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Vinculin Antibody [7E10]

Catalog # ASC12026

Specification

Vinculin Antibody [7E10] - Product Information

Application	**WB, E**
Primary Accession	P18206
Other Accession	NP_003364, 4507877
Reactivity	**Human, Mouse, Rat, Rabbit, Chicken**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 117 kDa** **Observed: 120 kDa KDa**
Application Notes	**Vinculin antibody can be used for detection of Vinculin by Western blot at 0.5 - 1 µg/ml.**

Vinculin Antibody [7E10] - Additional Information

Gene ID **7414**

Target/Specificity
VCL; Vinculin antibody is human, mouse, rat, rabbit and chicken reactive. At least three isoforms of Vinculin are known to exist.

Reconstitution & Storage
Vinculin antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
Vinculin Antibody [7E10] is for research use only and not for use in diagnostic or therapeutic procedures.

Vinculin Antibody [7E10] - 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}

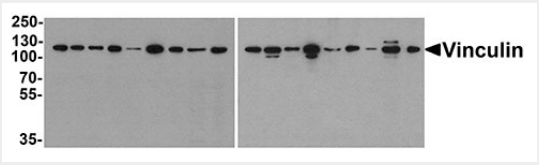
Tissue Location
Metavinculin is muscle-specific.

Vinculin Antibody [7E10] - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Vinculin Antibody [7E10] - Images



Western blot analysis of Vinculin in 293, A431, A549, HeLa, HepG2, K562, 3T3, Raji, U937 cell lysate and rat heart, mouse lung, rat lung, mouse spleen, rat spleen, rabbit spleen, mouse brain, rabbit brain and chicken spleen tissue lysate with Vinculin antibody at 1 µg/ml.

Vinculin Antibody [7E10] - 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 [7E10] - References

Burridge K, Fath K, Kelly T, et al. Focal adhesions: transmembrane junctions between the extracellular matrix and the cytoskeleton. Annu. Rev. Cell Biol.1988; 4:487-525.
Gilmore AP, Jackson P, Waites GT, et al. Further characterization of the talin-binding site in the cytoskeletal protein vinculin. J. Cell Sci. 1992; 103:719-31.
Deakin NO, Ballestrem C, and Turner CE. Paxillin and Hic-5 interaction with vinculin is differentially regulated by Rac1 and RhoA. PLoS One 2012; 7:e37990.
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