

### Vinculin Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22112a

### **Specification**

## Vinculin Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, FC, IHC-P,E <u>Q64727</u> Human, Mouse, Rat Rabbit polyclonal Rabbit IgG 116717

### Vinculin Antibody - Additional Information

Gene ID 22330

**Other Names** Vinculin, Metavinculin, Vcl

**Target/Specificity** This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 634-668 amino acids from mouse.

Dilution WB~~1:2000 FC~~1:25 IHC-P~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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** Vinculin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### 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 (By similarity).

## **Cellular Location**

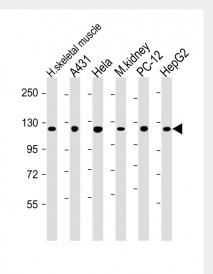
Cell membrane {ECO:0000250|UniProtKB:P12003}; Peripheral membrane protein {ECO:0000250|UniProtKB:P12003}; Cytoplasmic side {ECO:0000250|UniProtKB:P12003}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P12003}. Cell junction, focal adhesion {ECO:0000250|UniProtKB:P12003}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P85972}. Cell membrane, sarcolemma; Peripheral membrane protein; Cytoplasmic side. Cell projection, podosome. 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}

# Vinculin Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Vinculin Antibody - Images

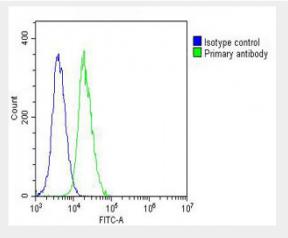


All lanes : Anti-Vinculin at 1:2000 dilution Lane 1: human skeletal muscle lysate Lane 2: A431 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: mouse kidney lysate Lane 5: PC-12 whole cell lysate Lane 6: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 117 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



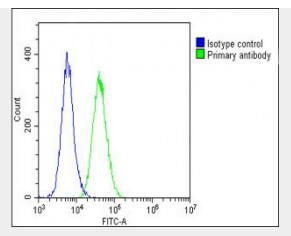


AP22112a staining Vinculin in mouse skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing NIH/3T3 cells stained with AP22112a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22112a, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Rabbit antibodv used was lgG, DyLight® 488 Conjugated Hiahlv Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG  $(1\mu g/1 \times 10^{6} \text{ cells})$  used under the same conditions. Acquisition of >10, 000 events was performed.





Overlay histogram showing C2C12 cells stained with AP22112a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22112a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit lgG, **DyLight**® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit  $IgG1 (1\mu g/1x10^6 \text{ cells})$  used under the same conditions. Acquisition of >10, 000 events was performed.

## Vinculin Antibody - Background

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 (By similarity).

# Vinculin Antibody - References

Coll J.-L., et al. Proc. Natl. Acad. Sci. U.S.A. 92:9161-9165(1995). Alatortsev V.E., et al. FEBS Lett. 413:197-201(1997). Carninci P., et al. Science 309:1559-1563(2005). Lubec G., et al. Submitted (JAN-2009) to UniProtKB. Mandai K., et al. J. Cell Biol. 144:1001-1017(1999).