

1A-606-T025

## Monoclonal Antibody to CD106 Allophycocyanin (APC) conjugated (25 tests)

<b>Clone:</b>	STA
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	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
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Human DS6 T cell line
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.25 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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 extravasation 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 cardiovascular events following acute coronary syndromes.

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**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.
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- \*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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