

DESCRIPTION

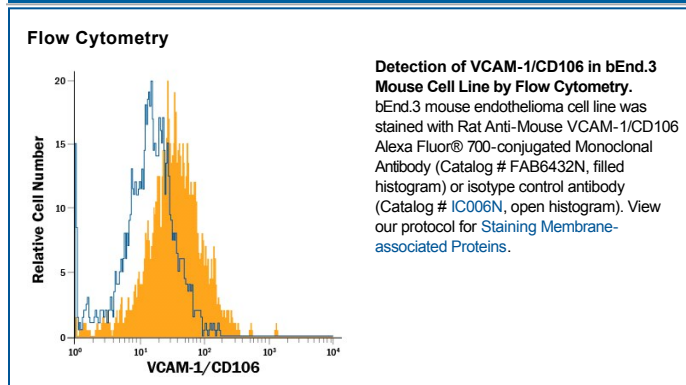
Species Reactivity	Mouse
Specificity	Detects recombinant mouse (m) VCAM-1/CD106 in Western blots and ELISAs. In sandwich immunoassays, no cross-reactivity or interference was observed with recombinant human VCAM-1, rmICAM-1, rmE-Selectin, mL-Selectin or rmP-Selectin.
Source	Monoclonal Rat IgG _{2A} Clone # 112734
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse VCAM-1/CD106 Phe25-Glu698 (predicted) Accession # P29533
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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	5 µL/10 ⁶ cells	See Below

DATA



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. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

VCAM-1 (CD106), an 85-95 kDa member of the immunoglobulin superfamily, is a type I transmembrane glycoprotein expressed by activated endothelial cells and multiple cell types, including osteoblasts, B cells plus plasma cells, select fibroblasts, Kupffer cells, sensory and autonomic neurons, visceral smooth muscle, simple squamous type I alveolar epithelium, and CD133⁺ CD24⁺ renal stem cells. Its expression is typically induced by IL-1β, IL-4, TNF-α and IFN-γ. VCAM-1 binds to leukocyte integrins VLA-4, LPAM-1 and CD11c. Over amino acids (aa) 25-698 (the ECD), mouse VCAM-1 shares approximately 75% and 86% aa sequence identity with human and rat VCAM-1, respectively. During the inflammatory adhesion mechanism, activated integrins halt rolling leukocytes and attach them firmly to the vascular endothelium. They do this by binding to their ligands, for example VCAM-1, on endothelium. The VCAM-1: VLA-4 interaction is thought to be involved in the extravasation of white blood cells through the blood vessel wall to sites of inflammation. ELISA techniques have also shown that detectable levels of soluble VCAM-1 are present in the biological fluids of apparently normal individuals. Within the context, a number of studies have reported that levels of VCAM-1 may be elevated or lowered in subjects with a variety of pathological conditions.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc. and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.