

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ALCAM/CD166 in Western blots. In Western blots, approximately 50% cross-reactivity with recombinant human ALCAM is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ALCAM/CD166 Trp28-Lys527 Accession # AAC06342
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 µg/mL	Recombinant Mouse ALCAM/CD166 Fc Chimera (Catalog # 1172-AL)
Flow Cytometry	2.5 µg/10 ⁶ cells	Mouse splenocytes
Immunohistochemistry	5-15 µg/mL	Perfusion fixed frozen sections of mouse thymus

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile Tris-buffered saline, pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% bovine serum albumin.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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. 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.