

TECHNICAL DATA SHEET

CyFlow™ CD106 Biotin Anti-Hu; Clone STA

REF CX097139

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD106
Alternative Names	VCAM-1, INCAM-110
Clone	STA
Clonality	monoclonal
Format	Biotin
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human DS6 T cell line

Specificity

The mouse monoclonal antibody STA recognizes CD106 antigen, a 100-110 kDa type I membrane protein of the immunoglobulin superfamily, a crucial mediator of leukocyte adhesion, and a costimulation molecule.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for indirect immunofluorescence analysis by Flow Cytometry. Suggested working usage is 8 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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, tumor 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.

References

- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- 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. < PMID: 7529789 >
- van Wetering S, van den Berk N, van Buul JD, Mul FP, Lommerse I, Mous R, ten Klooster JP, Zwaginga JJ, Hordijk PL: VCAM-1-mediated Rac signaling controls endothelial cell-cell contacts and leukocyte transmigration. Am J Physiol Cell Physiol. 2003 Aug; 285(2):C343-52. < PMID: 12700137 >

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- 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. < PMID: 16501078 >
- Wu TC: The role of vascular cell adhesion molecule-1 in tumor immune evasion. Cancer Res. 2007 Jul 1; 67(13):6003-6. < PMID: 17616653 >
- 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; < PMID: 23105687 >
- 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. < PMID: 17604837 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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