

Anti-Vinculin Picoband Antibody

Catalog # ABO10167

Product Information

Application	WB
Primary Accession	P18206
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Vinculin(VCL) detection. Tested with WB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7414
Other Names	Vinculin, Metavinculin, MV, VCL
Calculated MW	123799
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cytoplasm, cytoskeleton . Cell junction, adherens junction . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, focal adhesion . Cytoplasmic face of adhesion plaques. 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 (By similarity). Colocalizes with LIMD1 in the focal adhesions. .
Tissue Specificity	Metavinculin is muscle-specific.
Source	Eukaryota
Protein Name	Vinculin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human Vinculin recombinant protein (Position: E930-Q1134). Human Vinculin shares 87.7% amino acid (aa) sequence identity with both mouse and rat Vinculin.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.

Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
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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}. Cytoplasm, perinuclear region {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

Vinculin 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. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined.

Images

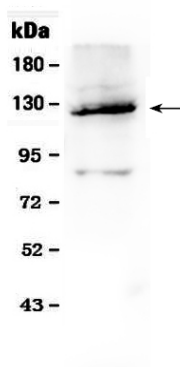


Figure 1. Western blot analysis of Vinculin using anti-Vinculin antibody (ABO10167). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: A549 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Vinculin antigen affinity purified polyclonal antibody (Catalog # ABO10167) at 0.5 μg/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour

at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Vinculin at approximately 124KD. The expected band size for Vinculin is at 124KD.

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