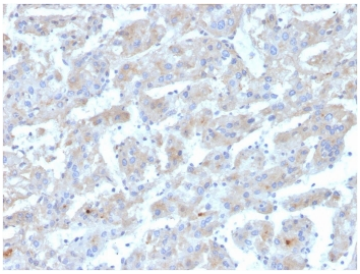
APOB Antibody APOB/3300 / Lipoprotein B Antibody [clone APOB/3300] (V8461)

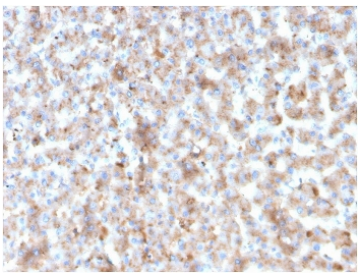
Catalog No.	Formulation	Size
V8461-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8461-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8461SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

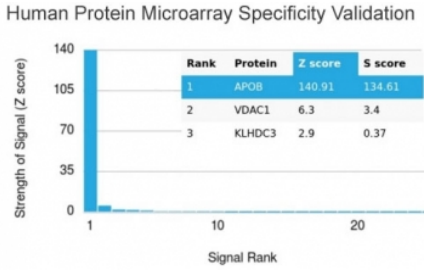
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	APOB/3300
Purity	Protein G affinity chromatography
UniProt	P04114
Localization	Cytoplasm, secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This APOB Antibody APOB/3300 / Lipoprotein B Antibody is available for research use only.



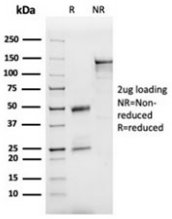
APOB Antibody APOB/3300 in Human Liver IHC. Immunohistochemistry staining of FFPE human liver tissue with APOB Antibody, clone APOB/3300. Tissue sections underwent HIER by boiling in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before testing. The image shows heterogeneous Lipoprotein B Antibody staining across hepatocytes, with predominantly cytoplasmic labeling of variable intensity.



APOB Antibody APOB/3300 in Human Liver Hepatocytes IHC. Immunohistochemistry staining of FFPE human liver tissue with APOB Antibody, clone APOB/3300. HIER was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before testing. This field demonstrates widespread granular cytoplasmic staining of hepatocytes, with differences in staining intensity between individual cells. The pattern demonstrates detection of Lipoprotein B in human liver tissue.



APOB Antibody APOB/3300 Protein Microarray Validated. Protein microarray analysis of APOB Antibody, clone APOB/3300, using the HuProt array containing more than 19,000 full-length human proteins. APOB produced the highest-ranked signal, with a Z-score of 90.91 and S-score of 134.63, supporting strong target recognition and specificity of this Lipoprotein B Antibody. The Z-score represents signal strength in standard deviations above the mean of all array signals, while the S-score measures the separation between the intended target and the next-highest ranked protein.



Purified APOB Antibody APOB/3300 SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free APOB Antibody, clone APOB/3300, under non-reducing (NR) and reducing (R) conditions. The non-reduced preparation shows intact immunoglobulin migrating near approximately 150 kDa, while reduction produces the expected antibody heavy and light chain components near approximately 50 and 25 kDa, respectively. This analysis confirms the integrity and purity of the Lipoprotein B Antibody preparation.

Description

APOB Antibody APOB/3300 / Lipoprotein B Antibody recognizes apolipoprotein B, a large lipid-binding protein encoded by the APOB gene. APOB is an essential structural component of several classes of plasma lipoproteins and plays a central role in the transport and metabolism of cholesterol, triglycerides, and other lipids. Unlike exchangeable apolipoproteins that can move between lipoprotein particles, apolipoprotein B remains an integral structural component of the particle on which it is assembled.

Two major forms of apolipoprotein B are produced in humans: ApoB-100 and ApoB-48. ApoB-100 is the full-length protein and is a major component of very-low-density lipoprotein, intermediate-density lipoprotein, and low-density lipoprotein particles. ApoB-48 corresponds to the N-terminal portion of ApoB-100 and is generated through tissue-specific RNA editing that introduces a premature stop codon into the APOB transcript. ApoB-48 is an essential structural component of chylomicrons involved in the transport of dietary lipids.

APOB has important roles in lipoprotein assembly and lipid trafficking. ApoB-100 also serves as the principal ligand through which LDL particles interact with the LDL receptor, supporting receptor-mediated uptake and clearance of circulating cholesterol-containing particles. Because each atherogenic lipoprotein particle generally contains one molecule of apolipoprotein B, APOB is widely studied in relation to lipoprotein particle biology, cholesterol metabolism, cardiovascular disease, and disorders of lipid transport.

Clone APOB/3300 is a mouse monoclonal antibody generated against a recombinant fragment corresponding to amino acids 592-689 of human apolipoprotein B. Because this N-terminal sequence is contained within both ApoB-100 and ApoB-48, the immunogen location does not support describing the clone as specific for ApoB-100. The Lipoprotein B Antibody is Protein Microarray Validated using the HuProt platform, providing additional evidence of antigen recognition and specificity.

NSJ Bioreagents offers clone APOB/3300 for research into apolipoprotein B expression, lipoprotein biology, and lipid

metabolism. An APOB Antibody can support investigation of the molecular mechanisms involved in lipid transport, lipoprotein assembly, cholesterol homeostasis, and APOB-associated disease biology.

Explore our Metabolism Antibodies page for additional reagents targeting proteins involved in lipid metabolism, nutrient processing, energy homeostasis, and metabolic regulation.

Application Notes

Optimal dilution of the APOB Antibody APOB/3300 / Lipoprotein B Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 592-689 from the human protein was used as the immunogen for the APOB Antibody APOB/3300.

Storage

Store the APOB Antibody APOB/3300 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

APOB antibody, Apolipoprotein B antibody, Lipoprotein B antibody, ApoB antibody, Apolipoprotein B-100 antibody, ApoB-100 antibody, Apolipoprotein B-48 antibody, ApoB-48 antibody

Copyright © NSJ Bioreagents. All rights reserved.