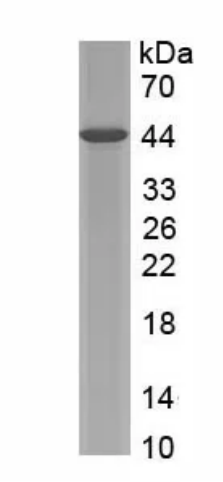
Active Cluster Of Differentiation 19 (CD19)

Catalog#:PHH12759

概述（Summary）

别称（Alternative Names）	B4; B-lymphocyte surface antigen B4; T-cell surface antigen Leu-12
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro20-Val113】
Accession #	P15391
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	41.4 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）	Functions as coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes. Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens. Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores. Is not required for early steps during B cell differentiation in the blood marrow. Required for normal differentiation of B-1 cells. Required for normal B cell differentiation and proliferation in response to antigen challenges. Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

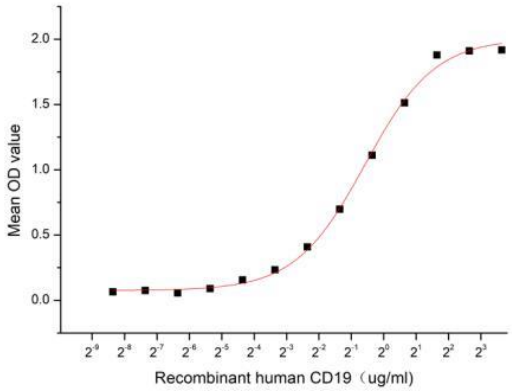


Figure 1. The binding activity of recombinant human CD19 and recombinant human VAV1

Cluster Of Differentiation 19 (CD19) is a type I transmembrane glycoprotein belonging to the immunoglobulin superfamily. It is expressed in normal and neoplastic B cells, and it modulates the threshold of B cell activation for amplifying B cell receptor signaling. This protein has recently emerged as a very attractive biomarker and therapeutic target for B-cell malignancies. The development of safe and effective ligands for CD19 has become an important need for the development of targeted conventional and immunotherapies. As far as we know, signaling through CD19 activates Vav/mitogen-activated protein kinase pathway and induces formation of a CD19/Vav/phosphatidylinositol 3-kinase complex in human B cell precursors. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CD19 and recombinant human VAV1. Briefly, biotin-linked CD19 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to VAV1-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 CD19 and recombinant human VAV1 was shown in Figure 1, the EC50 for this effect is 0.67 ug/mL.

注意事项（Note）

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