

# CD166

Purified Mouse Monoclonal Antibody  
Catalog # AO2672a

## Product Information

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<b>Application</b>	WB, IHC, ICC, E
<b>Primary Accession</b>	<a href="#">Q13740</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	2F1B12
<b>Isotype</b>	Mouse IgG1
<b>Calculated MW</b>	65102
<b>Immunogen</b>	Purified recombinant fragment of human CD166 (AA: extra 227-381) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	214
<b>Other Names</b>	MEMD; ALCAM
<b>Dilution</b>	WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~N/A E~~ 1/10000
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	CD166 is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ALCAM
<b>Synonyms</b>	MEMD {ECO:0000303   PubMed:9502422}
<b>Function</b>	Cell adhesion molecule that mediates both heterotypic cell- cell contacts via its interaction with CD6, as well as homotypic cell- cell contacts (PubMed: <a href="#">15048703</a> , PubMed: <a href="#">15496415</a> , PubMed: <a href="#">16352806</a> , PubMed: <a href="#">23169771</a> , PubMed: <a href="#">24945728</a> , PubMed: <a href="#">7760007</a> ). Promotes T-cell activation and proliferation via its interactions with CD6 (PubMed: <a href="#">15048703</a> , PubMed: <a href="#">16352806</a> , PubMed: <a href="#">24945728</a> ). Contributes to the formation and maturation of the immunological synapse via its interactions with CD6

(PubMed:[15294938](#), PubMed:[16352806](#)). Mediates homotypic interactions with cells that express ALCAM (PubMed:[15496415](#), PubMed:[16352806](#)). Acts as a ligand for the LILRB4 receptor, enhancing LILRB4-mediated inhibition of T cell proliferation (PubMed:[29263213](#)). Required for normal hematopoietic stem cell engraftment in the bone marrow (PubMed:[24740813](#)). Mediates attachment of dendritic cells onto endothelial cells via homotypic interaction (PubMed:[23169771](#)). Inhibits endothelial cell migration and promotes endothelial tube formation via homotypic interactions (PubMed:[15496415](#), PubMed:[23169771](#)). Required for normal organization of the lymph vessel network. Required for normal hematopoietic stem cell engraftment in the bone marrow. Plays a role in hematopoiesis; required for normal numbers of hematopoietic stem cells in bone marrow. Promotes in vitro osteoblast proliferation and differentiation (By similarity). Promotes neurite extension, axon growth and axon guidance; axons grow preferentially on surfaces that contain ALCAM. Mediates outgrowth and pathfinding for retinal ganglion cell axons (By similarity).

## Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q61490}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q61490}. Note=Detected at the immunological synapse, i.e, at the contact zone between antigen-presenting dendritic cells and T-cells (PubMed:15294938, PubMed:16352806). Colocalizes with CD6 and the TCR/CD3 complex at the immunological synapse (PubMed:15294938).

## Tissue Location

Detected on hematopoietic stem cells derived from umbilical cord blood (PubMed:24740813). Detected on lymph vessel endothelial cells, skin and tonsil (PubMed:23169771). Detected on peripheral blood monocytes (PubMed:15048703). Detected on monocyte- derived dendritic cells (at protein level) (PubMed:16352806). Detected at low levels in spleen, placenta, liver (PubMed:9502422). Expressed by activated T-cells, B-cells, monocytes and thymic epithelial cells (PubMed:7760007). Isoform 1 and isoform 3 are detected in vein and artery endothelial cells, astrocytes, keratinocytes and artery smooth muscle cells (PubMed:15496415). Expressed by neurons in the brain Restricted expression in tumor cell lines. Detected in highly metastasizing melanoma cell lines (PubMed:9502422)

## References

1.Diagn Pathol. 2015 Jul 2;10:86.2.Asian Pac J Cancer Prev. 2015;16(9):3849-56.

## Images

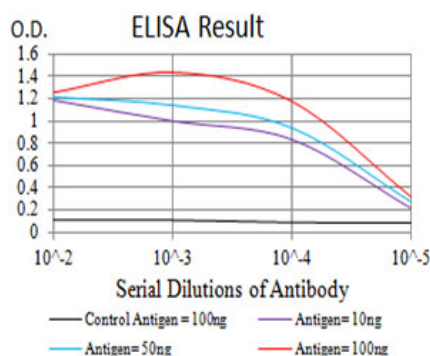


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

Figure 2:Western blot analysis using CD166 mAb against human CD166 (AA: extra 227-381) recombinant protein. (Expected MW is 47 kDa)

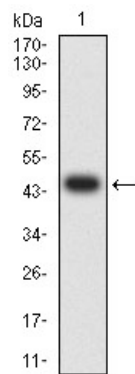


Figure 3: Western blot analysis using CD166 mAb against HEK293 (1) and CD166 (AA: extra 227-381)-hIgGfc transfected HEK293 (2) cell lysate.

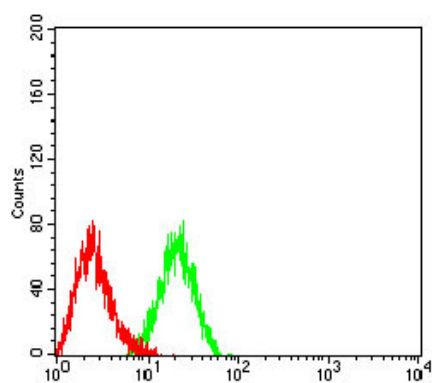
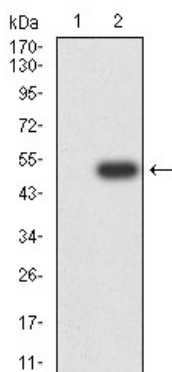


Figure 4: Flow cytometric analysis of HL-60 cells using CD166 mouse mAb (green) and negative control (red).

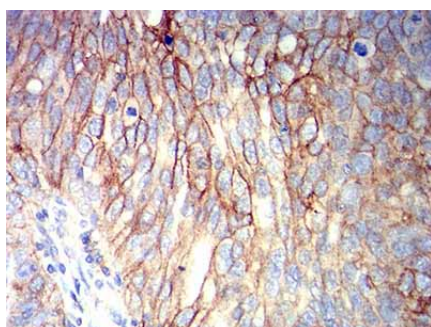
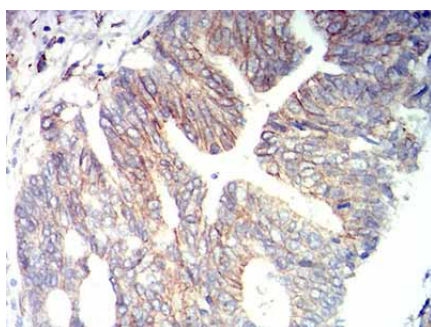


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using CD166 mouse mAb with DAB staining.



1/200 - 1/1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.