Product Datasheet

Apolipoprotein E/ApoE Antibody
NB110-60531SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NB110-60531SS

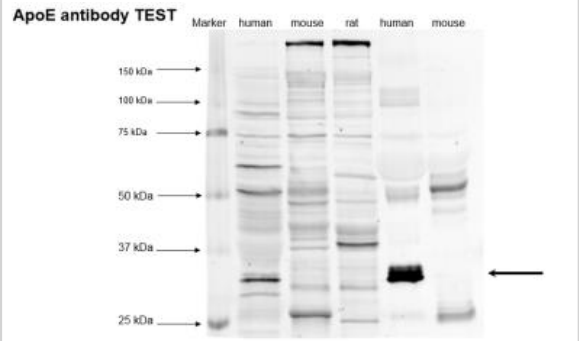
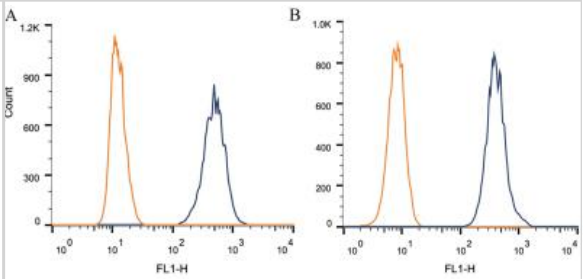
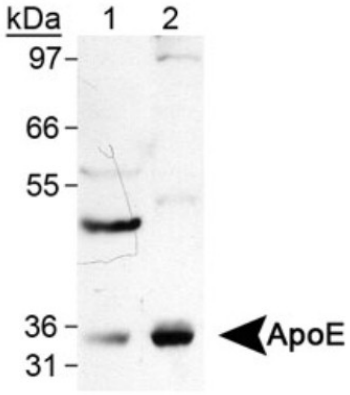
Apolipoprotein E/ApoE Antibody (WUE-4)

Product Information	
Unit Size	0.025 ml
Concentration	0.85 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	WUE-4
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	Tris-glycine, 150 mM NaCl
Target Molecular Weight	36 kDa

Product Description	
Host	Mouse
Gene ID	348
Gene Symbol	APOE
Species	Human, Mouse, Rat (Negative)
Species Reactivity	Human and Mouse. It does not appear to react with rat brain tissue.
Immunogen	Purified human ApoE [UniProt# P02649]

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	ELISA 1:100-1:2000, Flow Cytometry 1 ug per million cells, Immunohistochemistry 1:50-1:200, Immunoprecipitation 1:10-1:500, Western Blot 2 ug/ml
Application Notes	This ApoE antibody is useful for Western blot, ELISA, Immunohistochemistry and Immunoprecipitation. In Western blot a band is observed at ~36 kDa, representing the ApoE protein.

Images

Western Blot: ApoE Antibody (WUE-4) [NB110-60531] - 50 ug protein per lane for liver lysate and 0.5 ul of plasma at 9% SDS. Samples are loaded onto the gel as the following order: human liver lysate, mouse liver lysate, rat liver lysate, human plasma, and mouse plasma. Image from confirmed customer review.	
Flow Cytometry: ApoE Antibody (WUE-4) [NB110-60531] - Intracellular flow cytometric staining of 1 x 10^6 CHO (A) and HEK-293 (B) cells using ApoE antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.	
Western Blot: ApoE Antibody (WUE-4) [NB110-60531] - Detection of ApoE in human tissue lysate using NB110-60531. Lane 1: liver Lane 2: brain	

Publications

Fukuhara T, Wada M, Nakamura S et al. Amphipathic alpha-Helices in Apolipoproteins Are Crucial to the Formation of Infectious Hepatitis C Virus Particles. PLoS Pathog. 2014 Dec 01 [PMID: 25502789] (WB, ELISA, Human)

Details:
ApoE antibody was used for Western blot and ELISA in ApoE-knockout Huh7 cell line to confirm deficiencies of ApoE expression (Figure S1).

Hirsch-Reinshagen V, Donkin J, Stukas S, Chan J, Wilkinson A, Fan J, Parks JS, Kuivenhoven JA, Lutjohann D, Pritchard H, Wellington CL. LCAT synthesized by primary astrocytes esterifies cholesterol on glia-derived lipoproteins. J Lipid Res;50(5):885-93. 2009 May. [PMID: 19065001] (ELISA, Mouse)

Krul ES, Tikkanen MJ, Schonfeld G. Heterogeneity of apolipoprotein E epitope expression on human lipoproteins: importance for apolipoprotein E function. J Lipid Res;29(10):1309-25. 1988 Oct. [PMID: 2466929] (WB, Human)

Fryer JD et al. The low density lipoprotein receptor regulates the level of central nervous system human and murine apolipoprotein E but does not modify amyloid plaque pathology in PDAPP mice. J Biol Chem;280(27):25754-9. 2005 Jul 8. [PMID: 15888448] (ELISA, Human)

Lee CY, Tse W, Smith JD, Landreth GE. Apolipoprotein E Promotes beta-Amyloid Trafficking and Degradation by Modulating Microglial Cholesterol Levels. J Biol Chem;287(3):2032-44. 2012 Jan 13. [PMID: 22130662] (ELISA, Mouse)

Procedures

Western Blot Protocol for ApoE Antibody (NB110-60531)
Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 40ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS, 1 hour at room temperature.
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the mouse anti-ApoE primary antibody (NB 110-60531) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted mouse-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL).
Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.