Active Cluster Of Differentiation 8a (CD8a)

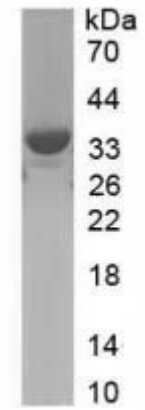
Catalog#:PHH12607

概述（Summary）

别称（Alternative Names）	p32; CD8-A; Leu2; MAL; T-cell surface glycoprotein CD8 alpha chain; T-lymphocyte differentiation antigen T8/Leu-2
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）	【Ser22-Val235】
Accession #	P01732
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	21.0 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）	Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different

intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

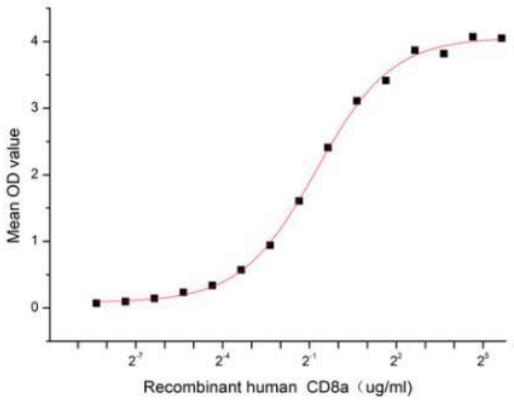


Figure 1. The binding activity of recombinant human CD8a and recombinant human CD4

Cluster Of Differentiation 8a (CD8a) is an approximately 32-34 kDa cell surface glycoprotein found on cytotoxic T lymphocytes. It belongs to the immunoglobulin family and is a key component of the immune system, particularly in the context of T-cell biology. Its interaction with MHC class I molecules is crucial for T-cell development, activation, and the mediation of the immune response against infected or cancerous cells.CD4 and CD8 molecules play a key role in the interaction between T cells and antigen presenting cells (APCs), thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CD8a and recombinant human CD4. Briefly, biotin-linked CD8a were diluted serially in PBS, with 0.01% BSA (pH 7.4).

Duplicate samples of 100 ul were then transferred to CD4-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 CD8a and recombinant human CD4 was shown in Figure 1, the EC50 for this effect is 0.59 ug/mL.

注意事项（Note）

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