

Store at -20C
#3528

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



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P, IF-IC	H	Endogenous	130	Mouse IgG1	#P16284	5175

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:800 - 1:3200
1:800 - 1:3200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #85873.

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

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 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).

Background References

1. Newman, P.J. (1997) *J. Clin. Invest.* 99, 3-8.
2. Cao, M. Y. et al. (1998) *J. Biol. Chem.* 273, 15765-72.
3. Ilan, N. and Madri, J.A. (2003) *Curr. Opin. Cell Biol.* 15, 515-24.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)
IF-IC: Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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