

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Apolipoprotein C-II/ApoC2 in direct ELISA.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2554B
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived human Apolipoprotein C-II/ApoC2 Thr23-Glu101 Accession # P02655
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

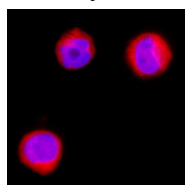
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

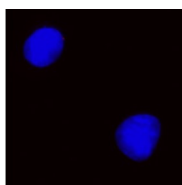
	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	3-25 µg/mL	Immersion fixed THP-1 human acute monocytic leukemia cell line
<b>Immunohistochemistry</b>	0.3-25 µg/mL	Immersion fixed paraffin-embedded sections of human liver
<b>ELISA</b>	This antibody functions as an ELISA detection antibody when paired with Rabbit Anti-Human Apolipoprotein C-II/ApoC2 Monoclonal Antibody (Catalog # <a href="#">MAB4497</a> ). This product is intended for assay development on various assay platforms requiring antibody pairs.	

## DATA

### Immunocytochemistry



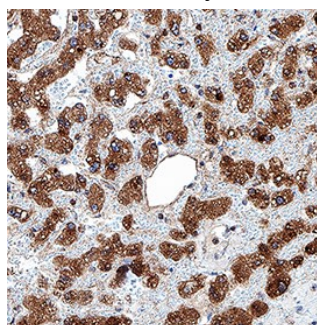
Positive (THP-1 cells)



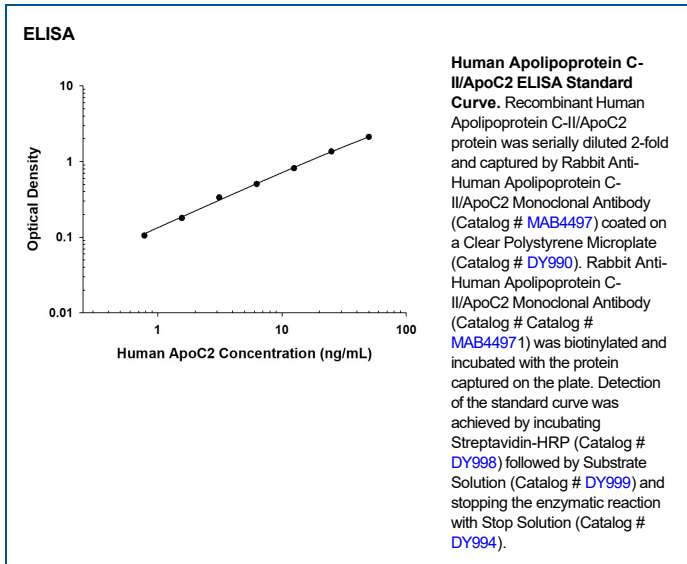
Negative (MCF-7 cells)

**Apolipoprotein C-II/ApoC2 in THP-1 Human Cell Line.**  
Apolipoprotein C-II/ApoC2 was detected in immersion fixed THP-1 human acute monocytic leukemia cell line (left panel; positive staining) and MCF-7 human breast cancer cell line (right panel; negative staining) using Rabbit Anti-Human Apolipoprotein C-II/ApoC2 Monoclonal Antibody (Catalog # MAB44971) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # [NL004](#)) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

### Immunohistochemistry



**Apolipoprotein C-II/ApoC2 in Human Liver.** Apolipoprotein C-II/ApoC2 was detected in immersion fixed paraffin-embedded sections of human liver using Rabbit Anti-Human Apolipoprotein C-II/ApoC2 Monoclonal Antibody (Catalog # MAB44971) at 0.3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # [VC003](#)). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # [CTS013](#)). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in hepatocytes. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Apolipoprotein C2 (ApoC2/II) is a 8-9 kDa, secreted member of the Apolipoprotein C2 family of proteins. It is produced by hepatocytes and represents a major component of VLDL particles. It activates lipoprotein lipase and may self-associate to form amyloid-type fibrils. The human ApoC2 precursor is 101 amino acids (aa) in length. It contains a 22 amino acid (aa) signal sequence, followed by a 79 aa ProApoC2 that contains a lipid-binding region (aa 43-51) and an enzyme interaction site (aa 55-78). ProApoC2 represents >90% of circulating ApoC2. In human, limited proteolytic processing occurs with removal of the six aa prosegment (aa 23-28). This does not affect activity. Human ProApoC2 is 59% and 62% aa identical to mouse and rat ProApoC2, respectively.