

CD166
Purified Mouse Monoclonal Antibody
Catalog # AO2672a**Specification**

CD166 - Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q13740
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	65kDa KDa

Immunogen

Purified recombinant fragment of human CD166 (AA: extra 227-381) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

CD166 - Additional Information

Gene ID 214

Other Names

MEMD; ALCAM

Dilution

WB~~ 1/500 - 1/2000

IHC~~ 1/200 - 1/1000

ICC~~N/A

E~~ 1/10000

Storage

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.

Precautions

CD166 is for research use only and not for use in diagnostic or therapeutic procedures.

CD166 - Protein Information

Name ALCAM

Synonyms MEMD {ECO:0000303|PubMed:9502422}

Function

Cell adhesion molecule that mediates both heterotypic cell- cell contacts via its interaction with

CD6, as well as homotypic cell-cell contacts (PubMed:15048703, PubMed:15496415, PubMed:16352806, PubMed:23169771, PubMed:24945728, PubMed:7760007). Promotes T-cell activation and proliferation via its interactions with CD6 (PubMed:15048703, PubMed:16352806, PubMed:24945728). 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)

CD166 - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD166 - Images

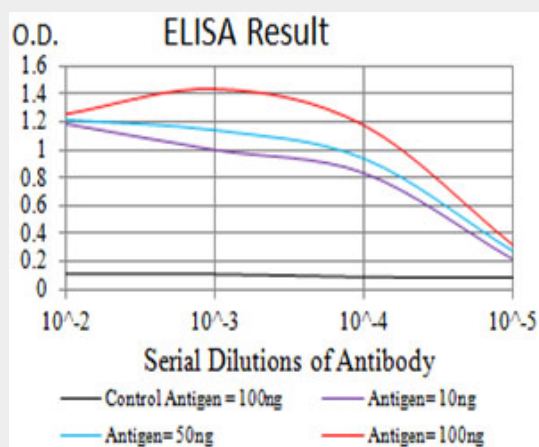


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

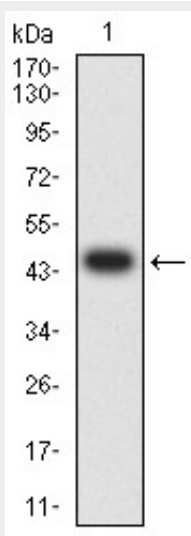


Figure 2: Western blot analysis using CD166 mAb against human CD166 (AA: extra 227-381) recombinant protein. (Expected MW is 47 kDa)

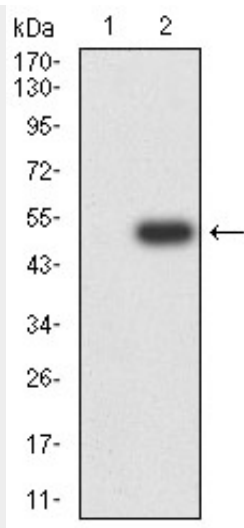


Figure 3: Western blot analysis using CD166 mAb against HEK293 (1) and CD166 (AA: extra 227-381)-hlgGFc transfected HEK293 (2) cell lysate.

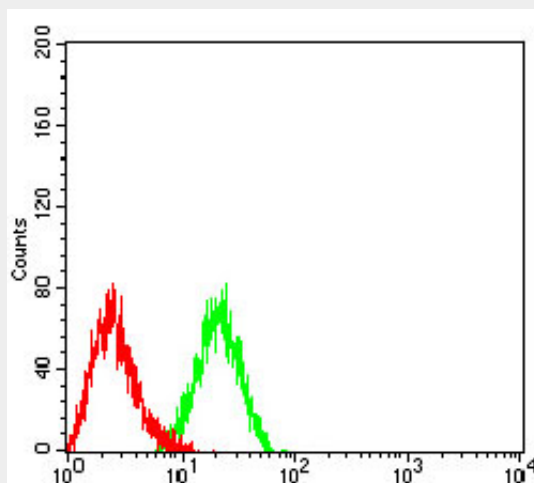


Figure 4: Flow cytometric analysis of HL-60 cells using CD166 mouse mAb (green) and negative control (red).

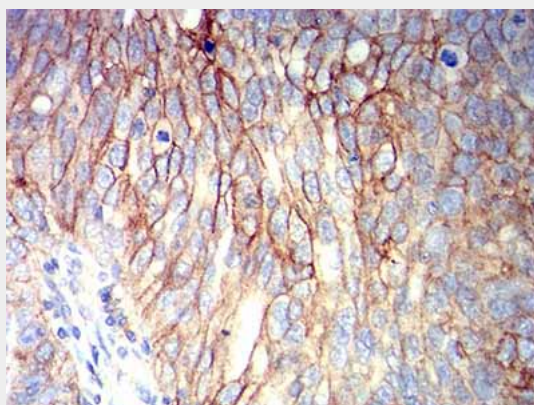
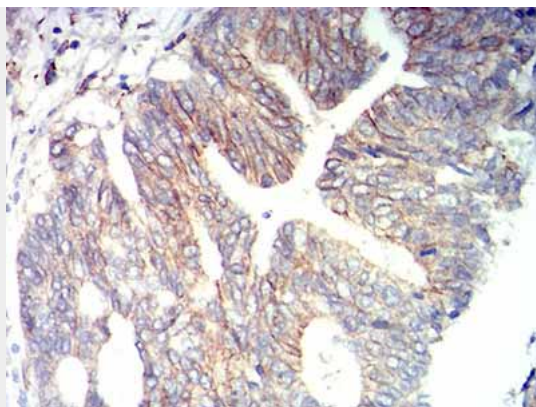


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using CD166 mouse mAb with DAB staining.



1/200 - 1/1000

CD166 - References

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