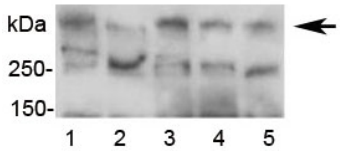
APOB Antibody / Circulating Apolipoprotein B Antibody (R36144)

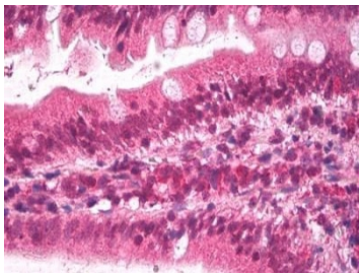
Catalog No.	Formulation	Size
R36144-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

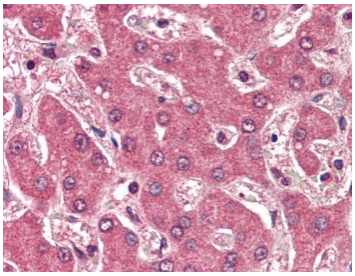
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	338
Localization	Cytoplasmic, membranous
Applications	Western Blot : 0.5-2 ug/ml IHC (FFPE) : 2ug/ml ELISA (peptide) LOD : 1:32000
Limitations	This APOB Antibody / Circulating Apolipoprotein B Antibody is available for research use only.



APOB Antibody Detects ApoB-100 in Human Serum WB. Western blot analysis of human serum samples from five individual donors using APOB Antibody. A high-molecular-weight band corresponding to ApoB-100 is detected in all five samples, consistent with its calculated molecular weight of approximately 515 kDa (NP_000375.3). Smaller reactive bands are also present and, according to the customer-generated data, are believed to represent degradation products of ApoB-100 rather than ApoB-48. Detection across five individual serum samples demonstrates recognition of endogenous circulating ApoB-100 in a biologically relevant human sample type.



IHC testing of FFPE human small intestine tissue with APOB antibody at 2ug/ml. Required HIER: steamed antigen retrieval with pH6 citrate buffer; AP-staining.



IHC testing of FFPE human liver tissue with APOB antibody at 2ug/ml. Required HIER: steamed antigen retrieval with pH6 citrate buffer; AP-staining.

Description

APOB Antibody / Circulating Apolipoprotein 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 circulating lipoprotein particles and plays a central role in the transport and metabolism of cholesterol, triglycerides, and other lipids. Unlike exchangeable apolipoproteins, ApoB remains associated with the lipoprotein particle on which it is assembled, making it an important marker for studying lipoprotein production, transport, and clearance.

Two major forms of apolipoprotein B are produced in humans. ApoB-100 is the full-length protein and is incorporated into very-low-density lipoprotein during hepatic lipoprotein assembly. It remains associated with particles as VLDL is remodeled into intermediate-density lipoprotein and low-density lipoprotein. ApoB-100 also contains the LDL receptor-binding region required for receptor-mediated uptake of LDL particles and therefore has an important role in cholesterol homeostasis.

ApoB-48 is generated through tissue-specific RNA editing of the APOB transcript, which introduces a premature stop codon and produces a protein corresponding to the N-terminal portion of ApoB-100. ApoB-48 is an essential structural component of chylomicrons and participates in the transport of dietary triglycerides and cholesterol. The production of these two forms allows APOB to participate in both endogenous and intestinal pathways of lipid transport.

Because ApoB is retained on triglyceride-rich and cholesterol-rich lipoprotein particles, circulating apolipoprotein B is widely investigated in studies of lipid metabolism, lipoprotein particle biology, cardiovascular disease, and metabolic regulation. Measurement and characterization of ApoB can provide information complementary to measurements of the lipid components carried within these particles.

NSJ Bioreagents offers this Circulating Apolipoprotein B Antibody for research into APOB expression, lipoprotein biology, and lipid metabolism. An APOB Antibody can support investigation of endogenous apolipoprotein B, lipoprotein assembly and transport, cholesterol homeostasis, and mechanisms associated with APOB-dependent metabolic processes.

For an alternative Protein Microarray Validated monoclonal clone with additional tissue validation, see our APOB Antibody APOB/3300 / Lipoprotein B Antibody page.

Application Notes

Optimal dilution of the APOB Antibody / Circulating Apolipoprotein B Antibody should be determined by the researcher.

Immunogen

Amino acids TDLHLRYQKDKK were used as the immunogen for this APOB antibody.

Storage

Aliquot and store the APOB antibody at -20oC.

Alternate Names

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

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