

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Apolipoprotein B/ApoB in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 1008037
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Apolipoprotein B/ApoB Ile3374-Val3600 Accession # P04114
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

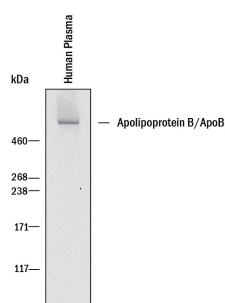
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below
Simple Western	5 µg/mL	Human Plasma

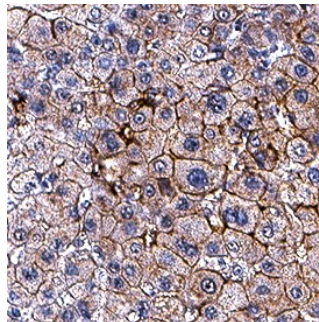
DATA

Western Blot



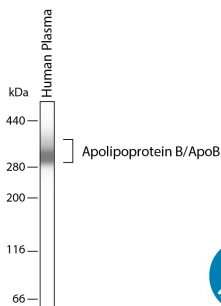
Detection of Human Apolipoprotein B/ApoB by Western Blot. Western blot shows lysates of human plasma. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Apolipoprotein B/ApoB Monoclonal Antibody (Catalog # MAB41242) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Apolipoprotein B/ApoB at approximately 500 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Apolipoprotein B/ApoB in Human Liver. Apolipoprotein B/ApoB was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Apolipoprotein B/ApoB Monoclonal Antibody (Catalog # MAB41242) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane in hepatocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Simple Western



Detection of Human Apolipoprotein B/ApoB by Simple Western™. Simple Western shows lysates of human plasma, loaded at 1:50. A specific band was detected for Apolipoprotein B/ApoB at approximately 315 kDa (as indicated) using 5 µg/mL of Mouse Anti-Human Apolipoprotein B/ApoB Monoclonal Antibody (Catalog # MAB41242). This experiment was conducted under reducing conditions and using the 66-440kDa separation system.



PREPARATION AND STORAGE

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

BACKGROUND

Human ApoB (Apolipoprotein B-100) is a 550 kDa, secreted, palmitoylated glycoprotein that is part of LDL and VLDL particles. It is made by liver and is 4536 amino acids (aa) in length. It binds LDL to the ApoB/E receptor. Multiple forms of ApoB-100 exist; ApoB-25, 26, 29, 37, 39, 48, and 74. The numbers reflect each molecule's predicted MW as a percentage of ApoB-100 (512 kDa). Amino acids 1206-1414 of the precursor were used for immunization. Based on likelihood of secretion, this antibody may recognize B26 (1297 aa), B37 (1728 aa), B39 (1799 aa), and B48 (2152 aa). Over the immunization polypeptide range, human ApoB-100 is 80% and 82% aa identical to mouse and dog ApoB-100, respectively.