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CAV3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6516A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P56539
Other Accession	P51638, Q3ZDQ5, P51637, Q2KI43
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Pig, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19453
Calculated MW	17259
Antigen Region	5-31

Additional Information

Gene ID	859
Other Names	Caveolin-3, M-caveolin, CAV3
Target/Specificity	This CAV3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 5-31 amino acids from the N-terminal region of human CAV3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CAV3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

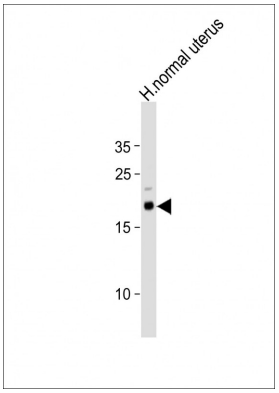
Background

CAV3 is a caveolin family member, which functions as a component of the caveolae plasma membranes found in most cell types. Caveolin proteins are proposed to be scaffolding proteins for organizing and concentrating certain caveolin-interacting molecules. Mutations identified in its gene lead to interference with protein oligomerization or intra-cellular routing, disrupting caveolae formation and resulting in Limb-Girdle muscular dystrophy type-1C (LGMD-1C), hyperCKemia or rippling muscle disease (RMD).

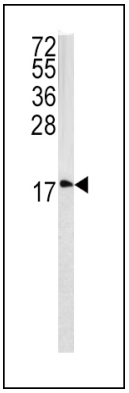
References

Garg,V., Biochem. Biophys. Res. Commun. 385 (3), 472-477 (2009)
Cai,C., . Biol. Chem. 284 (23), 15894-15902 (2009)

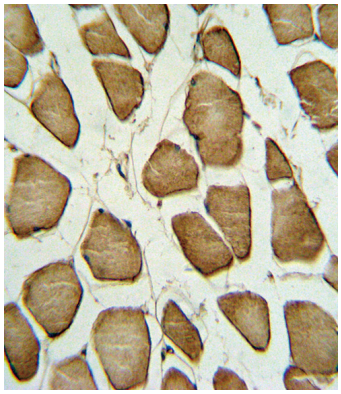
Images



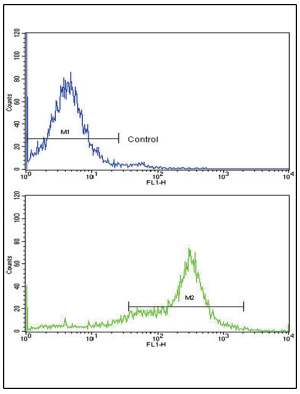
Anti-CAV3 Antibody (N-term)at 1:500 dilution + human normal uterus lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of CAV3 antibody (N-term) (Cat.# AP6516a) in 293 cell line lysates (35ug/lane). CAV3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human Skeletal muscle reacted with CAV3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of 293 cells using CAV3 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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