

## Basic Information

<b>Product Name</b>	Anti-Apolipoprotein AI/APOA1 DyLight 488 Conjugated Antibody
<b>Gene Name</b>	APOA1
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human
<b>Tested Application</b>	FCM
<b>Contents</b>	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.02% Na <sub>3</sub> N.
<b>Immunogen</b>	E. coli-derived human Apolipoprotein A I recombinant protein (Position: D25-Q267). Human Apolipoprotein A I shares 64% and 61.7% amino acid (aa) sequence identity with mouse and rat Apolipoprotein A I, respectively.
<b>Fluorophores</b>	A <sub>max</sub> =488nm; E <sub>max</sub> =515-545nm
<b>Conjugate</b>	DyLight 488
<b>Concentration</b>	500ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Dilution Ratios</b>	Flow cytometry (FCM):1-3 μg/1x10 <sup>6</sup> cells

## Storage

At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.

## 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 (PGI<sub>2</sub>) 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

# Anti-Apolipoprotein AI/APOA1 DyLight 488 Conjugated Antibody

Catalog Number: **A00717-Dyl488**

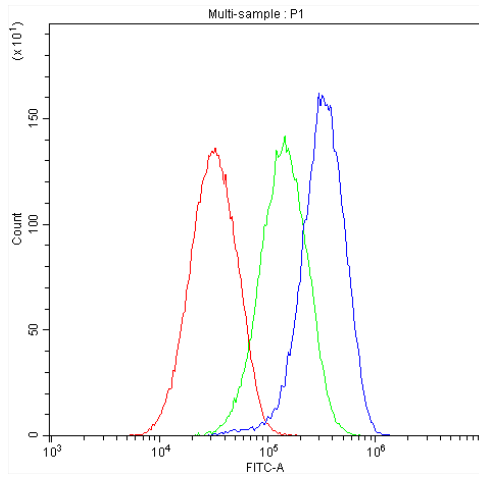


Figure 1. Flow Cytometry analysis of HEPG2 cells using anti-Human Apolipoprotein A I antibody (A00717-Dyl488). Overlay histogram showing HEPG2 cells stained with A00717-Dyl488 (Blue line). Isotype control antibody (Green line) was rabbit IgG (1 $\mu$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.