

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human ALCAM/CD166 in direct ELISAs. |
| Source | Recombinant Monoclonal Mouse IgG ₁ Clone # 2599A |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human ALCAM/CD166 Ala56-His211 Accession # Q13740 |
| 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 | HEK293 Human Cell Line Transfected with Human ALCAM and eGFP |

PREPARATION AND STORAGE

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| 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. 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.

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