
Anti- PECAM-1

Cat #: HM1054
Goat polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

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. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a type I integral membrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It is constitutively expressed on the surface of endothelial cells, and concentrated at the junction between them. It is also expressed on many peripheral lymphoid cells and platelets. CD31 interacts homotypically in cell adhesion assays.

SPECIFICITY

This antibody specifically reacts with PECAM-1 of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

IMMUNOGEN

A synthetic peptide derived from N-terminus of human PECAM-1 protein.

STORAGE

This antibody is stable for 12 months when stored at 2-8° C.

REFERENCES

1. Simmons,D.L., Walker,C., Power,C. and Pigott,R. (1990) Molecular cloning of CD31, a putative intercellular adhesion molecule closely related to carcinoembryonic antigen. *J. Exp. Med.* 171, 2147-2152.
2. Newman,P.J., Berndt,M.C., Gorski,J., White,G.C. II, Lyman,S., Paddock,C. and Muller,W.A. (1990) PECAM-1 (CD31) cloning and relation to adhesion molecules of the immunoglobulin gene superfamily. *Science* 247, 1219-1222.
3. Berman, M.E., Xie, Y., and Muller, W.A. 1996. Roles of platelet/endothelial cell adhesion molecule-1 (PECAM-1, CD31) in natural killer cell transendothelial migration and beta 2 integrin activation. *J. Immunol.* 156: 1515-1524.
4. Cao,M.Y., Huber,M., Beauchemin,N., Famiglietti,J., Albelda,S.M. and Veillette,A. (1998) Regulation of mouse PECAM-1 tyrosine phosphorylation by the Src and Csk families of protein-tyrosine kinases. *J. Biol. Chem.* 273, 15765-15772.
5. Gamulescu,M.A., Seifert,K., Tingart,M., Falet,H. and Hoffmeister,K.M. (2003) Platelet moesin interacts with PECAM-1 (CD31). *Platelets* 14, 211-217.
6. Newman,P.J. and Newman,D.K. (2003) Signal transduction pathways mediated by PECAM-1: new roles for an old

molecule in platelet and vascular cell biology. *Arterioscler. Thromb. Vasc. Biol.* 23, 953-964.

7. Ilan,N. and Madri,J.A. (2003) PECAM-1: old friend, new partners. *Curr. Opin. Cell Biol.* 15, 515-524.
8. Wong,M.X. and Jackson,D.E. (2004) Regulation of B cell activation by PECAM-1: implications for the development of autoimmune disorders. *Blood* 10, 155-161.
9. Sumpio,B.E., Yun,S., Cordova,A.C., Haga,M., Zhang,J., Koh,Y. and Madri,J.A. (2005) MAPKs (ERK1/2, p38) and AKT can be phosphorylated by shear stress independently of platelet endothelial cell adhesion molecule-1 (CD31) in vascular endothelial cells. *J. Biol. Chem.* 280, 11185-11191.

PRODUCTS FROM HYPROMATRIX, INC.**A. AntibodyArray™s:**

1. Signal Transduction AntibodyArray™
Catalog Number HM3000
2. Apoptosis AntibodyArray™
Catalog Number HM4000
3. Cell Cycle AntibodyArray™
Catalog Number HM5000

B. Staining AntibodyArray™s

1. Staining AntibodyArray™ I
Catalog Number HM8100
2. AntibodyArray Staining Apparatus
Catalog Number HM8000

C. Antibodies**1. HRP-conjugated antibodies**

- anti-phosphotyrosine
Catalog Number HM2040
- anti-phosphoserine
Catalog Number HM2070
- anti-phosphothreonine
Catalog Number HM2090

and more...

2. Primary antibodies

Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at www.hypromatrix.com.

CONTACT

Hypromatrix, Inc.
100 Barber Avenue
Worcester, MA 01606
USA

Tel: 508-856-7900
Fax: 508-302-0748
Email: contact@hypromatrix.com
Web: www.hypromatrix.com