Active T-Cell Surface Glycoprotein CD3 Epsilon (CD3e)

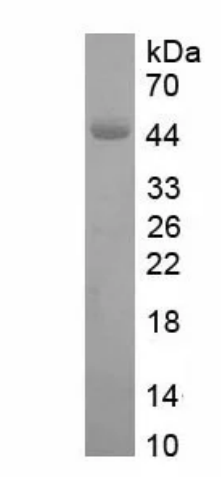
Catalog#:PHH12899

概述（Summary）

别称（Alternative Names）	T3E; TCRE; CD3-E Molecule,Epsilon(CD3-TCR Complex); T-cell surface antigen T3/Leu-4 epsilon chain
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）	【Asp23-Asp126】
Accession #	P07766
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	42.8 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）	Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways. In addition of this role of signal

transduction in T-cell activation, CD3E plays an essential role in correct T-cell development. Initiates the TCR-CD3 complex assembly by forming the two heterodimers CD3D/CD3E and CD3G/CD3E. Participates also in internalization and cell surface down-regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

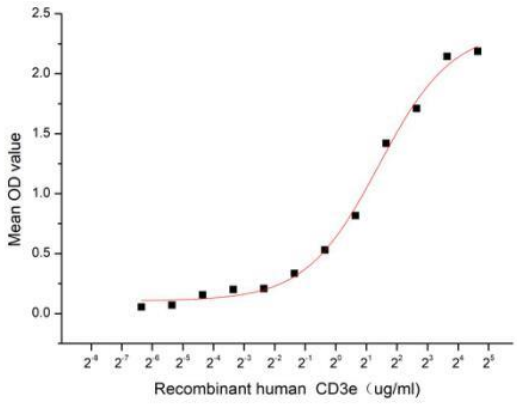


Figure 1. The binding activity of recombinant human CD3e and recombinant human CD247

CD3 epsilon (T-Cell Surface Glycoprotein CD3 Epsilon) is a 104-kD glycoprotein of the immunoglobulin (Ig) superfamily expressed in lymph node (RPKM 92.6), appendix (RPKM 45.9) and 9 other tissues. CD3 epsilon plays essential role in adaptive immune response. Mutations in CD3 epsilon lead to SCID (severe combined immunodeficiency). CD3E and CD247 can form two heterodimers flanking either side of the TCR. Thus a functional ELISA assay was conducted to detect the interaction of recombinant human CD3e and recombinant human CD247. Briefly, CD3e was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to CD247-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CD3e 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 µL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human CD3e and recombinant human CD247 was shown in Figure 1, the EC50 for this effect is 0.68 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.