

# anti-human CD31

## Monoclonal Antibody TR17 to CD31 (Human)

Cat-No: **21380311**

100 µg in 100 µl

**Clone:** TR17

**Specificity:** The antibody TR17 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.

**Isotype subclass:** Mouse IgG1

**Form:** Purified from ascites by protein-A affinity chromatography.

**Physical state:** Liquid

**Buffer/Additives/Preservative:** PBS, pH 7.2, containing 0.09% sodium azide.

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

**Storage conditions:** Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

**Application:** Application: Flow Cytometry, Western Blotting: non reducing conditions

**Background:** CD31 (platelet endothelial cell adhesion molecule-1, PECAM-1) is an inhibitory coreceptor involved in rebulation 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.

**References:** Leukocyte Typing VI. Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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