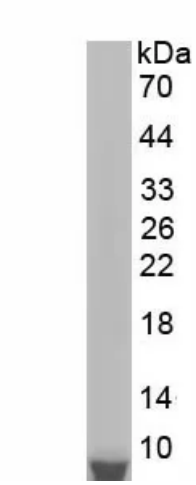
Active Apolipoprotein C1 (APOC1)

Catalog#:PEH12303

概述（Summary）

别称（Alternative Names）	Apo-C1; Truncated apolipoprotein C-I
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）	【Ser31-Ser83】
Accession #	P02654
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	7.5 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）	Inhibitor of lipoprotein binding to the low density lipoprotein (LDL) receptor, LDL receptor-related protein, and very low density lipoprotein (VLDL) receptor. Associates with high density lipoproteins (HDL) and the triacylglycerol-rich lipoproteins in the plasma and makes up about 10% of the protein of the VLDL and 2% of that of HDL. Appears to interfere directly with fatty acid uptake and is also the major plasma inhibitor of cholesteryl ester transfer protein (CETP). Binds free fatty acids and reduces their intracellular esterification. Modulates the interaction of APOE with beta-migrating VLDL and inhibits binding of beta-VLDL to the LDL receptor-related protein.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

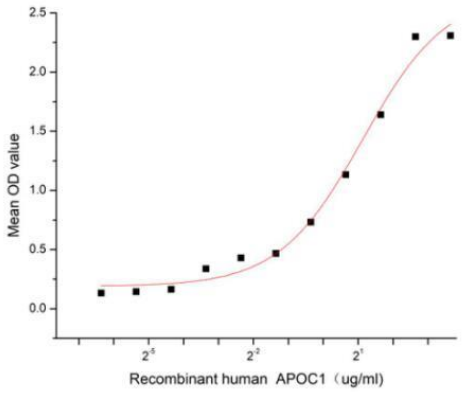


Figure 1. The binding activity of recombinant human APOC1 and recombinant mouse APOC3

Apolipoprotein C1 (APOC1), also known as Apo-CI; ApoC-I; apo-CIB; apoC-IB, is the smallest size apolipoprotein of all apolipoprotein C family (Mr = 6.6 kDa) and located at position 19q13.32. APOC1 is primarily expressed in the liver and activated when monocytes differentiate into macrophages. It plays important roles in the innate immune response as effector of glucocorticoid-mediated responses and regulator of the inflammatory process. It has anti-inflammatory activity and also can promote the differentiation of T-cells into Th1 cells and negatively regulates differentiation into Th2 cells. Besides, Apolipoprotein C3 (APOC3) has been identified as an interactor of APOC1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human APOC1 and recombinant mouse APOC3. Briefly, APOC1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to APOC3-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-APOC1 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 APOC1 and recombinant mouse APOC3 was shown in Figure 1, the EC50 for this effect is 2.19 ug/mL.

注意事项（Note）

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