

## Rabbit anti-Human CD146/MCAM Monoclonal Antibody | anti-MCAM antibody

Recombinant Anti-CD146/MCAM Antibody (PE), Rabbit Monoclonal

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                              |
|-----------|--------|------------|---------------------------------------------------------------------------|
| AAA254488 | Rabbit | Human      | Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay |

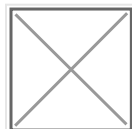
### PRODUCT SYNONYMS

CD146/MCAM; Monoclonal Antibody; Recombinant Anti-CD146/MCAM Antibody (PE); Rabbit Monoclonal; CD146/MCAM Antibody (PE); Rabbit MAb; melanoma cell adhesion molecule; Anti-CD146 Antibody; Anti-MUC18 Antibody; anti-MCAM antibody

### PRODUCT SPECIFICATIONS

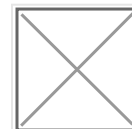
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|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                              |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                               |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                          |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                                                                                          |
| Clone Number                                   | 044                                                                                                                                                                                                                                                                                 |
| Specificity                                    | Human CD146/MCAM                                                                                                                                                                                                                                                                    |
| Purity/Purification                            | Protein A                                                                                                                                                                                                                                                                           |
| Form/Format                                    | Liquid; Aqueous solution containing 0.5% BSA and 0.1% sodium azide                                                                                                                                                                                                                  |
| Concentration                                  | 2ul/Test, 0.1mg/ml (varies by lot)                                                                                                                                                                                                                                                  |
| Applicable Applications for anti-MCAM antibody | IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry)                                                                                                                                                                                                       |
| Antibody Type                                  | Recombinant Antibody                                                                                                                                                                                                                                                                |
| Immunogen                                      | Recombinant Human CD146 protein                                                                                                                                                                                                                                                     |
| Conjugation                                    | PE                                                                                                                                                                                                                                                                                  |
| Preparation                                    | This antibody was obtained from a rabbit immunized with purified, recombinant Human CD146/MCAM (rh CD146) and conjugated with PE under optimum conditions, the unreacted PE was removed.                                                                                            |
| Preparation and Storage                        | This antibody can be stored at 2-8 degree C for twelve months without detectable loss of activity. Protected from prolonged exposure to light. Do not freeze! Sodium azide is toxic to cells and should be disposed of properly. Flush with large volumes of water during disposal. |

### IMAGES



#### IF (Immunofluorescence)

Immunofluorescence staining of Human CD146 in HeLa cells. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with Rabbit anti-Human CD146 monoclonal antibody (PE-conjugated, 10 ug/ml) at 4 degree C overnight, and counterstained with DAPI (blue). Positive staining was localized to plasma membrane.



#### Application Data

Profile of anti-CD146 reactivity on HeLa cells analyzed by flow cytometry.

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-MCAM antibody | The CD146 antigen, also known as melanoma cell adhesion molecule (MCAM) and MUC18, is an integral membrane glycoprotein belonging to the immunoglobulin superfamily. CD146 contains the characteristic immunoglobulin-like domains (V-V-C2-C2-C2), a transmembrane region, and a short cytoplasmic tail. The CD146 expression is detected in endothelial cells in vascular tissue throughout the body and plays a role in cell adhesion, as well as in cohesion of the endothelial monolayer at intercellular junctions in vascular tissue. As a Ca2+-independent cell adhesion molecule involved in heterophilic cell to cell interactions and a surface receptor, CD146 triggers tyrosine phosphorylation of FYN and PTK2 and subsequently induced signal transduction, proteolysis, or immune recognition. This protein is also expressed predominantly on metastatic lesions and advanced primary tumors, and thus has been suggested to play an important role in tumor progression and the development of metastasis in certain human carcinomas. |
| References                                         | Mills L, et al. (2002) Fully human antibodies to MCAM/MUC18 inhibit tumor growth and metastasis of human melanoma. Cancer Res. 62(17): 5106-14.Taira E, et al. (2004) Characterization of Gicerin/MUC18/CD146 in the rat nervous system. J Cell Physiol. 198(3): 377-87.Fritzsche FR, et al. (2008) CD146 protein in prostate cancer: revisited with two different antibodies. Pathology. 40(5): 457-64.Bidlingmaier S, et al. (2009) Identification of MCAM/CD146 as the target antigen of a human monoclonal antibody that recognizes both epithelioid and sarcomatoid types of mesothelioma. Cancer Res. 69(4): 1570-7.Boneberg EM, et al. (2009) Soluble CD146 is generated by ectodomain shedding of membrane CD146 in a calcium-induced, matrix metalloprotease-dependent process. Microvasc Res. 78(3): 325-31.                                                                                                                                                                                                                                  |

NCBI AND UNIPROT INFORMATION

|                                  |                                        |
|----------------------------------|----------------------------------------|
| NCBI GI #                        | 71274107                               |
| NCBI GeneID                      | 4162                                   |
| NCBI Accession #                 | NP_006491.2                            |
| NCBI GenBank Nucleotide #        | NM_006500.2                            |
| UniProt Accession #              | P43121; O95812; Q59E86; Q6PHR3; Q6ZTR2 |
| Molecular Weight                 | 57,605 Da                              |
| NCBI Official Full Name          | cell surface glycoprotein MUC18        |
| NCBI Official Synonym Full Names | melanoma cell adhesion molecule        |
| NCBI Official Symbol             | MCAM                                   |
| NCBI Official Synonym Symbols    | CD146; MUC18                           |
| NCBI Protein Information         | cell surface glycoprotein MUC18        |
| UniProt Protein Name             | Cell surface glycoprotein MUC18        |
| UniProt Gene Name                | MCAM                                   |
| UniProt Synonym Gene Names       | MUC18                                  |
| UniProt Entry Name               | MUC18_HUMAN                            |

**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.