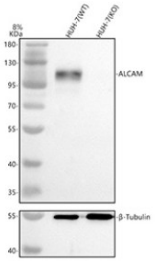
CD166 Antibody ADGA-1 / ALCAM Rabbit Monoclonal Antibody [clone ADGA-1] (FY13706)

Catalog No.	Formulation	Size
FY13706	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ADGA-1
Purity	Affinity purified
UniProt	Q13740
Applications	Western blot: 1:500
Limitations	This CD166 Antibody ADGA-1 / ALCAM Rabbit Monoclonal Antibody is available for research use only.



CD166 Antibody ADGA-1 WB Analysis of Huh-7 WT and ALCAM KO Cells. Western blot analysis of wild-type (WT) and ALCAM-knockout (KO) human Huh-7 whole-cell lysates using ALCAM Rabbit Monoclonal Antibody clone ADGA-1 at a 1:500 dilution. A prominent immunoreactive band at approximately 100-110 kDa is detected in WT lysate but is absent in the KO sample, supporting ALCAM-specific detection under the tested conditions. The higher apparent molecular weight relative to the calculated 65.1 kDa is consistent with the extensive glycosylation of ALCAM. Beta-tubulin serves as a loading control, with bands present in both lanes.

Description

CD166 Antibody ADGA-1 / ALCAM Rabbit Monoclonal Antibody recognizes activated leukocyte cell adhesion molecule (ALCAM), a transmembrane glycoprotein belonging to the immunoglobulin superfamily. Also known as CD166, ALCAM mediates interactions between neighboring cells and contributes to tissue organization, immune regulation, and cellular migration. Its extracellular region contains five immunoglobulin-like domains that participate in adhesive interactions, while its intracellular region connects membrane-associated adhesion events to cellular regulatory mechanisms. ALCAM is

expressed in multiple tissues and cell populations, where it helps coordinate contact-dependent communication and the maintenance of organized cellular structures.

ALCAM participates in both homophilic and heterophilic adhesion. Homophilic interactions occur between ALCAM molecules on adjacent cells, supporting cell-cell attachment and the organization of cellular assemblies. Heterophilic interactions involve binding to CD6, a cell surface receptor associated with T lymphocytes. The ALCAM-CD6 interaction contributes to immune cell communication and the formation of stable contacts between T cells and antigen-presenting cells. These adhesive interactions can influence immune synapse organization, lymphocyte activation, and the duration of cellular signaling events.

The adhesive properties of ALCAM are regulated by its distribution within the plasma membrane and its interactions with the cortical cytoskeleton. Changes in ALCAM clustering, membrane localization, and proteolytic shedding can alter the strength and persistence of cell-cell contacts. ALCAM also contributes to developmental processes involving cell migration and tissue patterning, including aspects of neural organization. Its ability to coordinate adhesive interactions makes it relevant to both stable tissue architecture and dynamic cellular movement.

ALCAM has attracted considerable attention in cancer research because altered expression and localization have been associated with tumor progression, invasion, and metastatic behavior in several malignancies. Its biological effects depend on cellular context, and increased ALCAM expression does not uniformly predict aggressive disease. CD166 is also used as a marker in studies of certain stem and progenitor cell populations, although its expression alone does not establish stem cell identity. CD166 Antibody ADGA-1 provides a reagent for investigating ALCAM protein expression and the relationship between cell adhesion, immune interactions, tissue organization, and cancer-associated cellular behavior.

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

Optimal dilution of the CD166 Antibody ADGA-1 / ALCAM Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human CD166 antigen protein was used as the immunogen for the CD166 Antibody ADGA-1.

Storage

The CD166 Antibody ADGA-1 can be stored at -20oC.

Alternate Names

ALCAM antibody, activated leukocyte cell adhesion molecule antibody, CD166 antigen antibody, MEMD antibody, BEN antibody, SC1 antibody, DM-GRASP antibody, HB2 antibody

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