

Recombinant Anti-CD166 Rabbit mAb

Catalog # AP95111

Product Information

Application	WB, IHC, FC, IP, IF/IC
Primary Accession	Q13740
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	65102

Additional Information

Gene ID	214
Other Names	MEMD; CD166 antigen; Activated leukocyte cell adhesion molecule; CD166
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human CD166 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

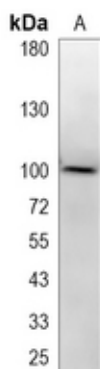
Cellular Location

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).

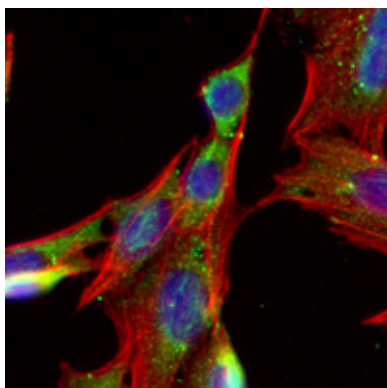
Tissue Location

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)

Images



Western blot analysis of CD166 expression in Daudi (A) whole cell lysates. (Predicted band size: 65 kD; Observed band size: 100 kD)



Immunofluorescent analysis of CD166 staining in Daudi cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).