



11-606-C025

## Monoclonal Antibody to CD106 Purified Antibody (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

**Application:** Flow Cytometry

Recommended dilution:4-6 µg/ml

Positive control:TNF-alpha activated HUVEC cells

Immunoprecipitation

Immunohistochemistry (frozen sections)

Application note:acetone fixation

ELISA

Application note: capture mAb for soluble CD106

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

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.

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.



## PRODUCT DATA SHEET

## References:

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\*Wu TC: The role of vascular cell adhesion molecule-1 in tumor immune evasion. Cancer Res. 2007 Jul 1;67(13):6003-6.

\*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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