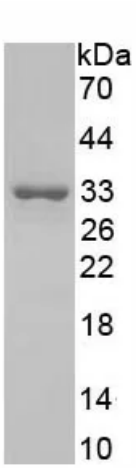
Active Apolipoprotein M (APOM)

Catalog#:PEM12835

概述（Summary）

别称（Alternative Names）	Apo-M; G3a; NG20; Protein G3a
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）	【Met20-Lys190】
Accession #	Q9Z1R3
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	25.8 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）	Probably involved in lipid transport. Can bind sphingosine-1-phosphate, myristic acid, palmitic acid and stearic acid, retinol, all-trans-retinoic acid and 9-cis-retinoic acid.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

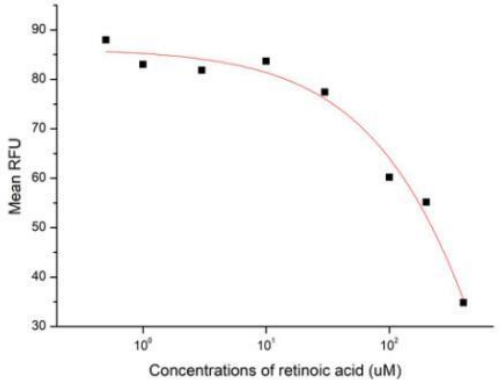


Figure 1 The binding activity of recombinant mouse APOM with retinoic acid

Apolipoprotein M (APOM) is an approximately 25 kDa variably glycosylated protein that adopts a beta-barrel structure characteristic of lipocalin family proteins. It functions as a component of lipoprotein particles which play essential roles in fatty acid and cholesterol transport and metabolism. Alternative splicing generates a short isoform that lacks the N-terminal 72 amino acids. APOM is produced primarily by hepatocytes but also by renal tubule epithelial cells. The signal peptide is not cleaved and is required for APOM association with lipoprotein particles as well as Megalin mediated reabsorption by the kidney. The activity of recombinant mouse APOM was measured by its ability to bind all-trans retinoic acid. The binding of retinoic acid results in the quenching of Trp fluorescence in APOM. APOM was diluted to 50 ug/ml in 50 mM Tris, 10 mM CaCl2, 150 mM NaCl, pH 7.5 (assay buffer) and the retinoic acid was diluted to 400, 200, 100, 30, 10, 3, 1 and 0.5 µM in 95% ethanol. Mixing 112.5 µL of 50 µg/mL rmAPOM and 12.5 µL of retinoic acid serial dilutions in microtubes and a blank containing 112.5 µL of 50 µg/mL rmAPOM and 12.5 µL of 95% ethanol, then incubate at room temperature for 30 minutes. Loading 100 ul of the reaction mixtures and blank and read at excitation and emission wavelengths of 280 nm and 340 nm (top read), respectively, in endpoint mode. The result was shown in figure 1, the 50% binding concentration (BC50) is >300 µM.

注意事项（Note）

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