

# PECAM-1 (C-20): sc-1505

## BACKGROUND

Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors including neuroblastomas, rhabdomyosarcomas, Wilm's tumors, Ewing's sarcomas and some primitive myeloid malignancies. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the B2 $\alpha$ 1 and B2 $\alpha$ M integrins. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a glycoprotein expressed on the cell surfaces of monocytes, neutrophils, platelets and a subpopulation of T cells. VCAM-1 (vascular cell adhesion molecule-1) was first identified as an adhesion molecule induced on human endothelial cells by inflammatory cytokines such as IL-1, tumor necrosis factor (TNF) and lipopolysaccharide (LPS). The KALIG gene encodes a nerve cell adhesion molecule (NCAM)-like protein and is deleted in 66% of patients with Kallmann's syndrome, anosmia with secondary hypogonadism.

## CHROMOSOMAL LOCATION

Genetic locus: PECAM1 (human) mapping to 17q23.3; Pecam1 (mouse) mapping to 11 E1.

## SOURCE

PECAM-1 (C-20) is available as either goat (sc-1505) or rabbit (sc-1505-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of PECAM-1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1505 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PECAM-1 (C-20) is recommended for detection of PECAM-1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PECAM-1 siRNA (h): sc-29445, PECAM-1 siRNA (m): sc-29446, PECAM-1 shRNA Plasmid (h): sc-29445-SH, PECAM-1 shRNA Plasmid (m): sc-29446-SH, PECAM-1 shRNA (h) Lentiviral Particles: sc-29445-V and PECAM-1 shRNA (m) Lentiviral Particles: sc-29446-V.

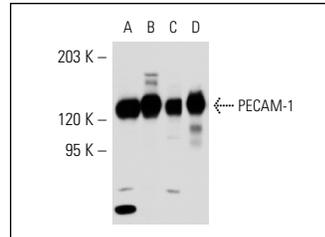
Molecular Weight of PECAM-1: 130 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CTLL-2 cell lysate: sc-2242 or human platelet whole cell lysate: sc-363773.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



PECAM-1 (C-20)-R: sc-1505-R. Western blot analysis of PECAM-1 expression in Jurkat (A), human platelet (B), CTLL-2 (C) and human PBL (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Davies, G., et al. 2000. Cell-cell adhesion molecules and signaling intermediates and their role in the invasive potential of prostate cancer cells. *J. Urol.* 163: 985-992.
- Ilan, N., et al. 2000. Platelet-endothelial cell adhesion molecule-1 (CD31), a scaffolding molecule for selected catenin. *J. Biol. Chem.* 275: 21435-21443.
- Tasaki, M., et al. 2009. Identification and characterization of major proteins carrying ABO blood group antigens in the human kidney. *Transplantation* 87: 1125-1133.
- Su, S.C., et al. 2010. Annexin 2 regulates endothelial morphogenesis by controlling AKT activation and junctional integrity. *J. Biol. Chem.* 285: 40624-40634.
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- Zhou, J., et al. 2010. Embryoid bodies formation and differentiation from mouse embryonic stem cells in collagen/Matrigel scaffolds. *J. Genet. Genomics* 37: 451-460.
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## RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **PECAM-1 (H-3): sc-376764** or **PECAM-1 (E-4): sc-365804**, our highly recommended monoclonal alternatives to PECAM-1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **PECAM-1 (H-3): sc-376764**.