMD2; VIP-21; VIP21; Cav-3; M-cav; CAV3_HUMAN; CAV3; M-caveolin; CAV3_MOUSE; CAV3_RAT; caveolin 3

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CAV3
Function	May act as a scaffolding protein within caveolar membranes. Interacts directly with G protein alpha subunits and can functionally regulate their activity. May also regulate voltage-gated potassium channels. Plays a role in the sarcolemma repair mechanism of both skeletal muscle and cardiomyocytes that permits rapid resealing of membranes disrupted by mechanical stress (By similarity). Mediates the recruitment of CAVIN2 and CAVIN3 proteins to the caveolae (PubMed: 19262564).
Cellular Location	Golgi apparatus membrane; Peripheral membrane protein. Cell membrane {ECO:0000250 UniProtKB:P51638}; Peripheral membrane protein. Membrane, caveola {ECO:0000250 UniProtKB:P51637}; Peripheral membrane protein. Cell membrane, sarcolemma {ECO:0000250 UniProtKB:P51637}. Note=Potential hairpin-like structure in the membrane. Membrane protein of caveolae (By similarity)
Tissue Location	Expressed predominantly in muscle.

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