

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Monoclonal Mouse IgG ₁ Clone # 105902
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ALCAM/CD166 Trp28-Ala526 Accession # Q13740
Formulation	Lyophilized from a 0.2 µm 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 µm 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.

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

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. <ul style="list-style-type: none"> ● 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. 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.