Anti-CD31 (PECAM-1) Rabbit Monoclonal Antibody

CATALOG NO: A1123-50

ALTERNATIVE NAMES: EndoCAM, GPIIA', PECA1, CD_antigen: CD31, PECAM-1

AMOUNT: 50 µl

CLONE: RM247

IMMUNOGEN: A peptide corresponding to the cytoplasmic domain of human CD31

MOLECULAR WEIGHT: ~131 kDa

HOST/ISOTYPE: Rabbit IgG

SPECIES REACTIVITY: Human

PURIFICATION: Protein A affinity purified from an animal origin–free culture supernatant

FORM: Liquid

FORMULATION: 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide

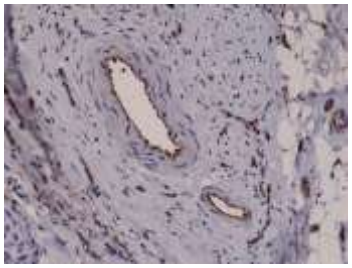
SPECIFICITY: This antibody reacts to human CD31 (Platelet endothelial cell adhesion molecule, PECAM-1).

STORAGE CONDITIONS: For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

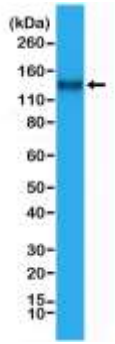
DESCRIPTION: Induces susceptibility to atherosclerosis. Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. Prevents phagocyte ingestion of closely apposed viable cells by transmitting 'detachment' signals, and changes function on apoptosis, promoting tethering of dying cells to phagocytes (the encounter of a viable cell with a phagocyte via the homophilic interaction of PECAM1 on both cell surfaces leads to the viable cell's active repulsion from the phagocyte. During apoptosis, the inside-out signaling of PECAM1 is somehow disabled so that the apoptotic cell does not actively reject the phagocyte anymore. The lack of this repulsion signal together with the interaction of the eat-me signals and their respective receptors causes the attachment of the apoptotic cell to the phagocyte, thus triggering the process of engulfment). Isoform Delta15 is unable to protect against apoptosis. Modulates BDKRB2 activation. Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in human umbilical cord vein cells (HUVEC).

APPLICATION: IHC: 1:1000 -1:2500 dilution; WB: 1:1000 - 1:2000 dilution

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using Anti-CD31 antibody at a 1:2500 dilution.



Western Blot of Jurkat cell lysate, using Anti-CD31 antibody at a 1:1000 dilution, showed CD31 (~130 kDa) expression in Jurkat cells.

RELATED PRODUCTS:

- Human CellExp™ PECAM-1, Human Recombinant **(Cat. No. 7184-10, -50)**

FOR RESEARCH USE ONLY! Not to be used on humans.