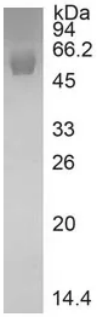
Active Cluster Of Differentiation 5 (CD5)

Catalog#:PHH12745

概述（Summary）

别称（Alternative Names）	T1; LEU1; Lymphocyte antigen T1/Leu-1
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）	【Arg25-Pro372】
Accession #	P06127
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	40.3 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）	May act as a receptor in regulating T-cell proliferation.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

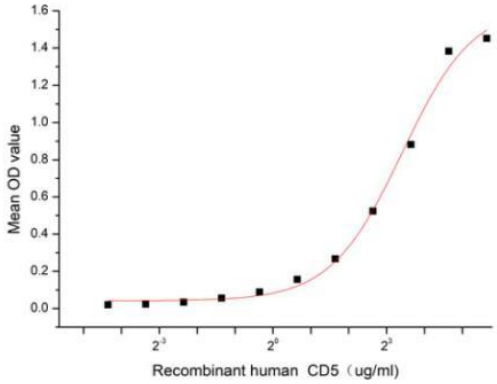


Figure 1. The binding activity of recombinant human CD5 and recombinant mouse CD19

Cluster Of Differentiation 5 (CD5) is a cluster of differentiation found on a subset of IgM-secreting B cells called B-1 cells, and also on T cells. B-1 cells have limited diversity of their B-cell receptor due to their lack of the enzyme terminal deoxynucleotidyl transferase (TdT) and are potentially self-reactive. CD5 serves to mitigate activating signals from the BCR so that the B-1 cells can only be activated by a very strong stimuli (such as bacterial proteins) and not by normal tissue proteins. CD5 was used as a T-cell marker until monoclonal antibodies against CD3 were developed. In humans, the gene is located on the long arm of chromosome 11. T cells express higher levels of CD5 than B cells. CD5 is upregulated on T cells upon strong activation. Cluster Of Differentiation 19 (CD19) has a remarkably high affinity for CD5, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CD5 and recombinant mouse CD19. Briefly, biotin-linked CD5 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CD19-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 CD5 and recombinant mouse CD19 was shown in Figure 1, the EC50 for this effect is 10.6 ug/mL.

注意事项（Note）

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