

## DESCRIPTION

<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 Trp28-Ala526 Accession # Q13740
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

## 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>Western Blot</b>	1 µg/mL	Recombinant Human ALCAM/CD166 Fc Chimera (Catalog # <a href="#">656-AL</a> ) under non-reducing conditions only
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	Human peripheral blood monocytes
<b>Human ALCAM/CD166 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Human ALCAM/CD166 Antibody (Catalog # <a href="#">MAB6561</a> )
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human ALCAM/CD166 Biotinylated Antibody (Catalog # <a href="#">BAF656</a> )
<b>Standard</b>		Recombinant Human ALCAM/CD166 Fc Chimera (Catalog # <a href="#">656-AL</a> )
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</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.