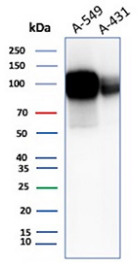
CD166 Antibody rMOG/07 / ALCAM Monoclonal Antibody [clone rMOG/07] (V5885)

Catalog No.	Formulation	Size
V5885-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5885-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5885SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

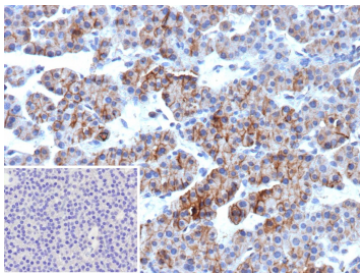
Recombinant MOUSE MONOCLONAL

Bulk quote request

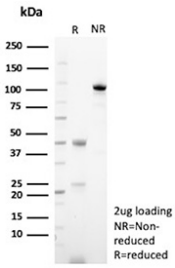
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	rMOG/07
UniProt	Q13740
Localization	Cell membrane
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western Blot: 2-4ug/ml
Limitations	This CD166 Antibody rMOG/07 / ALCAM Monoclonal Antibody is available for research use only.



CD166 Antibody rMOG/07 WB Analysis of Human A549 and A431 Cell Lysates. Western blot analysis of human A549 (lane 1) and A431 (lane 2) cell lysates using ALCAM Monoclonal Antibody clone rMOG/07. Immunoreactive bands are detected near 100-105 kDa, consistent with the reported apparent molecular weight of glycosylated ALCAM. The calculated molecular weight of the unmodified protein is approximately 65 kDa.



CD166 Antibody rMOG/07 IHC Staining of Human Parathyroid Gland Tissue. Immunohistochemical analysis of FFPE human parathyroid gland tissue using ALCAM Monoclonal Antibody clone rMOG/07. Brown immunoreactivity is observed in numerous parathyroid cells, with staining involving cell membranes and cytoplasmic regions. The inset shows the secondary-only negative control, in which the primary antibody was omitted. Heat-induced epitope retrieval was performed in 10 mM Tris with 1 mM EDTA, pH 9.0, at 95Â°C for 45 minutes, followed by cooling at room temperature for 20 minutes.



CD166 Antibody rMOG/07 SDS-PAGE Analysis of Purified Recombinant Antibody. SDS-PAGE analysis of purified ALCAM Monoclonal Antibody clone rMOG/07 under reducing (R) and non-reducing (NR) conditions, with 2 ug of antibody loaded per lane.

Description

CD166 Antibody rMOG/07 / ALCAM Monoclonal Antibody targets activated leukocyte cell adhesion molecule (ALCAM), a transmembrane glycoprotein belonging to the immunoglobulin superfamily. Also designated CD166, ALCAM mediates interactions between neighboring cells and contributes to the organization of tissues, immune cell communication, and cellular migration. Its expression in diverse cell populations reflects the importance of regulated adhesion during development, tissue maintenance, and responses to changes in the cellular environment.

ALCAM contains five extracellular immunoglobulin-like domains, a single transmembrane segment, and a short cytoplasmic region. The extracellular domains support homophilic interactions between ALCAM molecules on adjacent cells and heterophilic binding to CD6, a receptor expressed predominantly on T lymphocytes. These interactions contribute to the stabilization of intercellular contacts and help coordinate communication between immune cells and other cellular populations. The ALCAM-CD6 interaction has attracted particular interest because adhesion influences the duration and organization of contacts involved in immune activation.

Cellular adhesion mediated by ALCAM is dynamically regulated rather than permanently fixed. Interactions with cytoskeletal-associated proteins influence the distribution and clustering of ALCAM at the plasma membrane, affecting the strength and organization of adhesive contacts. The protein also undergoes extensive N-linked glycosylation, contributing to its mature molecular properties. Proteolytic cleavage of the extracellular region can generate soluble ALCAM, providing another mechanism through which its cell-surface abundance and adhesive functions may be regulated.

ALCAM participates in developmental processes requiring coordinated cellular movement and recognition. Its expression has been investigated in neural development, epithelial organization, endothelial interactions, and the regulation of contacts between hematopoietic cells. Changes in ALCAM distribution can influence how cells maintain tissue architecture while retaining the ability to migrate or reorganize in response to developmental and environmental signals.

In cancer biology, altered ALCAM expression and localization have been associated with changes in tumor cell adhesion, invasion, and interactions with surrounding tissues. Its relationship with tumor progression is context-dependent, and differences in expression do not necessarily indicate identical biological behavior across malignancies. CD166 Antibody rMOG/07 supports research into the distribution and regulation of this adhesion molecule, helping characterize the cellular interactions that influence tissue organization, immune communication, and tumor-associated adhesion.

For an alternative reagent with knockout validation and broader species reactivity, explore our ALCAM Antibody targeting CD166, a cell-surface glycoprotein involved in cell adhesion and immune interactions.

Application Notes

1. Optimal dilution of the CD166 Antibody rMOG/07 / ALCAM Monoclonal Antibody should be determined by the researcher.

2. This CD166/ALCAM antibody is recombinantly produced by expression in CHO cells.

Immunogen

The CD166/ALCAM antibody was raised against a 200 amino acid portion of human CD166.

Storage

CD166/ALCAM antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

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

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