

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

Tissue Location

Metavinculin is muscle-specific.

{ECO:0000250 | UniProtKB:P12003}

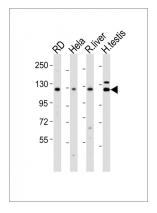
Background

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

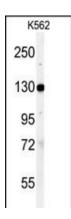
Moiseyeva E.P., Weller P.A.J. Biol. Chem. 268:4318-4325(1993) Sun N., Critchley D.R., Paulin D.Biochem. J. 409:657-667(2008) Izard T., Evans G., Borgon R.A.Nature 427:171-175(2004)

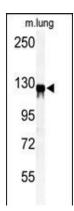
Images



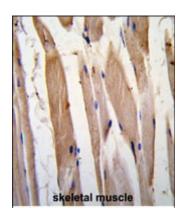
All lanes: Anti-VINC Antibody (N-term) at 1:2000 dilution Lane 1: RD whole cell lysates Lane 2: Hela whole cell lysates Lane 3: rat liver lysates Lane 4: human testis lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted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

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