

## Mouse Vinculin Monoclonal Antibody | anti-VCL antibody

Vinculin (Marker of Age-related Macular Degeneration)

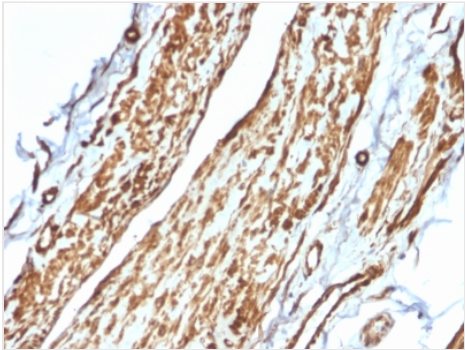
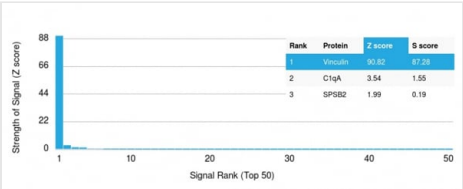
|                               |                      |                                               |                                             |
|-------------------------------|----------------------|-----------------------------------------------|---------------------------------------------|
| CATALOG #<br><b>AAA214830</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human. Others not known.</b> | APPLICATIONS<br><b>Immunohistochemistry</b> |
|-------------------------------|----------------------|-----------------------------------------------|---------------------------------------------|

### PRODUCT SYNONYMS

Vinculin; Monoclonal Antibody; Vinculin (Marker of Age-related Macular Degeneration); CMD1W; CMH15; Epididymis luminal protein 114; HEL114; Metavinculin; MV; MVCL; OTTHUMP00000019861; OTTHUMP00000019862; VCL; VINC; VINC\_HUMAN; anti-VCL antibody

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactivity                                    | Human. Others not known.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clonality                                     | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype                                       | IgG2b, kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Clone Number                                  | VCL/2575                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Specificity                                   | Focal adhesions are identified as areas within the plasma membrane of tissue culture cells that adhere tightly to the underlying substrate. In vivo, these regions are involved in the adhesion of cells to the extracellular matrix. Paxillin and vinculin are cytoskeletal, focal adhesion proteins that are components of a protein complex which links the Actin network to the plasma membrane. Vinculin binding sites have been identified on other cytoskeletal proteins, including Talin and alpha-Actinin. In addition, vinculin, Talin and alpha-Actinin each contain Actin binding sites. Expression of vinculin and Talin have been shown to be affected by the level of Actin expression. alpha-Actinin has been shown to link Actin to integrins in the plasma membrane through interactions with the vinculin and Talin complex or by a direct interaction with integrin. |
| Purity/Purification                           | Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Form/Format                                   | 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sequence Length                               | 1,066                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Applicable Applications for anti-VCL antibody | IHC (Immunohistochemistry)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Immunogen                                     | Recombinant fragment of human Vinculin (VCL) protein (around aa 174-322) (exact sequence is proprietary)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Positive Control                              | Human Bladder and Testis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cellular Localization                         | Cytoplasmic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Chromosome Location                           | 10q22.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Preparation and Storage                       | Antibody with azide - store at 2 to 8 degree C.<br>Antibody without azide - store at -20 to -80 degree C.<br>Antibody is stable for 24 months. Non-hazardous. No MSDS required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



**IHC (Immunohistochemistry)**  
Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with VCL Mouse Monoclonal Antibody (VCL/2575).

**Application Data**  
Analysis of Protein Array containing more than 19,000 full-length human proteins using Mouse Vinculin Monoclonal Antibody (VCL/2575). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

ADDITIONAL INFORMATION

|            |                                                    |
|------------|----------------------------------------------------|
| References | Hwang, M.P., et al. 2016. Biomaterials 103: 22-32. |
|------------|----------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                        |
|----------------------------------|----------------------------------------|
| NCBI GI #                        | 4507877                                |
| NCBI GeneID                      | 7414                                   |
| NCBI Accession #                 | NP_003364.1                            |
| NCBI GenBank Nucleotide #        | NM_003373.3                            |
| UniProt Accession #              | P18206; Q16450; Q5SWX2; Q7Z3B8; Q8IXU7 |
| Molecular Weight                 | 117kDa                                 |
| NCBI Official Full Name          | vinculin isoform VCL                   |
| NCBI Official Synonym Full Names | vinculin                               |
| NCBI Official Symbol             | VCL                                    |
| NCBI Official Synonym Symbols    | MV; MVCL; CMD1W; CMH15; HEL114         |
| NCBI Protein Information         | vinculin                               |
| UniProt Protein Name             | Vinculin                               |
| UniProt Gene Name                | VCL                                    |
| UniProt Synonym Gene Names       | MV                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.