

# Rabbit Anti-CD166 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52264

## **Product Information**

| Application   | WB, IHC-F, IF, E  |
|---|---|
| Primary Accession   | Q13740  |
| Reactivity  | Human, Mouse, Rat   |
| Host  | Rabbit  |
| Clonality   | Polyclonal  |
| Calculated MW   | 65102   |
| Physical State  | Liquid  |
| Immunogen   | KLH conjugated synthetic peptide derived from human CD166   |
| Epitope Specificity   | 451-583/583   |
| Isotype   | IgG   |
| Purity  | affinity purified by Protein A  |
| Buffer<br>SUBCELLULAR LOCATION<br>SIMILARITY<br>Important Note<br>Background Descriptions | <ul> <li>0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.</li> <li>Membrane; Single-pass type I membrane protein.</li> <li>Contains 3 Ig-like C2-type (immunoglobulin-like) domains.Contains 2 Ig-like</li> <li>V-type (immunoglobulin-like) domains.</li> <li>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.</li> <li>CD166 is a member of the Ig superfamily and is expressed on activated</li> <li>T-cells, B cells and other cells including thymic epithelial cells, fibroblasts, keratinocytes and neurons. CD6 has been identified as a receptor for CD166.</li> <li>The expression of CD166 is up-regulated in low-grade prostate tumors and down-regulated in high-grade tumors; may play role in progression of prostate cancer.</li> </ul> |

### **Additional Information**

| Gene ID            | 214  |
|--------------------|--|
| Other Names        | MEMD; CD166; CD166 antigen; Activated leukocyte cell adhesion molecule;<br>ALCAM   |
| Target/Specificity | Spleen, placenta, liver, and weakly in liver. Expressed by activated T-cells,<br>B-cells, monocytes and thymic epithelial cells. Expressed by neurons in the<br>brain. Restricted expression in tumor cell lines. Preferentially expressed in<br>highly metastasizing melanoma cell lines. |
| Dilution           | WB=1:500-2000,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1<br>᠋   |
| Format             | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce   |

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

| Name              | ALCAM   |
|-------------------|---|
| Synonyms          | MEMD {ECO:0000303 PubMed:9502422}   |
| Function          | Cell adhesion molecule that mediates both heterotypic cell- cell contacts via<br>its interaction with CD6, as well as homotypic cell- cell contacts<br>(PubMed:15048703, PubMed:15496415, PubMed:16352806,<br>PubMed:23169771, PubMed:24945728, PubMed:7760007). Promotes T-cell<br>activation and proliferation via its interactions with CD6 (PubMed:15048703,<br>PubMed:16352806, PubMed:24945728). Contributes to the formation and<br>maturation of the immunological synapse via its interactions with CD6<br>(PubMed:15294938, PubMed:16352806). Mediates homotypic interactions<br>with cells that express ALCAM (PubMed:15496415, PubMed:16352806). Acts<br>as a ligand for the LILRB4 receptor, enhancing LILRB4-mediated inhibition of T<br>cell proliferation (PubMed:29263213). Required for normal hematopoietic<br>stem cell engraftment in the bone marrow (PubMed:24740813). Mediates<br>attachment of dendritic cells onto endothelial cells via homotypic interaction<br>(PubMed:23169771). Inhibits endothelial cell migration and promotes<br>endothelial tube formation via homotypic interactions (PubMed:15496415,<br>PubMed:23169771). Required for normal organization of the lymph vessel<br>network. Required for normal hematopoietic stem cell engraftment in the<br>bone marrow. Plays a role in hematopoietic stem cell engraftment in the<br>bone marrow. Plays a role in hematopoietic, required for normal numbers of<br>hematopoietic stem cells in bone marrow. Promotes in vitro osteoblast<br>proliferation and differentiation (By similarity). Promotes neurite extension,<br>axon growth and axon guidance; axons grow preferentially on surfaces that<br>contain ALCAM. Mediates outgrowth and pathfinding for retinal ganglion cell<br>axons (By similarity). |
| Cellular Location | Cell membrane; Single-pass type I membrane protein. Cell projection, axon<br>{ECO:0000250 UniProtKB:Q61490}. Cell projection, dendrite<br>{ECO:0000250 UniProtKB:Q61490}. Note=Detected at the immunological<br>synapse, i.e, at the contact zone between antigen-presenting dendritic cells<br>and T-cells (PubMed:15294938, PubMed:16352806). Colocalizes with CD6 and<br>the TCR/CD3 complex at the immunological synapse (PubMed:15294938).   |
| Tissue Location   | Detected on hematopoietic stem cells derived from umbilical cord blood<br>(PubMed:24740813). Detected on lymph vessel endothelial cells, skin and<br>tonsil (PubMed:23169771). Detected on peripheral blood monocytes<br>(PubMed:15048703). Detected on monocyte- derived dendritic cells (at<br>protein level) (PubMed:16352806). Detected at low levels in spleen, placenta,<br>liver (PubMed:9502422). Expressed by activated T-cells, B-cells, monocytes<br>and thymic epithelial cells (PubMed:7760007). Isoform 1 and isoform 3 are<br>detected in vein and artery endothelial cells, astrocytes, keratinocytes and<br>artery smooth muscle cells (PubMed:15496415). Expressed by neurons in the<br>brain Restricted expression in tumor cell lines. Detected in highly<br>metastasizing melanoma cell lines (PubMed:9502422)   |

#### Background

Cell adhesion molecule that binds to CD6. Involved in neurite extension by neurons via heterophilic and homophilic interactions. 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.

#### References

Bowen M.A.,et al.J. Exp. Med. 181:2213-2220(1995). Ikeda K.,et al.J. Biol. Chem. 279:55315-55323(2004). Abe Y.,et al.Submitted (APR-2006) to the EMBL/GenBank/DDBJ databases. Muzny D.M.,et al.Nature 440:1194-1198(2006). Ota T.,et al.Nat. Genet. 36:40-45(2004).

#### Images



Lane 1: human colon carcinoma lysates Lane 2: rat brain lysates probed with Anti CD166 Polyclonal Antibody, Unconjugated (AP52264) at 1:200 in 4°C. Followed by conjugation to secondary antibody at 1:3000 90min in 37°C. Predicted band 64kD. Observed band size: 64kD.

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