

1B-273-C025

Monoclonal Antibody to CD31 Biotin conjugated (0.025 mg)

Clone: MEM-05

Isotype: Mouse IgG1

Specificity: The antibody MEM-05 reacts with 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.

Regulatory Status: RUO

Immunogen: Leukocytes of patient suffering from LGL-type leukaemia

Species Reactivity: Human

Preparation: The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions.

The reagent is free of unconjugated biotin.

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.

Usage: Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow

Cytometry.

Suggested working dilution is 1:500. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the

investigator.

Expiration: See vial label

Lot Number: See vial label

Background: 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.



PRODUCT DATA SHEET

References:

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*Wilkinson R, Lyons AB, Roberts D, Wong MX, Bartley PA, Jackson DE: Platelet endothelial cell adhesion molecule-1 (PECAM-1/CD31) acts as a regulator of B-cell development, B-cell antigen receptor (BCR)-mediated activation, and autoimmune disease. Blood. 2002 Jul 1;100(1):184-93.

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