CD31 (PECAM-1) (89C2)
Mouse mAb

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications | Species Cross-Reactivity* | Molecular Wt. | Isotype
---|---|---|---
W, IP, IHC-P, IF-IC Endogenous | H | 130 kDa | Mouse IgG1**

Background: CD31 (Platelet Endothelial Cell Adhesion Molecule-1: PECAM-1), a member of the Ig superfamily of cell adhesion molecules, is expressed by circulating platelets, monocytes, neutrophils, some T cells and endothelial cells, and modulates cell adhesion, endothelial cell migration and angiogenesis (1). CD31 is phosphorylated on Tyr686 at the cytoplasmic carboxy-terminal tail upon various stimuli (e.g. mechanical stress or oxidative stress), presumably by Src family members (2). The tyrosine phosphorylation mediates associations with a number of SH2 domain containing binding partners such as PI3-kinase, SHIP, PLCγ and SHP-2. Thus, CD31 serves as a scaffold for various signaling molecules (3).

Specificity/Sensitivity: CD31 (PECAM-1) (89C2) Mouse mAb detects endogenous levels of total CD31 protein. It does not cross-react with other related proteins.

Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant human CD31 protein.

Background References:

Recommended Antibody Dilutions:
Western Blotting 1:1000
Immunoprecipitation 1:50
Immunohistochemistry (Paraffin) 1:1600

Recommended Application:
Western blotting

IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Implication:
DyLight is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries.

Recommended Application: Western blotting
Immunohistochemical analysis of paraffin-embedded human capillary hemangioma using CD31 (PECAM-1) (89C2) Mouse mAb.

Confocal immunofluorescent analysis of HUVEC (upper) and HeLa cells (lower) using CD31 (PECAM-1) (89C2) Mouse mAb (green). Actin filaments have been labeled with DyLight™ 554 Phalloidin #13054(red). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).