



## ALCAM (6A66): sc-70345

### 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

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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 3q13.1.

### SOURCE

ALCAM (6A66) is a mouse monoclonal antibody raised against neuronal cell line XKM of rat origin.

### 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.

### PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

ALCAM (6A66) is recommended for detection of ALCAM of human and rat origin by immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for ALCAM siRNA (h): sc-43023.

Molecular Weight of ALCAM: 100-105 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.