Datasheet for ABIN509567

anti-VCAM1 antibody (PE)

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Overview

Quantity:	100 tests
Target:	VCAM1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This VCAM1 antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Human DS6 T cell line
Clone:	STA
Isotype:	IgG1
Specificity:	The mouse monoclonal antibody STA recognizes an extracellular epitope of 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.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	VCAM1

Target Details

Alternative Name:	CD106 (VCAM1 Products)
Background:	Vascular cell adhesion molecule 1,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.,VCAM-1, INCAM-100
Gene ID:	7412
UniProt:	P19320
Pathways:	Carbohydrate Homeostasis

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.

Handling

Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

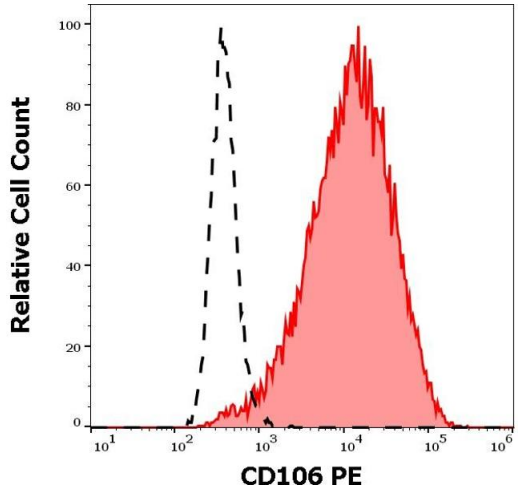
Publications

Product cited in:

Yen, Liao, Hsiao, Kao, Chen, Wu-Hsieh: "Modeling the early events of severe acute respiratory syndrome coronavirus infection in vitro." in: **Journal of virology**, Vol. 80, Issue 6, pp. 2684-93, (2006) (PubMed).

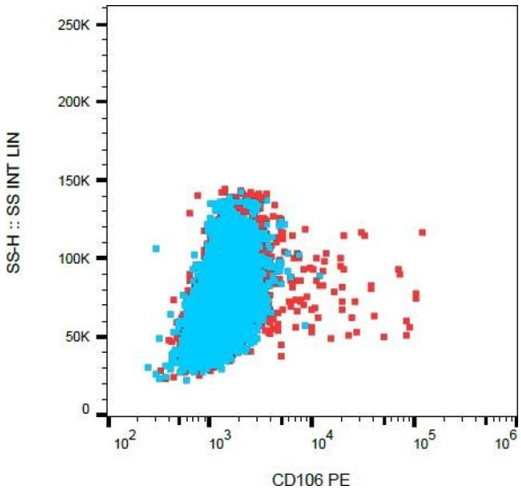
Leca, Mansur, Bensussan: "Expression of VCAM-1 (CD106) by a subset of TCR gamma delta-bearing lymphocyte clones. Involvement of a metalloprotease in the specific hydrolytic release of the soluble isoform." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 154, Issue 3, pp. 1069-77, (1995) (PubMed).

Images



Flow Cytometry

Image 1. Separation of HDLM-2 cells stained using anti-human CD106 (STA) PE antibody (20 µL reagent per million cells in 100 µL of cell suspension, red-filled) from HDLM-2 cells stained using mouse IgG1 isotype control (MOPC-21) PE antibody (concentration in sample 3 µg/mL, same as CD106 PE concentration, black-dashed) in flow cytometry analysis (surface staining) of HDLM-2 cell suspension.



Flow Cytometry

Image 2. Flow cytometry analysis (surface staining) of TNF alpha-stimulated HUVEC cells with anti-CD106 (STA) PE.