

Datasheet for ABIN2689180

anti-CD31 antibody

10 Publications



Overview

Quantity:	0.1 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
Characteristics:	The 390 antibody reacts with CD31, also known as PECAM-1 (platelet endothelial cell adhesion molecule). CD31 is a ~130 kDa integral membrane glycoprotein, a member of the immunoglobulin superfamily, that mediates homophilic and heterophilic cell-cell 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 ($\alpha v \beta 3$ 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. This antibody is routinely tested by flow cytometric analysis. Other applications were tested during antibody development only or reported in the literature.

BD Pharmingen™ Purified Rat Anti-Mouse CD31 - Purified - Clone 390 - Isotype Rat IgG2a, κ - Reactivity Ms - 0.1 mg

Purification:

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	CD31 (PECAM1)
Alternative Name:	CD31 (PECAM1 Products)
Background:	Synonyms: PECAM-1
Pathways:	Regulation of Actin Filament Polymerization

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

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).

Iguchi, Okuyama, Koguma, Obinata, Yanai: "Selective stimulation of granulopoiesis in vitro by established bone marrow stromal cells." in: **Cell structure and function**, Vol. 22, Issue 3, pp. 357-64, (1997) (PubMed).

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