

[24945728](http://www.uniprot.org/citations/24945728), PubMed: [7760007](http://www.uniprot.org/citations/7760007)). Promotes T-cell activation and proliferation via its interactions with CD6 (PubMed: [15048703](http://www.uniprot.org/citations/15048703), PubMed: [16352806](http://www.uniprot.org/citations/16352806), PubMed: [24945728](http://www.uniprot.org/citations/24945728)). Contributes to the formation and maturation of the immunological synapse via its interactions with CD6 (PubMed: [15294938](http://www.uniprot.org/citations/15294938), PubMed: [16352806](http://www.uniprot.org/citations/16352806)). Mediates homotypic interactions with cells that express ALCAM (PubMed: [15496415](http://www.uniprot.org/citations/15496415), PubMed: [16352806](http://www.uniprot.org/citations/16352806)). Acts as a ligand for the LILRB4 receptor, enhancing LILRB4-mediated inhibition of T cell proliferation (PubMed: [29263213](http://www.uniprot.org/citations/29263213)). Required for normal hematopoietic stem cell engraftment in the bone marrow (PubMed: [24740813](http://www.uniprot.org/citations/24740813)). Mediates attachment of dendritic cells onto endothelial cells via homotypic interaction (PubMed: [23169771](http://www.uniprot.org/citations/23169771)). Inhibits endothelial cell migration and promotes endothelial tube formation via homotypic interactions (PubMed: [15496415](http://www.uniprot.org/citations/15496415), PubMed: [23169771](http://www.uniprot.org/citations/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)

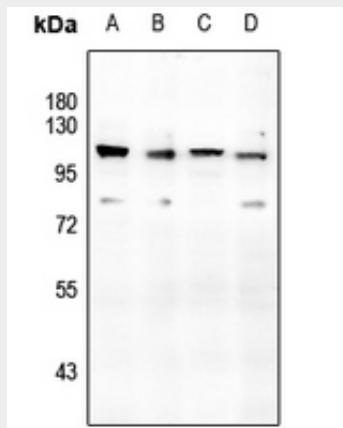
Anti-CD166 Antibody - Protocols

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

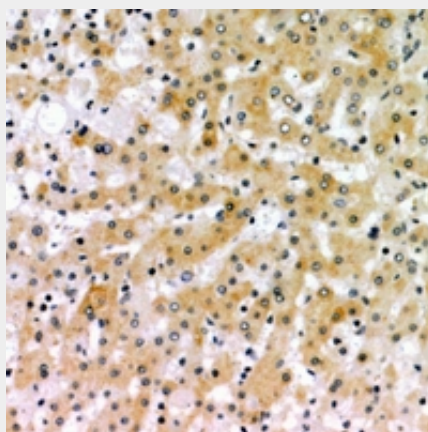
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD166 Antibody - Images



Western blot analysis of CD166 expression in HEK293T (A), HepG2 (B), PMVEC (C), AML12 (D) whole cell lysates.



Immunohistochemical analysis of CD166 staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-CD166 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD166. The exact sequence is proprietary.