# **Product Datasheet**

# Apolipoprotein A-I/ApoA1 Antibody - BSA Free NB400-147

Unit Size: 0.2 mg

Store at 4C short term. For extended storage, add an equal volume of glycerol, aliquot and store at -20C or below. Avoid repeated freeze-thaw cycles.

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# NB400-147

Apolipoprotein A-I/ApoA1 Antibody - BSA Free

Apolipoprotein A-I/ApoA1 Antibody - BSA Free	
Product Information	
Unit Size	0.2 mg
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. For extended storage, add an equal volume of glycerol, aliquot and store at -20C or below. Avoid repeated freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	0.125 M Sodium Borate, 0.075 M Sodium Chloride, 0.005 M EDTA, pH 8.0
Product Description	
Description	Goat Anti-Apolipoprotein A-I Antibody has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other apoLipoproteins and human serum proteins to remove any unwanted specificities  Store vial at 4C prior to opening. This product is stable at 4C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20C or below. Avoid cycles of freezing and thawing.
Host	Goat
Gene ID	335
Gene Symbol	APOA1
Species	Human
Reactivity Notes	Specific cross-reaction of anti-apoLipoprotein antibodies with antigens from other species has not been determined. Non-specific cross-reaction of anti-apoLipoprotein antibodies with other human serum proteins is negligible.
Specificity/Sensitivity	Typically less than 1% cross-reactivity against other types of apoLipoprotein was detected by ELISA against purified standards. This antibody reacts with human apoLipoprotein A-I and has negligible cross-reactivity with Type A-II, B, C-I, C-III, E and J apoLipoproteins. Specific cross-reaction of anti-apoLipoprotein antibodies with antigens from other species has not been determined. Non-specific cross-reaction of anti-apoLipoprotein antibodies with other human serum proteins is negligible.
Immunogen	Apolipoprotein A-I/ApoA1 was isolated from human plasma by density gradient centrifugation followed by HPLC purification, followed by repeated immunizations in goat. (Uniprot: P02647)
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, SDS-Page, Sandwich ELISA
Recommended Dilutions	Western Blot 1:1000-1:2000, ELISA 1:10000-1:20000, Immunohistochemistry 1:50-1:200, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation 1:100, Immunohistochemistry-Paraffin 1:10-1:500, SDS-Page, Sandwich ELISA



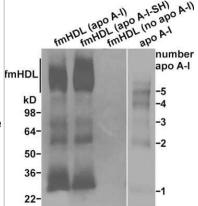
#### **Application Notes**

This product have been tested by Western blot and IHC and are suitable for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for immunoprecipitation, immunohistochemistry and for western blotting for highly sensitive qualitative analysis.

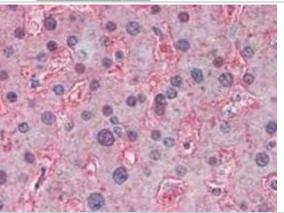
Use in Sandwich-ELISA reported in scientific literature (PMID 26648662)

## **Images**

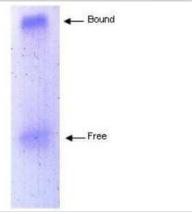
Western Blot: Apolipoprotein A-I/ApoA1 Antibody [NB400-147] - Crosslinking analysis of fmHDL apolipoprotein. fmHDL (apo A-I), fmHDL (apo A-I-SH), and fmHDL (no apo A-I) were cross-linked with BS3. The apolipoprotein cross-link products were resolved on a 4-20% SDS PAGE gel and visualized by apo A-I immunoblotting. An oligomer ladder was prepared with lipid-free apo A-I (apo A-I lane) for cross-link product identification. fmHDL migrated on the PAGE gel as a clearly visible band and were detectible by apo A-I immunoblotting (marked as fmHDL on the left). Image collected and cropped by CiteAb from the following publication (https://www.jlr.org/lookup/doi/10.1194/jlr.M054635) licensed under a CC-BY license.



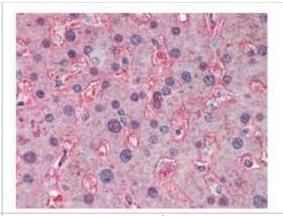
Immunohistochemistry: Apolipoprotein A-I/ApoA1 Antibody [NB400-147] - anti-APOA1 antibody was used at a 5 ug/ml to detect signal in human liver tissue. Tissue was formalin-fixed and paraffin embedded.



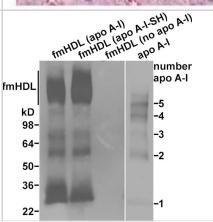
Western Blot: Apolipoprotein A-I/ApoA1 Antibody [NB400-147] - Coomassie stained gel showing both free and HDL bound apoA-I eluted from a solid phase resin prepared using anti-Human apolipoprotein A-I antibody. The resin was reacted with human serum prior to washing and elution of bound proteins. The gel was composed of 0.75% agarose in a native buffer system. Separation occurred at room temperature.



anti-APOA1 antibody was used at a 5 ug/ml to detect signal in human liver tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.



Cross-linking analysis of fmHDL apolipoprotein. fmHDL (apo A-I), fmHDL (apo A-I-SH), and fmHDL (no apo A-I) were cross-linked with BS3. The apolipoprotein cross-link products were resolved on a 4–20% SDS PAGE gel and visualized by apo A-I immunoblotting. An oligomer ladder was prepared with lipid-free apo A-I (apo A-I lane) for cross-link product identification. fmHDL migrated on the PAGE gel as a clearly visible band and were detectible by apo A-I immunoblotting (marked as fmHDL on the left).



#### **Publications**

Ehring, K;Ehlers, SF;Froese, J;Gude, F;Puschmann, J;Grobe, K; Two-way Dispatched function in Sonic hedgehog shedding and transfer to high-density lipoproteins eLife 2024-09-19 [PMID: 39297609]

Verdi J, Zipkin R, Hillman E et al. Inducible Germline IgMs Bridge Trypanosome Lytic Factor Assembly and Parasite Recognition Cell Host Microbe 2020-05-15 [PMID: 32416060]

Bakillah A, Tedla F, Ayoub I et al. Plasma Nitration of High-Density and Low-Density Lipoproteins in Chronic Kidney Disease Patients Receiving Kidney Transplants. Mediators of Inflammation. 2015-10-19 [PMID: 26648662] (S-ELISA, Human)

Lyssenko NN, Nickel M, Tang C, Phillips MC. Factors controlling nascent high-density lipoprotein particle heterogeneity: ATP-binding cassette transporter A1 activity and cell lipid and apolipoprotein AI availability. FASEB J 2013-07-01 [PMID: 23543682] (Human)

Luthi AJ, Lyssenko NN, Quach D et al. Robust passive and active efflux of cellular cholesterol to a designer functional mimic of high-density lipoprotein J. Lipid Res. 2015-02-04 [PMID: 25652088] (WB, Human)

#### Details:

Apolipoprotein A-I/ApoA1 antibody used for WB in experiments involving fmHDL/ functional mimic of high-density lipoprotein ( which contained gold nanoparticle template, a phospholipid bilayer and apolipoprotein A-I) and purified Apo A-I which was isolated from frozen human plasma (Figure 2).

Vedhachalam, C et al. Mechanism of ATP-binding Cassette Transporter A1-mediated Cellular Lipid Efflux to Apolipoprotein A-I Formation of High Density Lipoprotein Particles. J Biol Chem; 282: 25123 - 25130. [PMID: 17604270]





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# **Products Related to NB400-147**

NBL1-07609 Apolipoprotein A-I/ApoA1 Overexpression Lysate

HAF017 Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish

Peroxidase)]

HAF109 Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish

Peroxidase)]

NB410-28088-1mg Goat IgG Isotype Control

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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