**DESCRIPTION**

**Species Reactivity**  
Mouse

**Specificity**  
Detects mouse ALCAM/CD166 in Western blots and direct ELISAs. In Western blots, shows 100% cross-reactivity with recombinant human (rh) ALCAM and no cross-reactivity with rhBCAM, rhEpCAM, recombinant mouse (rm) MAAdCAM-1, rmMCAM, rmNCAM-L1, rmOCAM, or rmTROP-2.

**Source**  
Monoclonal Rat IgG\(_2\)A Clone # 200622

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
Mouse myeloma cell line NS0-derived recombinant mouse ALCAM/CD166 Trp28-Lys527  
Accession # AAC06342

**Formulation**  
Lyophilized from a 0.2 \(\mu\)m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 \(\mu\)m filtered solution in PBS.

**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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>1 (\mu)g/mL</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>2.5 (\mu)g/10(^6) cells</td>
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<tr>
<td>CyTOF-ready</td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
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</table>

**PREPARATION AND STORAGE**

**Reconstitution**  
Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

**Stability & Storage**

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**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. 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 of which the amino-terminal V1 domain is essential for ligand binding and ALCAM-mediated cell aggregation (1-4).

**References:**