

Anti-Vinculin VCL Rabbit Monoclonal Antibody

Catalog # ABO13914

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P18206
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Vinculin VCL Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

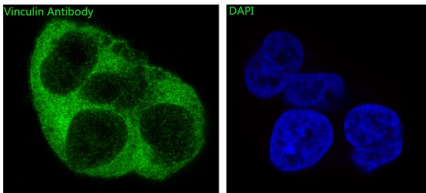
Additional Information

Gene ID	7414
Other Names	Vinculin, Metavinculin, MV, VCL
Calculated MW	123799
Application Details	WB 1:10000-1:20000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50
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
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AIG-22
Immunogen	A synthesized peptide derived from human Vinculin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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.

Images



Immunofluorescent analysis of A673 cells, using Vinculin Antibody .

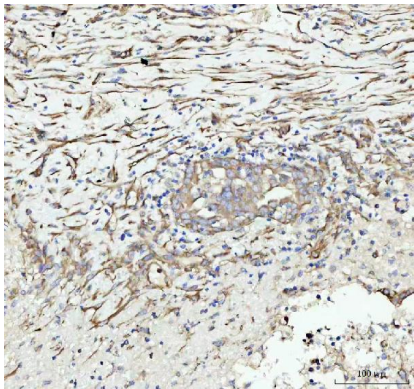
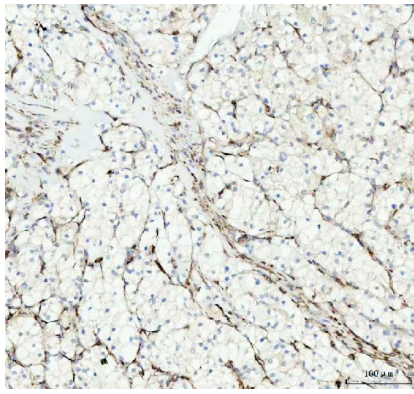


Figure 2. IHC analysis of Vinculin using anti-Vinculin antibody (M01207). Vinculin was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-Vinculin Antibody (M01207) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Figure 3. IHC analysis of Vinculin using anti-Vinculin antibody (M01207). Vinculin was detected in a paraffin-embedded section of human renal cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked



with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-Vinculin Antibody (M01207) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

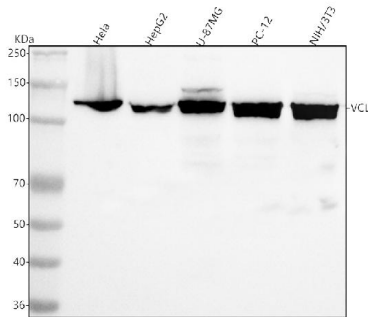


Figure 1. Western blot analysis of Vinculin using anti-Vinculin antibody (M01207).

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 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human U-87MG whole cell lysates,

Lane 4: rat PC-12 whole cell lysates,

Lane 5: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 monoclonal antibody (Catalog # M01207) at 1:10000 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 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Vinculin at approximately 124 kDa. The expected band size for Vinculin is at 124 kDa.

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