

#### DESCRIPTION

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|---------------------------|--|
| <b>Species Reactivity</b> | Human  |
| <b>Specificity</b>        | Detects human ALCAM/CD166 in Western blots. Shows approximately 50% cross-reactivity with recombinant mouse OCAM and no cross-reactivity with recombinant human (rh) BCAM, rhEpCAM, rhMCAM, or rhNCAM-L1.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 105902   |
| <b>Purification</b>       | Protein A or G purified from ascites   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human ALCAM/CD166<br>Trp28-Ala526<br>Accession # Q13740  |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm  |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                       | <b>Recommended Concentration</b> | <b>Sample</b>                      |
|-----------------------|----------------------------------|------------------------------------|
| <b>Flow Cytometry</b> | 0.25-1 µg/10 <sup>6</sup> cells  | Human peripheral blood lymphocytes |

#### PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.                                  |
| <b>Stability &amp; Storage</b> | <b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul> |

#### BACKGROUND

ALCAM, activated leukocyte cell adhesion molecule, is a type I membrane glycoprotein and a member of the immunoglobulin supergene family. It is also known as CD166, MEMD, SC-1/DM-GRASP/BEN in the chicken, and KG-CAM in the rat. ALCAM is expressed on thymic epithelial cells, activated B and T cells, and monocytes. ALCAM can bind itself homotypically and is also capable of binding CD6, NgCAM, and other, as of yet, unidentified brain proteins. The ALCAM/CD6 interaction may be involved in T cell development and T cell regulation. Additionally, ALCAM/CD6 and ALCAM/NgCAM interactions may play roles in the nervous system. ALCAM has also been observed to be upregulated on highly metastasizing melanoma cell lines and may play a role in tumor migration. ALCAM is a 583 amino acid (aa) protein consisting of a 27 aa signal peptide, a 500 aa extracellular domain, a 24 aa transmembrane domain and a 32 aa cytoplasmic domain. The extracellular domain of ALCAM contains 5 Ig-like domains.

#### References:

1. Bowen, M.A. *et al.* (1995) *J. Exp. Med.* **181**:2213.
2. Aruffo, A. *et al.* (1997) *Immunol. Today* **18**:498.
3. Degen, W.G. *et al.* (1998) *Am. J. Pathol.* **152**:805.

#### PRODUCT SPECIFIC NOTICES

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