

Vinculin Antibody

Catalog # ASC11803

Specification

Vinculin Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IF, ICC, E <u>P18206</u> <u>NP_003364</u>, <u>7414</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 120 kDa

Observed: 117 kDa KDa Vinculin antibody can be used for detection of Vinculin by Western blot at 0.5 - 1 μ g/ml. For immunofluorescence start at 20 μ g/mL.

Vinculin Antibody - Additional Information

Gene ID 7414 Target/Specificity Vinculin antibody was raised against a 23 amino acid peptide near the center of human Vinculin.

The immunogen is located within amino acids 820 - 870 of Vinculin.

Reconstitution & Storage

Vinculin antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

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.

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}. 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.

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



Immunofluorescence of RAIDD in HeLa cells with RAIDD antibody at 5 μ g/ml.





Immunohistochemistry of LMX1A in mouse brain tissue with LMX1A Antibodyat 5 µg/mL.

Vinculin Antibody - Background

Vinculin is a cytoskeletal protein that plays an important role in the regulation of focal adhesions and embryonic development (1). Three structural vinculin domains include an amino-terminal head, a short flexible proline-rich region and a carboxy-terminal tail (2). Expression of vinculin were shown to be affected by the level of actin expression (2,3). Vinculin deficiencies are associated with a decrease in cell adhesion and an increase in cell motility, suggesting a possible role in metastatic growth (4). Defects in VCL are the cause of cardiomyopathy dilated type 1W (CMD1W) (5).

Vinculin Antibody - References

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