Active Platelet/Endothelial Cell Adhesion Molecule (PECAM1)

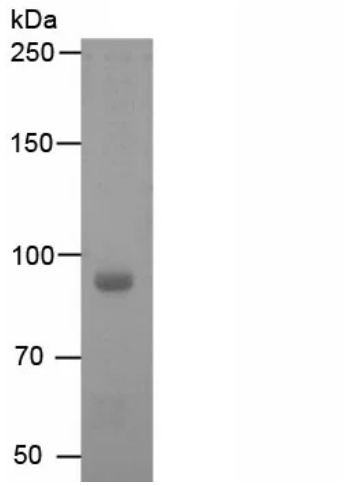
Catalog#:PHH12346

概述（Summary）

别称（Alternative Names）	CD31; EndoCAM; GPIIA'; PECA1
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gln28-Lys601】
Accession #	P16284
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	65.6 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. Trans-homophilic interaction may play a role in endothelial cell-cell adhesion via cell junctions. Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils. Homophilic ligation of PECAM1 prevents macrophage-mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment

signal. Promotes macrophage-mediated phagocytosis of apoptotic leukocytes by tethering them to the phagocytic cells; PECAM1-mediated detachment signal appears to be disabled in apoptotic leukocytes. Modulates bradykinin receptor BDKRB2 activation. Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in endothelial cells. Induces susceptibility to atherosclerosis.; Does not protect against apoptosis.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

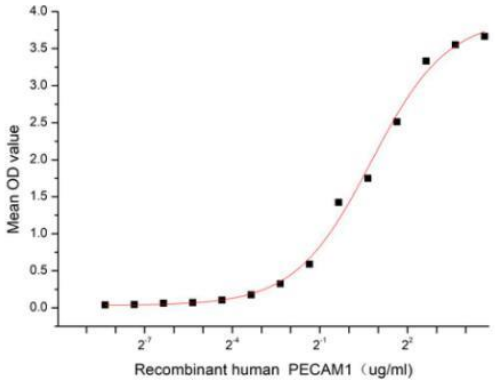


Figure 1. The binding activity of recombinant human PECAM1 and recombinant human PTPN6

Platelet/Endothelial Cell Adhesion Molecule (PECAM1), also known as CD31, is a transmembrane glycoprotein which belongs to the immunoglobulin superfamily. PECAM1 is widely expressed in various tissues, including blood vessels, the heart, lungs, and the brain and plays an important role in intercellular adhesion, cell migration, platelet function regulation and immune response.Abnormal expression of PECAM-1 is also associated with a variety of diseases, such as atherosclerosis, inflammation and blood diseases. Besides, Protein Tyrosine Phosphatase, Non Receptor Type 6 (PTPN6) has been identified as an interactor of PECAM1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human PECAM1 and recombinant human PTPN6. Briefly, biotin-linked PECAM1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate

samples of 100 ul were then transferred to PTPN6-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human PECAM1 and recombinant human PTPN6 was shown in Figure 1, the EC50 for this effect is 1.69 ug/mL.

注意事项（Note）

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