

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.

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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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.

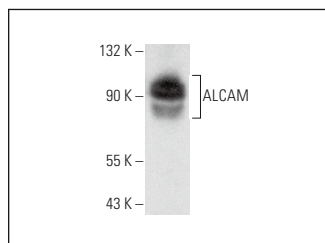
Molecular Weight of ALCAM: 100-105 kDa.

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

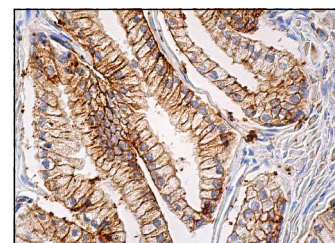
RECOMMENDED SUPPORT REAGENTS

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

- 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.
- Tang, X., et al. 2015. CD166 positively regulates MCAM via inhibition to 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.
- Mazor, M., et al. 2017. Progenitor cells from cartilage: grade specific differences in stem cell marker expression. *Int. J. Mol. Sci.* 18: 1759.
- Agarwal, A., et al. 2023. Inhibition of miR-214 expression by small molecules alleviates head and neck cancer metastasis by targeting ALCAM/TFAP2 signaling. *bioRxiv*. E-published.

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.