

Datasheet for ABIN1176859

anti-CD31 antibody

11 Publications



Overview

Quantity:	0.5 mg
Target:	CD31 (PECAM1)
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD31 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunoprecipitation (IP), Immunohistochemistry (Formalin-fixed Sections) (IHC (f)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Zinc-fixed Sections) (IHC (zinc)), Blocking Reagent (BR)

Product Details

Brand:	BD Pharmingen™
Immunogen:	C3H/HeJ mouse hematopoietic progenitor cell line 32D
Clone:	390
Isotype:	IgG2a kappa
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Sterility:	0.2 μm filtered
Endotoxin Level:	Endotoxin level is ≤ 0.01 EU/ μ g (≤ 0.001 ng/ μ g) of protein as determined by the LAL assay.

Target Details

Target:	CD31 (PECAM1)
Alternative Name:	CD31 (PECAM-1) (PECAM1 Products)
Background:	The 390 monoclonal antibody specifically binds to CD31, also known as PECAM-1 (platelet
	endothelial cell adhesion molecule). CD31 is a \sim 130 kDa integral membrane glycoprotein, a
	member of the immunoglobulin superfamily, that mediates homophilic and heterophilic cell-ce
	adhesion. CD31 is expressed constitutively on the surface of adult and embryonic endothelial
	cells and is weakly expressed on many peripheral leukocytes and platelets. It has also been
	detected on bone marrow-derived hematopoietic stem cells and embryonic stem cells. CD31 is
	involved in the transendothelial emigration of neutrophils, and neutrophil PECAM-1 appears to
	be down-regulated after extravasation into inflamed tissues. Multiple alternatively spliced
	isoforms are detected during early post-implantation embryonic development, this alternative
	splicing is involved in regulation of ligand specificity. CD38 and vitronectin receptor
	(alphavbeta3 integrin, CD51/CD61) are proposed to be ligands for CD31. CD31-mediated
	endothelial cell-cell interactions are involved in angiogenesis. The 390 mAb inhibits a variety of
	in vitro and in vivo functions mediated by CD31.
	Synonyms: Platelet endothelial cell adhesion molecule, Pecam1, PECAM-1, Pecam-1
Pathways:	Regulation of Actin Filament Polymerization
Application Details	
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile
	filtered.
Preservative:	Azide free
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C. This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Product cited in:

Duncan, Andrew, Takimoto, Kaufman, Yoshida, Spellberg, de la Pompa, Elia, Wakeham, Karan-Tamir, Muller, Senaldi, Zukowski, Mak: "Genetic evidence for functional redundancy of Platelet/Endothelial cell adhesion molecule-1 (PECAM-1): CD31-deficient mice reveal PECAM-1-dependent and PECAM-1-independent functions." in: **Journal of immunology (Baltimore, Md.: 1950)**, Vol. 162, Issue 5, pp. 3022-30, (1999) (PubMed).

Horenstein, Stockinger, Imhof, Malavasi: "CD38 binding to human myeloid cells is mediated by mouse and human CD31." in: **The Biochemical journal**, Vol. 330 (Pt 3), pp. 1129-35, (1998) (PubMed).

Buck, Edelman, Buck, Kennedy, Baldwin: "Expression patterns of adhesion receptors in the developing mouse lung: functional implications." in: **Cell adhesion and communication**, Vol. 4, Issue 2, pp. 69-87, (1997) (PubMed).

DeLisser, Christofidou-Solomidou, Strieter, Burdick, Robinson, Wexler, Kerr, Garlanda, Merwin, Madri, Albelda: "Involvement of endothelial PECAM-1/CD31 in angiogenesis." in: **The American journal of pathology**, Vol. 151, Issue 3, pp. 671-7, (1997) (PubMed).

Famiglietti, Sun, DeLisser, Albelda: "Tyrosine residue in exon 14 of the cytoplasmic domain of platelet endothelial cell adhesion molecule-1 (PECAM-1/CD31) regulates ligand binding specificity." in: **The Journal of cell biology**, Vol. 138, Issue 6, pp. 1425-35, (1997) (PubMed).

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