

CD166 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2882a**Specification**

CD166 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q13740](#)**CD166 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 214**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2882a](/products/AP2882a) was selected from the N-term region of human CD166. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD166 Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/7760007), PubMed:[15496415](http://www.uniprot.org/citations/15496415), PubMed:[15048703](http://www.uniprot.org/citations/15048703), PubMed:[16352806](http://www.uniprot.org/citations/16352806), PubMed:[23169771](http://www.uniprot.org/citations/23169771), PubMed:[24945728](http://www.uniprot.org/citations/24945728)). Promotes T-cell activation and proliferation via its interactions with CD6 (PubMed:[15048703](http://www.uniprot.org/citations/15048703), PubMed:[15048703](http://www.uniprot.org/citations/15048703), PubMed:[15048703](http://www.uniprot.org/citations/15048703)).

href="http://www.uniprot.org/citations/16352806" target="_blank">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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CD166 Antibody (N-term) Blocking Peptide - Images

CD166 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - References

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