



Antibodies

1B-606-C025

Monoclonal Antibody to CD106 Biotin conjugated (0.025 mg)

Clone:	STA
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody STA recognizes CD106 antigen (VCAM-1), a 100-110 kDa type I membrane protein of the immunoglobulin superfamily, a crucial mediator of leukocyte adhesion, and a costimulation molecule. HLDA V; WS Code A013
Regulatory Status:	RUO
Immunogen:	Human DS6 T cell line
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Usage:	Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow Cytometry. Suggested working dilution is 8 microgram/ml. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD106 / VCAM-1 (vascular cell adhesion molecule-1) is an Ig-like cell surface adhesion molecule binding VLA-4 integrin. VCAM-1 is a potent T cell costimulatory molecule taking part in their positive selection and survival, as well as in adhesion, transendothelial migration and activation of peripheral T cells. VCAM-1 is also involved in endothelial cell-cell contacts. Whereas VCAM-1 normally mediates leukocyte extravasion to sites of tissue inflammation, tumour cells can use overexpressed VCAM-1 to escape T cell immunity. Soluble form of VCAM-1 (sVCAM-1) is an inflammatory marker and can be used also in prognosis of subsequent cariovascular events following acute coronary syndromes.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

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- *Postadzhiyan AS, Tzontcheva AV, Kehayov I, Finkov B: Circulating soluble adhesion molecules ICAM-1 and VCAM-1 and their association with clinical outcome, troponin T and C-reactive protein in patients with acute coronary syndromes. *Clin Biochem.* 2007 Sep 19
- *Paessens LC, Singh SK, Fernandes RJ, van Kooyk Y: Vascular cell adhesion molecule-1 (VCAM-1) and intercellular adhesion molecule-1 (ICAM-1) provide co-stimulation in positive selection along with survival of selected thymocytes. *Mol Immunol.* 2008 Jan;45(1):42-8.
- *Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
- *Leca G, Mansur SE, Bensussan A: Expression of VCAM-1 (CD106) by a subset of TCR gamma delta-bearing lymphocyte clones. Involvement of a metalloprotease in the specific hydrolytic release of the soluble isoform. *J Immunol.* 1995 Feb 1;154(3):1069-77.
- *Yen YT, Liao F, Hsiao CH, Kao CL, Chen YC, Wu-Hsieh BA: Modeling the early events of severe acute respiratory syndrome coronavirus infection in vitro. *J Virol.* 2006 Mar;80(6):2684-93.

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