

ALCAM (H-9): sc-74557

BACKGROUND

Activated leukocyte cell adhesion molecule (ALCAM), expressed on activated leukocytes T cells, B cells and monocytes, is a member of the immunoglobulin superfamily (IgSF) and identified as a CD6 ligand. CD6 is a type I membrane protein in the scavenger receptor cysteine rich protein superfamily that acts in T cell adhesion and costimulation. ALCAM mediates thymocyte-thymic epithelial cell adhesion via homophilic (ALCAM-ALCAM) and heterophilic (ALCAM-CD6) interactions involving a previously undescribed protein-protein interaction between a member of the scavenger receptor cysteine rich protein superfamily and the immunoglobulin superfamily.

REFERENCES

1. Bowen, M.A., et al. 1995. Cloning, mapping, and characterization of activated leukocyte-cell adhesion molecule (ALCAM), a CD6 ligand. *J. Exp. Med.* 181: 2213-2220.
2. Skonier, J.E., et al. 1996. Recognition of diverse proteins by members of the immunoglobulin superfamily: delineation of the receptor binding site in the human CD6 ligand ALCAM. *Biochemistry* 35: 12287-12291.

CHROMOSOMAL LOCATION

Genetic locus: ALCAM (human) mapping to 3q13.11; Alcam (mouse) mapping to 16 B5.

SOURCE

ALCAM (H-9) is a mouse monoclonal antibody raised against amino acids 28-135 mapping near the N-terminus of ALCAM of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ALCAM (H-9) is recommended for detection of ALCAM of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ALCAM siRNA (h): sc-43023, ALCAM siRNA (m): sc-43024, ALCAM shRNA Plasmid (h): sc-43023-SH, ALCAM shRNA Plasmid (m): sc-43024-SH, ALCAM shRNA (h) Lentiviral Particles: sc-43023-V and ALCAM shRNA (m) Lentiviral Particles: sc-43024-V.

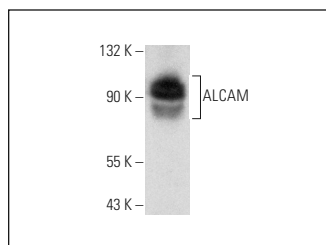
Molecular Weight of ALCAM: 100-105 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, Daudi cell lysate: sc-2415 or SK-N-SH cell lysate: sc-2410.

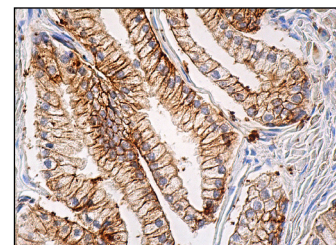
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ALCAM (H-9): sc-74557. Western blot analysis of ALCAM expression in HuT 78 whole cell lysate.



ALCAM (H-9): sc-74557. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing membrane staining of glandular cells.

SELECT PRODUCT CITATIONS


1. Ma, L., et al. 2014. Cluster of differentiation 166 (CD166) regulates cluster of differentiation (CD44) via NFκB in liver cancer cell line Bel-7402. *Biochem. Biophys. Res. Commun.* 451: 334-338.
2. Tang, X., et al. 2015. CD166 positively regulates MCAM via inhibition of ubiquitin E3 ligases Smurf1 and βTrCP through PI3K/AKT and c-Raf/MEK/ERK signaling in Bel-7402 hepatocellular carcinoma cells. *Cell. Signal.* 27: 1694-1702.
3. Mazor, M., et al. 2017. Progenitor cells from cartilage: grade specific differences in stem cell marker expression. *Int. J. Mol. Sci.* 18 pii: E1759.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **ALCAM (B-6): sc-74558** for ALCAM antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.