

Anti-Vinculin Antibody
Catalog # ABO11087**Specification**

Anti-Vinculin Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P18206
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Vinculin(VCL) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-Vinculin Antibody - Additional Information

Gene ID 7414

Other Names

Vinculin, Metavinculin, MV, VCL

Calculated MW

123799 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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.

Protein Name

Vinculin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Vinculin(173-188aa KMIDERQQLTHQEHR), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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.

Sequence Similarities

Belongs to the vinculin/alpha-catenin family.

Anti-Vinculin Antibody - 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 CTNNA1 is necessary for its localization to the cell-cell junctions {ECO:0000250|UniProtKB:P12003}

Tissue Location

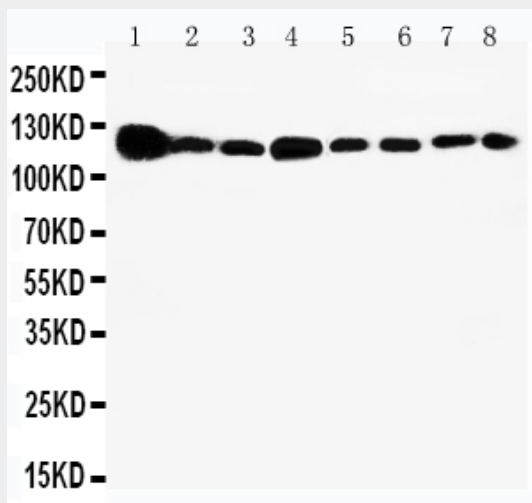
Metavinculin is muscle-specific.

Anti-Vinculin Antibody - Protocols

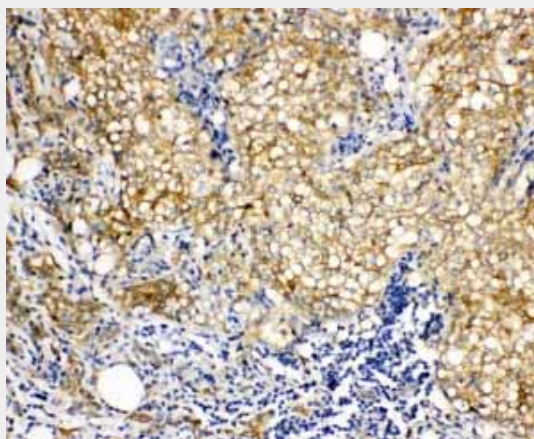
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

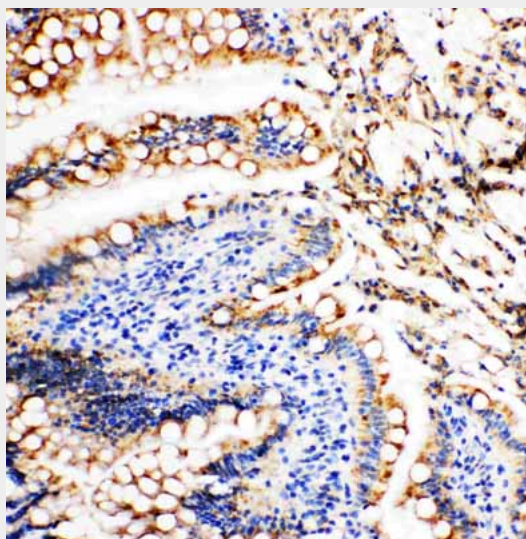
Anti-Vinculin Antibody - Images



Anti-Vinculin antibody, ABO11087, Western blotting Lane 1: Rat Heart Tissue Lysate Lane 2: Rat Brain Tissue Lysate Lane 3: Rat Liver Tissue Lysate Lane 4: U87 Cell Lysate Lane 5: SMMC Cell Lysate Lane 6: HEPA Cell Lysate Lane 7: HELA Cell Lysate Lane 8: HT1080 Cell Lysate



Anti-Vinculin antibody, ABO11087, IHC(P) IHC(P): Human Mammary Cancer Tissue



Anti-Vinculin antibody, ABO11087, IHC(P)IHC(P): Rat Intestine Tissue

Anti-Vinculin Antibody - 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.