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VINC Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7426a

Product Information

Application	WB, IHC-P, E
Primary Accession	P18206
Other Accession	P85972, P26234, Q64727, P12003
Reactivity	Human, Rat, Mouse
Predicted	Chicken, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15469
Calculated MW	123799
Antigen Region	12-39

Additional Information

Gene ID	7414
Other Names	Vinculin, Metavinculin, MV, VCL
Target/Specificity	This VINC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-39 amino acids from the N-terminal region of human VINC.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	VINC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VCL
Function	Actin filament (F-actin)-binding protein involved in cell- matrix adhesion and cell-cell adhesion. Regulates cell-surface E- cadherin expression and potentiates mechanosensing by the E-cadherin complex. May also play

	important roles in cell morphology and locomotion.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P12003}; Peripheral membrane protein {ECO:0000250|UniProtKB:P12003}; Cytoplasmic side {ECO:0000250|UniProtKB:P12003}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P12003}. Cell junction, focal adhesion {ECO:0000250|UniProtKB:P12003}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P85972}. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q64727}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q64727}; Cytoplasmic side {ECO:0000250|UniProtKB:Q64727}. Cell projection, podosome {ECO:0000250|UniProtKB:Q64727}. Note=Recruitment to cell-cell junctions occurs in a myosin II-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions {ECO:0000250|UniProtKB:P12003}
Tissue Location	Metavinculin is muscle-specific.

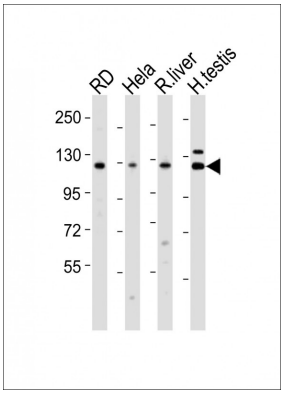
Background

VINC is a cytoskeletal protein associated with cell-cell and cell-matrix junctions, where it is thought to function as one of several interacting proteins involved in anchoring F-actin to the membrane. Defects in VCL are the cause of cardiomyopathy dilated type 1W. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia.

References

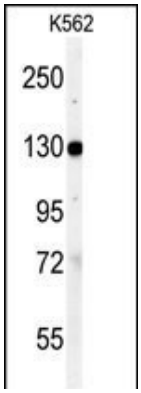
Moiseyeva E.P., Weller P.A.J. Biol. Chem. 268:4318-4325(1993)
Sun N., Critchley D.R., Paulin D.Biochem. J. 409:657-667(2008)
Izard T., Evans G., Borgon R.A.Nature 427:171-175(2004)

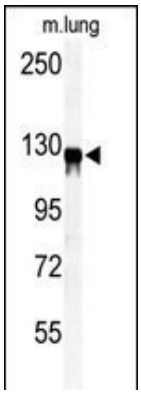
Images



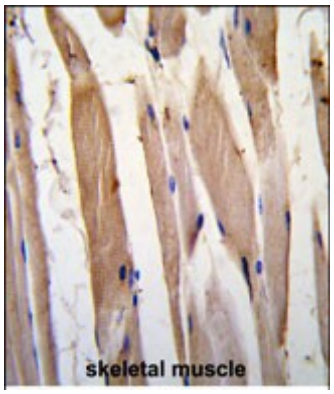
All lanes : Anti-VINC Antibody (N-term) at 1:2000 dilution Lane 1: RD whole cell lysates Lane 2: Hela whole cell lysates Lane 3: rat liver lysates Lane 4: human testis lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 124 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of anti-VINC Antibody (N-term) (Cat.#AP7426a) in K562 cell line lysates (35ug/lane). VINC (arrow) was detected using the purified Pab.





Western blot analysis of anti-VINC Antibody (N-term) (Cat.#AP7426a) in mouse lung tissue lysates (35ug/lane). VINC (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with VINC 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.