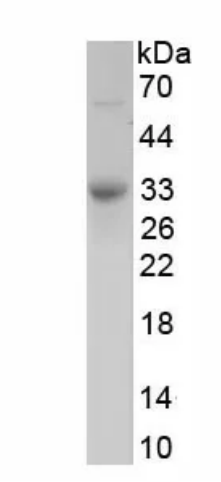
Active Cluster Of Differentiation 146 (CD146)

Catalog#:PEH12720

概述（Summary）

别称（Alternative Names）	MCAM; MUC18; Melanoma Cell Adhesion Molecule; Cell surface glycoprotein P1H12; Melanoma-associated antigen A32; S-endo 1 endothelial-associated antigen
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Asp324-Val565】
Accession #	P43121
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	27.9 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）	Plays a role in cell adhesion, and in cohesion of the endothelial monolayer at intercellular junctions in vascular tissue. Its expression may allow melanoma cells to interact with cellular elements of the vascular system, thereby enhancing hematogeneous tumor spread. Could be an adhesion molecule active in neural crest cells during embryonic development. Acts as surface receptor that triggers tyrosine phosphorylation of FYN and PTK2/FAK1, and a transient increase in the intracellular calcium concentration.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

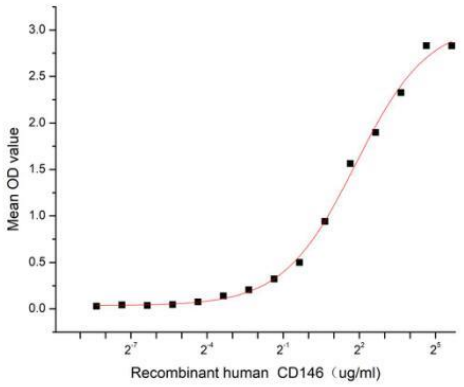


Figure 1. The binding activity of recombinant human CD146 and recombinant rat PECAM-1

CD146 (cluster of differentiation 146), also known as MUC18 or MCAM, is a putative adhesion molecule that belongs to the immunoglobulin superfamily (IgSF). It is an approximately 113-kDa type1 transmembrane glycoprotein that is expressed at the intercellular junction of endothelial cells. CD146 was originally identified as a tumor marker for melanoma (MCAM) due to its existence only in melanoma but not in the corresponding normal counterpart. However CD146 is not just a CAM for the inter-cellular and cell-matrix adhesion. Recent evidence indicates that CD146 is actively involved in miscellaneous processes, such as development, signaling transduction, cell migration, mesenchymal stem cells differentiation, angiogenesis and immune response. CD146 and PECAM-1 are both members of immunoglobulin superfamily of cell adhesion molecules. PECAM-1 has been identified as an interactor of CD146, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CD146 and recombinant rat PECAM-1. Briefly, CD146 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to PECAM-1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CD146 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 ul stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human CD146 and recombinant rat PECAM-1 was shown in Figure 1, the EC50 for this effect is 3.6 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.