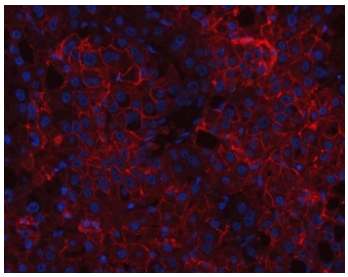
ALCAM Antibody / CD166 Polyclonal Antibody (R32766)

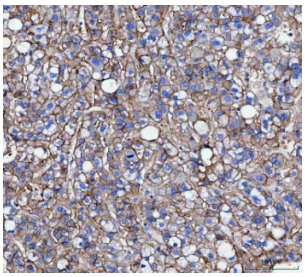
Catalog No.	Formulation	Size
R32766	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

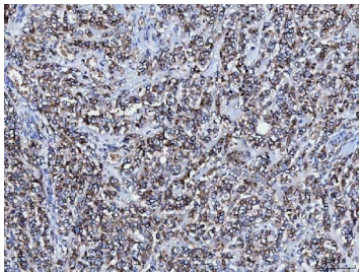
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13740
Localization	Membrane, cytoplasm
Applications	WB: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This ALCAM Antibody / CD166 Polyclonal Antibody is available for research use only.



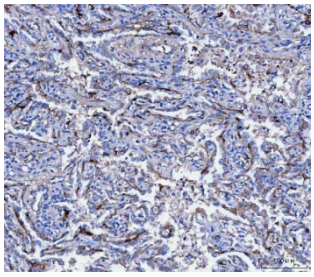
ALCAM Antibody IF Staining of Human Liver Cancer Tissue. Immunofluorescence analysis of FFPE human liver cancer tissue using CD166 Polyclonal Antibody. Red ALCAM immunoreactivity is visible along cellular outlines and in portions of the cytoplasm, while nuclei are counterstained blue with DAPI. Heat-induced epitope retrieval was performed by steaming sections in pH 8 EDTA buffer for 20 minutes.



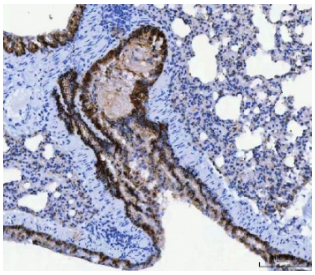
ALCAM Antibody IHC Staining of Human Liver Cancer Tissue. Immunohistochemical analysis of FFPE human liver cancer tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is observed along cell membranes and in portions of the cytoplasm, with heterogeneous staining among tumor-associated cells. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



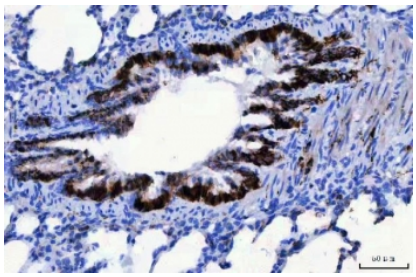
ALCAM Antibody IHC Staining of Human Breast Cancer Tissue. Immunohistochemical analysis of FFPE human breast cancer tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is distributed among tumor-associated cells, with prominent staining along cellular boundaries and variable cytoplasmic signal. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



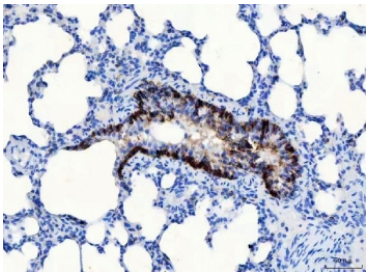
ALCAM Antibody IHC Staining of Human Lung Cancer Tissue. Immunohistochemical analysis of FFPE human lung cancer tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is observed in tumor-associated epithelial structures, with staining involving cell membranes and portions of the cytoplasm. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



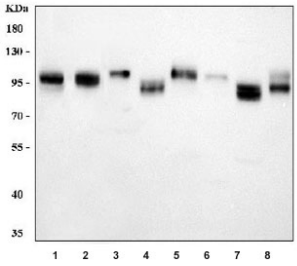
ALCAM Antibody IHC Staining of Mouse Lung Tissue. Immunohistochemical analysis of FFPE mouse lung tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is prominent in the epithelial lining of an airway structure, with comparatively limited staining in portions of the surrounding alveolar tissue. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



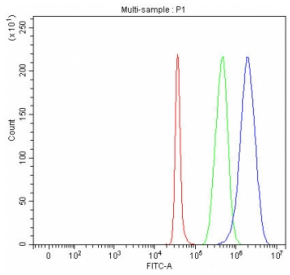
ALCAM Antibody IHC Staining of Rat Lung Airway Epithelium. Immunohistochemical analysis of FFPE rat lung tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is prominent along the epithelial lining of an airway, with additional staining in adjacent cellular structures. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



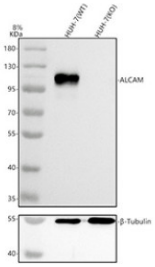
ALCAM Antibody IHC Staining of Rat Lung Bronchiolar Structures. Immunohistochemical analysis of FFPE rat lung tissue using CD166 Polyclonal Antibody. Brown immunoreactivity is concentrated in the epithelial cells lining a small airway, while much of the surrounding alveolar tissue exhibits comparatively limited staining. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA buffer for 20 minutes.



ALCAM Antibody WB Analysis of Human SH-SY5Y and HeLa Cells, Rat Tissues and Mouse Tissues. Western blot analysis of human SH-SY5Y (lane 1) and HeLa (lane 2) cell lysates; rat liver (lane 3), brain (lane 4), and lung (lane 5) tissue lysates; and mouse liver (lane 6), brain (lane 7), and lung (lane 8) tissue lysates using CD166 Polyclonal Antibody. Immunoreactive bands are detected at approximately 85-110 kDa, with differences in apparent molecular weight among the samples. ALCAM has a calculated molecular weight of approximately 65 kDa but undergoes extensive glycosylation, which can increase its apparent molecular weight during SDS-PAGE.



ALCAM Antibody FACS Analysis of Human SH-SY5Y Cells. Flow cytometry analysis of fixed and permeabilized human SH-SY5Y cells using CD166 Polyclonal Antibody at 1 ug per million cells following blocking with goat serum. The blue histogram represents antibody-stained cells, the green histogram represents the isotype control, and the red histogram represents unstained cells. The antibody-stained population exhibits a rightward fluorescence shift relative to both controls.



ALCAM Antibody WB Analysis of Wild-Type and ALCAM Knockout Huh-7 Cells. Western blot analysis of human Huh-7 wild-type (WT, lane 1) and ALCAM knockout (KO, lane 2) whole-cell lysates using CD166 Polyclonal Antibody at 0.5 ug/ml. A prominent immunoreactive band near 105-115 kDa is detected in WT lysate and is absent from the KO sample, supporting ALCAM-specific recognition. The observed migration above the approximately 65 kDa calculated molecular weight is consistent with the extensive glycosylation of mature ALCAM. Beta Tubulin serves as the loading control.

Description

ALCAM Antibody / CD166 Polyclonal Antibody targets activated leukocyte cell adhesion molecule (ALCAM), also known as CD166, a transmembrane glycoprotein belonging to the immunoglobulin superfamily. ALCAM participates in cell-cell adhesion, intercellular communication, and the organization of cellular interactions during development and tissue maintenance. Originally identified through its expression on activated leukocytes, ALCAM is also found in diverse epithelial, endothelial, neural, and mesenchymal cell populations.

ALCAM contains five extracellular immunoglobulin-like domains, a single transmembrane region, and a short cytoplasmic tail. Its extracellular domains mediate both homophilic interactions between ALCAM molecules and heterophilic interactions with CD6, a receptor expressed primarily on T lymphocytes. These interactions contribute to the formation and stability of cell-cell contacts. The ALCAM-CD6 interaction is particularly relevant to immune cell communication, where adhesion molecules help coordinate physical contact between lymphocytes and antigen-presenting cells.

The organization of ALCAM at the plasma membrane is regulated by interactions with the cortical actin cytoskeleton and associated proteins. Changes in receptor clustering and membrane distribution can influence adhesive strength and cellular behavior. ALCAM also undergoes extensive N-linked glycosylation, which contributes to its mature molecular properties and can influence interactions within the extracellular environment. Proteolytic shedding of its extracellular domain provides an additional mechanism for regulating surface expression and generating soluble ALCAM.

During development, ALCAM contributes to processes involving cell migration, tissue organization, and the establishment of specialized cellular contacts. Its expression has been investigated in neuronal development, hematopoietic cell interactions, and the maintenance of epithelial tissue architecture. Because adhesion must be coordinated with cellular movement, changes in ALCAM expression or localization can influence how cells interact with neighboring populations.

ALCAM has also attracted attention in cancer research because altered cell adhesion can contribute to tumor progression

and metastatic behavior. Its expression has been examined in colorectal, breast, lung, and other malignancies, although its biological and prognostic significance varies by tumor type and cellular context. ALCAM Antibody supports investigations into CD166 expression, cell adhesion, tumor-associated cellular interactions, and the mechanisms that regulate communication between neighboring cells.

Explore additional antibodies targeting cell-surface receptors, adhesion molecules, and immune cell markers in our CD Antibodies collection.

Application Notes

Optimal dilution of the ALCAM Antibody / CD166 Polyclonal Antibody should be determined by the researcher.

Immunogen

Amino acids N167-E406 from the human protein were used as the immunogen for the CD166 / ALCAM antibody.

Storage

After reconstitution, the CD166 / ALCAM antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Activated leukocyte cell adhesion molecule antibody, CD166 antibody, CD166 cell adhesion molecule antibody, ALCAM glycoprotein antibody, MEMD antibody, CD6 ligand antibody, Activated leukocyte cell adhesion molecule CD166 antibody, ALCAM cell surface protein antibody, ALCAM immunoglobulin superfamily protein antibody, ALCAM adhesion receptor antibody

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