

Caveolin-3 Rabbit pAb

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Catalog # AP58079

Product Information

Application	WB
Primary Accession	P51637
Reactivity	Human
Predicted	Rat, Dog, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17358
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Caveolin-3
Epitope Specificity	95-151/151
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus membrane; Peripheral membrane protein (By similarity). Cell membrane; Peripheral membrane protein (By similarity). Membrane, caveola; Peripheral membrane protein (By similarity). Note=Potential hairpin-like structure in the membrane. Membrane protein of caveolae (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	12391
Other Names	Caveolin-3 {ECO:0000312 MGI:MGI:107570}, M-caveolin, Cav3 {ECO:0000312 MGI:MGI:107570}
Dilution	WB=1:500-2000,Flow-Cyt=1 µg /test

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 {ECO:0000312 | MGI:MGI:107570}

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 (PubMed:[19380584](#)). Mediates the recruitment of CAVIN2 and CAVIN3 proteins to the caveolae (By similarity).

Cellular Location

Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Cell membrane, sarcolemma. Note=Potential hairpin-like structure in the membrane. Membrane protein of caveolae (By similarity)

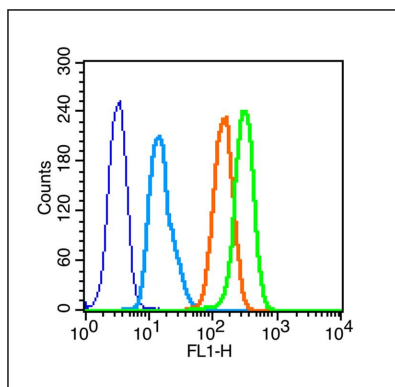
Tissue Location

Expressed predominantly in muscle.

Background

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Images



Blank control (blue line): A431 (blue).

Primary Antibody (green line): Rabbit Anti-Caveolin-3 antibody (AP58079);

Dilution: 1 µg / 10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white/blue line): F(ab')₂ fragment goat anti-rabbit IgG-FITC; Dilution: 1 µg / test.

Protocol

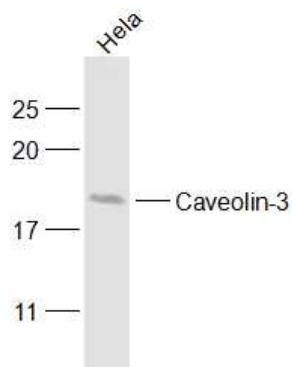
The cells were fixed with 80% methanol (5 min at -20°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature (The cells were fixed with 2% paraformaldehyde (10 min), then permeabilized with 90% ice-cold methanol for 30 min on ice.). Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2% BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Sample:

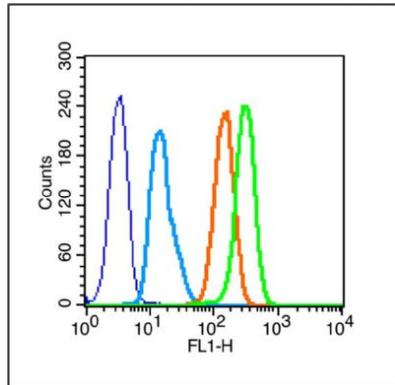
Hela (Human) Cell Lysate at 30 µg

Primary: Anti-Caveolin-3 (AP58079) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000



dilution
 Predicted band size: 17 kD
 Observed band size: 17 kD



Blank control (blue line):A431(blue).

Primary Antibody (green line): Rabbit Anti-Caveolin-3 antibody(AP58079); Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): F(ab')₂ fragment goat anti-rabbit IgG-FITC;Dilution: 1 μ g /test.

Protocol

The cells were fixed with 80% methanol (5 min at -20°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature (The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice.). Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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