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Vinculin Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22112a

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	Q64727
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55982
Calculated MW	116717

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~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is 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.

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}

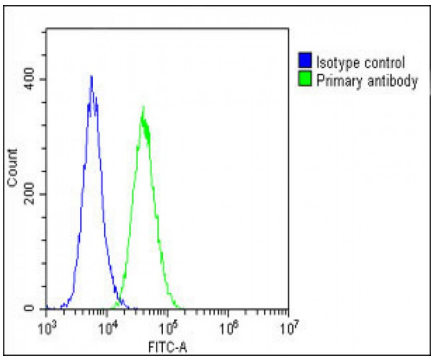
Background

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).

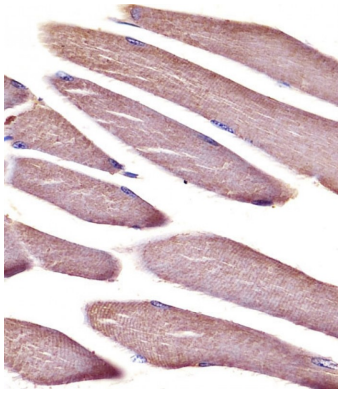
References

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).

Images

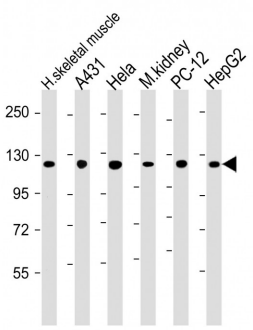


Overlay histogram showing C2C12 cells stained with AP22112a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the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



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.

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.