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CD166 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2882a

Specification

CD166 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q13740
Other Accession	O35112, O46651, Q61490, Q9BH13
Reactivity	**Human**
Predicted	**Bovine, Mouse, Rabbit, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**65102**
Antigen Region	**58-87**

CD166 Antibody (N-term) - Additional Information

Gene ID 214

Other Names
CD166 antigen, Activated leukocyte cell adhesion molecule, CD166, ALCAM, MEMD

Target/Specificity
This CD166 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-87 amino acids from the N-terminal region of human CD166.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CD166 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD166 Antibody (N-term) - 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:7760007, PubMed:15496415, PubMed:15048703, PubMed:16352806, PubMed:23169771, PubMed:24945728). 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)

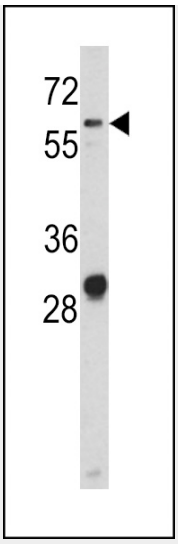
CD166 Antibody (N-term) - Protocols

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

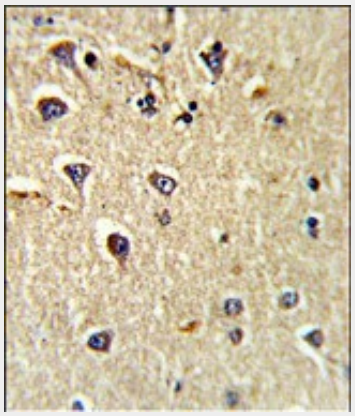
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD166 Antibody (N-term) - Images

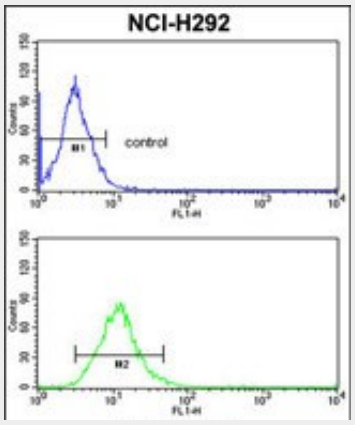
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Western blot analysis of CD166 antibody (N-term) (Cat. #AP2882a) in NCI-H460 cell line lysates (35ug/lane). CD166 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CD166 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CD166 Antibody (N-term) (Cat. #AP2882a) flow cytometric analysis of NCI-H292 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CD166 Antibody (N-term) - Background

CD166 is cell adhesion molecule that binds to CD6. The protein is involved in neurite extension by neurons via heterophilic and homophilic interactions. It may play a role in the binding of T- and B-cells to activated leukocytes, as well as in interactions between cells of the nervous system.

CD166 Antibody (N-term) - References

Kahlert,C., Br. J. Cancer 101 (3), 457-464 (2009)
Kulasingam,V., Int. J. Cancer 125 (1), 9-14 (2009)