Datasheet for ABIN192183

anti-CD31 antibody (PE)

2 Images | 4 Publications

Go to Product page

Overview

Quantity:	100 tests
Target:	CD31 (PECAM1)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD31 antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Hu CD31 PE
Immunogen:	Leukocytes of a patient suffering from LGL-type leukaemia
Clone:	MEM-05
Isotype:	IgG1
Specificity:	The antibody MEM-05 reacts with an extracellular epitope of CD31 (PECAM-1), a 130-140 kDa type I transmembrane glycoprotein expressed on monocytes, platelets, granulocytes, endothelial cells and stem cells of the myeloid lineage.
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:	CD31 (PECAM1)
Alternative Name:	CD31 (PECAM1 Products)
Background:	Platelet and endothelial cell adhesion molecule 1,CD31 (platelet endothelial cell adhesion molecule-1, PECAM-1) is an inhibitory coreceptor involved in regulation of T cell and B cell signaling by a dual immunoreceptor tyrosine-based inhibitory motif (ITIM) that upon associated kinases-mediated phosphorylation provide docking sites for protein-tyrosine phosphatases. CD31 is expressed ubiquitously within the vascular compartment and is located mainly at junctions between adjacent cells. N-terminal Ig-like domain of CD31 is responsible for its homophilic binding, which plays an important role in cell-cell interactions. CD31 is a multifunctional molecule with diverse roles in modulation of integrin-mediated cell adhesion, transendothelial migration, angiogenesis, apoptosis, negative regulation of immunoreceptor signaling, autoimmunity, macrophage phagocytosis, IgE-mediated anaphylaxis and thrombosis. It is one of key regulatory molecules in vascular system.,PECAM-1, EndoCAM, GPIIA, PECA1
Gene ID:	5175
UniProt:	P16284
Pathways:	Regulation of Actin Filament Polymerization

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.
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

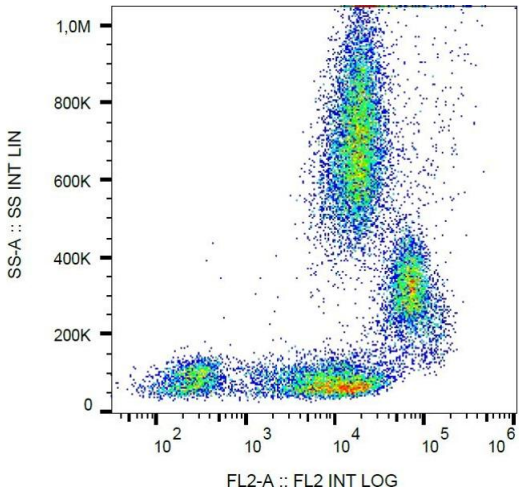
Product cited in:

Kalina, Bakardjieva, Blom, Perez-Andres, Barendregt, Kanderová, Bonroy, Philippé, Blanco, Pico-Knijnenburg, Paping, Wolska-Kuśnierz, Pac, Tkazcyk, Haerynck, Akar, Formánková, Freiberger, Svatoň et al.: "EuroFlow Standardized Approach to Diagnostic Immunopheneotyping of Severe PID in Newborns and Young Children. ..." in: **Frontiers in immunology**, Vol. 11, pp. 371, (2020) (PubMed).

van Dongen, van der Burg, Kalina, Perez-Andres, Mejstrikova, Vlkova, Lopez-Granados, Wentink, Kienzler, Philippé, Sousa, van Zelm, Blanco, Orfao: "EuroFlow-Based Flowcytometric Diagnostic Screening and Classification of Primary Immunodeficiencies of the Lymphoid System." in: **Frontiers in immunology**, Vol. 10, pp. 1271, (2019) (PubMed).

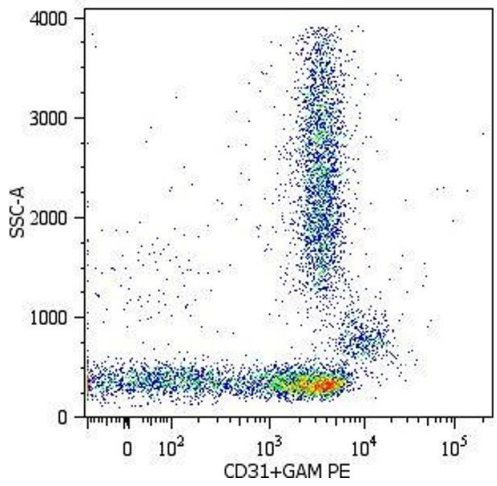
Cârţână, Săftoiu, Gruionu, Gheonea, Pirici, Georgescu, Ciocâlteu, Gruionu: "Confocal laser endomicroscopy for the morphometric evaluation of microvessels in human colorectal cancer using targeted anti-CD31 antibodies." in: **PLoS ONE**, Vol. 7, Issue 12, pp. e52815, (2013) (PubMed).

Prager, Staffler, Majdic, Säemann, Godár, Zlabinger, Stockinger: "Induction of hyporesponsiveness and impaired T lymphocyte activation by the CD31 receptor:ligand pathway in T cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 166, Issue 4, pp. 2364-71, (2001) (PubMed).



Flow Cytometry

Image 1. Flow cytometry analysis (surface staining) of human peripheral blood with anti-human CD31 (MEM-05) PE.



Flow Cytometry

Image 2. Surface staining of lysed and wash human peripheral blood with purified anti-human CD31 (MEM-05) (detection by Goat anti-mouse IgG1 PE).