

Basic Information

Product Name	Anti-Apolipoprotein AI/APOA1 Antibody	
Gene Name	APOA1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, IHC-F, ICC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived human APOA1 recombinant protein (Position: D25-Q267). Human APOA1 shares 64% and 61.7% amino acid (aa) sequence identity with mouse and rat APOA1, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	24KD	
Dilution Ratios	Western blot(WB):	1:500-2000
	Immunohistochemistry(Paraffin-embedded Section):	1:50-400
	Immunohistochemistry(Frozen Section):	1:50-400
	Immunocytochemistry:	1:50-400
	Flow cytometry (FCM):	1-3 µg/1x10 ⁶ cells
	ELISA:	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Apolipoprotein A-1, also known as APOA1, is a human protein with a specific role in lipid metabolism. It binds to lipopolysaccharide or endotoxin, and has a major role in the anti-endotoxin function of HDL. The gene is mapped to 11q23. And it is a single polypeptide chain with 243 amino acid residues of known primary amino acid sequence. The ApoA-I protein promotes cholesterol efflux from tissues to the liver for excretion. It is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. ApoA-I is also isolated as a prostacyclin (PGI₂) stabilizing factor, and thus may have an anticlotting effect. Defects in the gene encoding it are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. Additionally, ApoA-I overexpression promotes macrophage-specific reverse cholesterol transport.

Selected Validation Data



Western blot analysis of Apolipoprotein A I expression in human placenta extract (lane 1). Apolipoprotein A I at 26KD was detected using rabbit anti- Apolipoprotein A I Antigen Affinity purified polyclonal antibody (Catalog # PB9916) at 0.5 $\mu\text{g/mL}$. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).

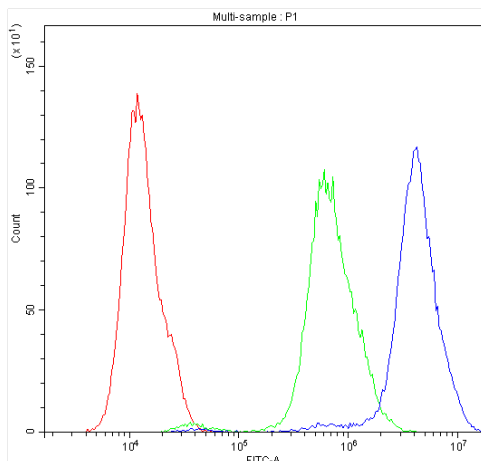


Figure 4. Flow Cytometry analysis of CACO-2 cells using anti-APOA1 antibody (PB9916). Overlay histogram showing CACO-2 cells stained with PB9916 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APOA1 Antibody (PB9916, $1\mu\text{g}/1\times 10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, $5-10\mu\text{g}/1\times 10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG ($1\mu\text{g}/1\times 10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.