

Cluster Of Differentiation 146 (CD146) Active Protein | CD146 active protein

Active Cluster Of Differentiation 146 (CD146)

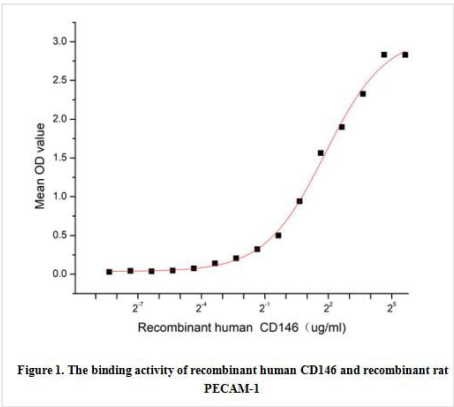
CATALOG # AAA161855	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Cluster Of Differentiation 146 (CD146); Active Cluster Of Differentiation 146 (CD146); Cluster Of Differentiation 146; MCAM; MUC18; Melanoma Cell Adhesion Molecule; Cell surface glycoprotein P1H12; Melanoma-associated antigen A32; S-endo 1 endothelial-associated antigen4; CD146 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Asp324~Val 565
Applicable Applications for CD146 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.1
Research Area	CD & Adhesion molecule, Tumor immunity, Dermatology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

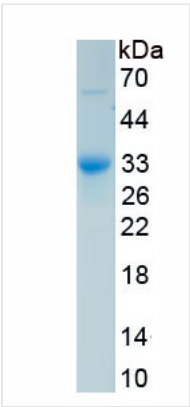


Bioactivity

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 degree C. 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 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. 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.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for CD146 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	85681878
NCBI GeneID	4162
UniProt Accession #	P43121; O95812; Q59E86; Q6PHR3; Q6ZTR2
Molecular Weight	646
NCBI Official Full Name	Cell surface glycoprotein MUC18
NCBI Official Synonym Full Names	melanoma cell adhesion molecule
NCBI Official Symbol	MCAM
NCBI Official Synonym Symbols	CD146; MUC18
NCBI Protein Information	cell surface glycoprotein MUC18; Gicerin; melanoma adhesion molecule; cell surface glycoprotein P1H12; melanoma-associated antigen A32; melanoma-associated antigen MUC18; S-endo 1 endothelial-associated antigen
UniProt Protein Name	Cell surface glycoprotein MUC18
UniProt Gene Name	MCAM

UniProt Synonym Gene Names	MUC18
UniProt Entry Name	MUC18_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/cluster-of-differentiation-146-cd146/161855>