

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Apolipoprotein B/ApoB in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 989529
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Apolipoprotein B/ApoB Met1206-Asp1413 Accession # NP_000375
Formulation	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.

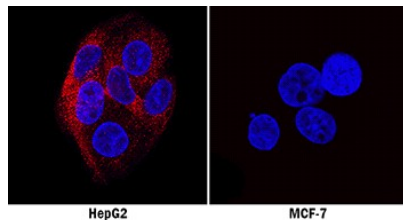
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

DATA

Immunocytochemistry



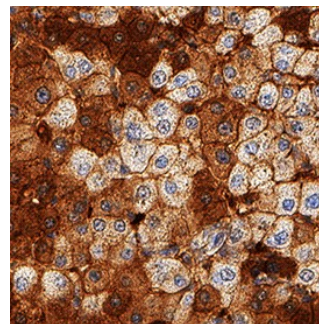
HepG2

MCF-7

Apolipoprotein B/ApoB in Human HepG2 and MCF-7 Cell Lines.

Apolipoprotein B/ApoB was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line (positive control, left panel) and MCF-7 human breast cancer cell line (negative control, right panel) using Mouse Anti-Human Apolipoprotein B/ApoB Monoclonal Antibody (Catalog # MAB41241) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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 # MAB41241) 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 # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in hepatocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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.