

Datasheet for ABIN94070
anti-CD31 antibody (Biotin)



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Overview

Quantity:	100 µg
Target:	CD31 (PECAM1)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD31 antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-Hu CD31 Biotin
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 biotin LC-NHS ester under optimum conditions and unconjugated antibody and free biotin 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: Recommended dilution: 2-4 µg/mL.
Restrictions:	For Research Use only

Handling

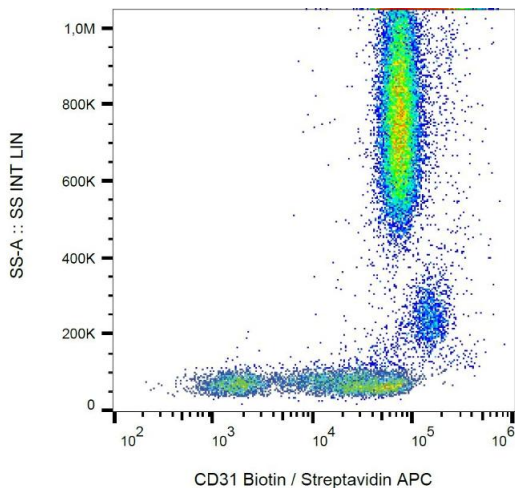
Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze. Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

Product cited in: Cârțână, Săftoiu, Gruionu, Gheonea, Pirici, Georgescu, Ciocâlțeu, 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](#)).

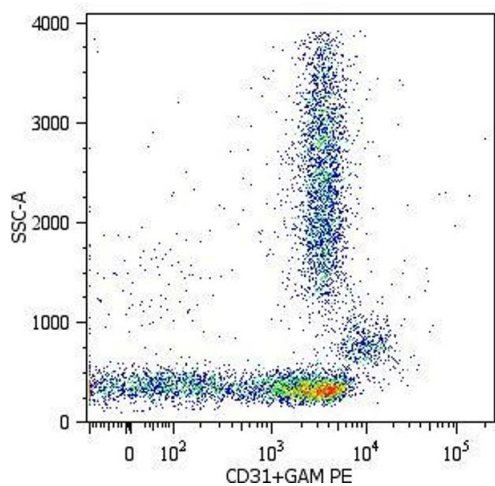
Prager, Staffler, Majdic, Säemann, Godár, Zlabinger, Stockinger: "Induction of hyporesponsiveness and impaired T lymphocyte activation by the CD31 receptor:ligand pathway in T cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 166, Issue 4, pp. 2364-71, (2001) ([PubMed](#)).

Images



Flow Cytometry

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



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).