

ALCAM (C-20): sc-8549

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.
3. Bowen, M.A., et al. 1997. Structure and chromosomal location of the human CD6 gene: detection of five human CD6 isoforms. *J. Immunol.* 158: 1149-1156.
4. Bowen, M.A., et al. 1997. Characterization of mouse ALCAM (CD166): the CD6-binding domain is conserved in different homologs and mediates cross-species binding. *Eur. J. Immunol.* 27: 1469-1478.
5. Cortes, F., et al. 1999. HCA, an immunoglobulin-like adhesion molecule present on the earliest human hematopoietic precursor cells, is also expressed by stromal cells in blood-forming tissues. *Blood* 93: 826-837.
6. Bowen, M.A. and Aruffo, A. 1999. Adhesion molecules, their receptors and their regulation: analysis of CD6-activated leukocyte cell adhesion molecule (ALCAM/CD166) interactions. *Transplant Proc.* 31: 795-796.
7. Mann, C.J., et al. 2006. Comparison of neurolin (ALCAM) and neurolin-like cell adhesion molecule (NLCAM) expression in zebrafish. *Gene Expr. Patterns* 6: 952-963.
8. Jezierska, A., et al. 2006. ALCAM/CD166 protects breast cancer cells against apoptosis and autophagy. *Med. Sci. Monit.* 12: BR263-BR273.

CHROMOSOMAL LOCATION

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

SOURCE

ALCAM (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ALCAM of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8549 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ALCAM (C-20) is recommended for detection of ALCAM of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ALCAM (C-20) is also recommended for detection of ALCAM in additional species, including equine, canine, bovine, porcine and avian.

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: Daudi cell lysate: sc-2415 or SK-N-SH cell lysate: sc-2410.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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