

PECAM-1 (M-185): sc-28188

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 α 1 and B2 α 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 (M-185) is a rabbit polyclonal antibody raised against amino acids 376-560 mapping within an extracellular domain of PECAM-1 of mouse origin.

PRODUCT

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

APPLICATIONS

PECAM-1 (M-185) is recommended for detection of PECAM-1 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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: WEHI-3 cell lysate: sc-3815, CTLL-2 cell lysate: sc-2242 or mouse PBL whole cell lysate.

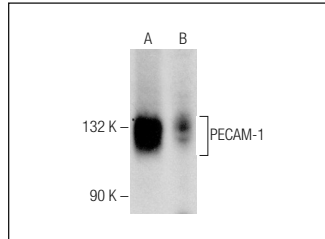
STORAGE

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

RESEARCH USE

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

DATA



PECAM-1 (M-185): sc-28188. Western blot analysis of PECAM-1 expression in CTLL-2 (A) and mouse PBL (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Kreutz, R., et al. 2007. Induction of C1q expression in glomerular endothelium in a rat model with arterial hypertension and albuminuria. *J. Hypertens.* 25: 2308-2316.
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- Hata, N., et al. 2010. Platelet-derived growth factor BB mediates the tropism of human mesenchymal stem cells for malignant gliomas. *Neurosurgery* 66: 144-156.
- Degousee, N., et al. 2011. Group V phospholipase A2 in bone marrow-derived myeloid cells and bronchial epithelial cells promotes bacterial clearance after *Escherichia coli* pneumonia. *J. Biol. Chem.* 286: 35650-35662.
- Shen, K., et al. 2012. c-Jun N-terminal kinase mediated VEGFR2 sustained phosphorylation is critical for VEGFA-induced angiogenesis *in vitro* and *in vivo*. *Cell Biochem. Biophys.* 64: 17-27.


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Try **PECAM-1 (H-3): sc-376764** or **PECAM-1 (E-4): sc-365804**, our highly recommended monoclonal alternatives to PECAM-1 (M-185). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **PECAM-1 (H-3): sc-376764**.