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Vinculin Rabbit mAb

Catalog # AP76249

Product Information

Application	WB, FC, IP
Primary Accession	P18206
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	123799

Additional Information

Gene ID	7414
Other Names	VCL
Dilution	WB~~1:1000-1:5000 FC~~1:100-1:200 IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 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

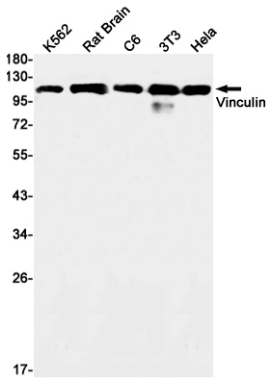
{ECO:0000250|UniProtKB:Q64727}. Note=Recruitment to cell-cell junctions occurs in a myosin II-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions {ECO:0000250|UniProtKB:P12003}

Tissue Location Metavinculin is muscle-specific.

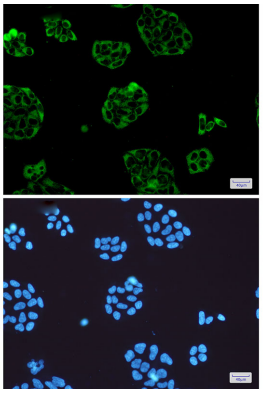
Background

Vinculin is a cytoskeletal protein that plays an important role in the regulation of focal adhesions and embryonic development. Three structural vinculin domains include an amino-terminal head, a short, flexible proline-rich region and a carboxy-terminal tail. In the inactive state, the head and tail domains of vinculin interact to form a closed confirmation. The open and active form of vinculin translocates to focal adhesions where it is thought to be involved in anchoring F-actin to the membrane and regulation of cell migration.

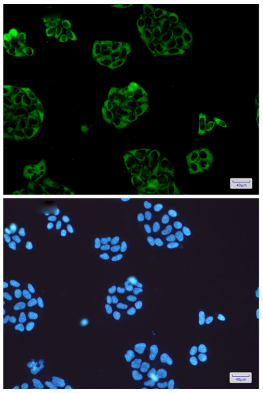
Images

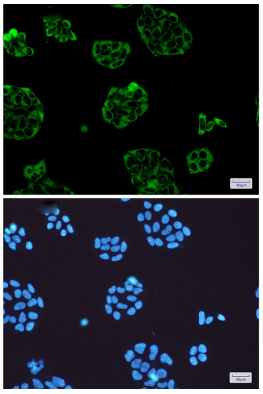


Western blot analysis of Vinculin in K562, rat Brain, C6, 3T3, Hela lysates using Vinculin antibody.



Immunocytochemistry analysis of Vinculin(green) in Hela using Vinculin antibody,and DAPI(blue)





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