# Active Homing Associated Cell Adhesion Molecule (HCAM)

*Catalog#:PEM12464*

## 概述（Summary）

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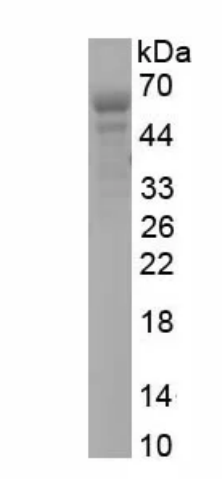
| **别称（Alternative Names）** | CDW44; CD44; CSPG8; ECMR-III; HCELL; IN; LHR; MC56; MDU2; MDU3; MIC4; MUTCH-I; Pgp1; Hematopoietic Cell E- And L-Selectin Ligand; Chondroitin Sulfate Proteoglycan 8 |
| **纯度（Purity）** | Greater than 80% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | Please contact with the lab for this information |
| **蛋白构建（Construction）** | 【Gln23-Pro258】 |
| **Accession #** | P15379 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Mus musculus (Mouse) |
| **预测分子量（Predicted MW）** | 56.2 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-surface receptor that plays a role in cell-cell interactions, cell adhesion and migration, helping them to sense and respond to changes in the tissue microenvironment. Participates thereby in a wide variety of cellular functions including the activation, recirculation and homing of T-lymphocytes, hematopoiesis, inflammation and response to bacterial infection. Engages, through its ectodomain, extracellular matrix components such as hyaluronan/HA, collagen, growth factors, cytokines or proteases and serves as a platform for |

signal transduction by assembling, via its cytoplasmic domain, protein complexes containing receptor kinases and membrane proteases. Such effectors include PKN2, the RhoGTPases RAC1 and RHOA, Rho-kinases and phospholipase C that coordinate signaling pathways promoting calcium mobilization and actin-mediated cytoskeleton reorganization essential for cell migration and adhesion.

## 电泳图（SDS-PAGE image）




Greater than 80% as determined by reducing SDS-PAGE.

## 活性图（Bioactivity image）

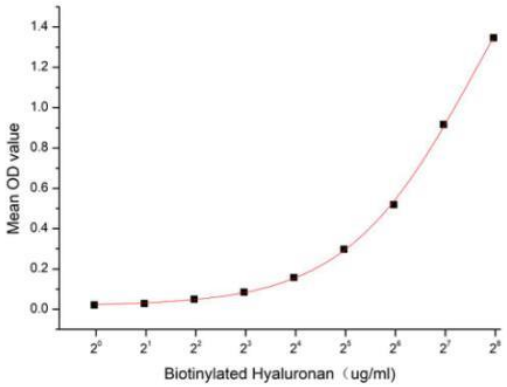



**Figure 1. The binding activity of recombinant mouse CD44 and biotinylated HA**

Homing Associated Cell Adhesion Molecule (HCAM), also known as CD44, is a ubiquitous multistructural and multifunctional cells surface adhesion molecule involved in cell-cell and cell-matrix interactions. CD44 is broadly expressed, including in the membranes of B cells, granulocytes, monocytes, and erythrocytes as well as on many thymocytes and mature T cells, besides it is highly expressed in many cancers and regulates metastasis via recruitment of CD44 to the cell surface. This protein is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse HCAM and biotinylated hyaluronan (HA). Briefly, biotin-linked HA was diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to HCAM-coated microtiter wells and incubated for 2h at 37℃. Wells were

washed with PBST 3 times and incubation with Streptavidin-HRP for 1 hour, 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 450/630 nm immediately. The binding activity of recombinant mouse HCAM and biotinylated HA was shown in Figure 1, and this effect was in a dose dependent manner.

## 注意事项（Note）

For Research Use Only , Not for Diagnostic Use.