

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) MAdCAM-1, rhMCAM, rmNCAM-L1, rmOCAM, or rmTROP-2.
Source	Monoclonal Rat IgG _{2A} 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
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Mouse splenocytes treated with PHA

PREPARATION AND STORAGE

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

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:

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.
4. Van Kempen, L. *et al.* (2001) *J. Biol. Chem.* **276**:25783.

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