OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA336538

Apolipoprotein E (APOE) Mouse Monoclonal Antibody [Clone ID: WUE-4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	WUE-4
Applications:	CyTOF-ready, ELISA, FC, ICC/IF, IHC, IP, WB
Recommended Dilution:	Flow (Intracellular), Immunohistochemistry-Paraffin, Flow Cytometry: 1 ug per million cells, ELISA: 1:100-1:2000, Immunohistochemistry: 1:50-1:200, Immunoprecipitation: 1:10-1:500, Western Blot: 2 ug/ml, Immunocytochemistry/ Immunofluorescence: 1:200, CyTOF-ready
Reactivity:	Human, Mouse (Does not react with: Rat)
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Purified human ApoE [UniProt# P02649]
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Protein G purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	36 kDa
Gene Name:	apolipoprotein E
Database Link:	NP_000032 Entrez Gene 11816 MouseEntrez Gene 25728 RatEntrez Gene 348 Human P02649

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Background: ApoE (apolipoprotein E) is the protein constituent of cholesterol/triglyceride-rich plasma lipoproteins, and is a multifunctional glycosylated secretary protein found almost in all organs with high activity in hepatic tissues. ApoE expression is induced by cholesterol-rich diets and is enhanced in lipoproteins in humans with genetic disorder type III hyperlipoproteinemia (HLP) characterized by remnant lipoproteins accumulation in plasma and premature atherosclerosis. ApoE circulates in blood as a protein component of VLDLs, chylomicron remnants, a subclass of HDL etc, and in cerebrospinal fluid as well as CNS interstitial fluid on small particles and disks resembling HDLs. ApoE facilitates transport of cholesterol and other lipids, as well as the clearance of plasma lipoproteins by serving as a critical ligand for lipoprotein uptake by LDL receptors and related proteins. ApoE participates in lipids redistribution to cells (e.g. CNS) that require cholesterol and phospholipids for reparative processes. ApoE also involves in proliferation inhibition of smooth muscle cells/lymphocytes, antigen presentation, and cholesterol efflux stimulation from foam cell macrophages. Defects in APOE have been linked to HLPP3 (hyperlipoproteinemia type 3), AD2 (Alzheimer disease type 2), SBHD (sea-blue histiocyte disease), LPG (lipoprotein glomerulopathy), and certain autoimmune disorders including multiple sclerosis and psoriasis.

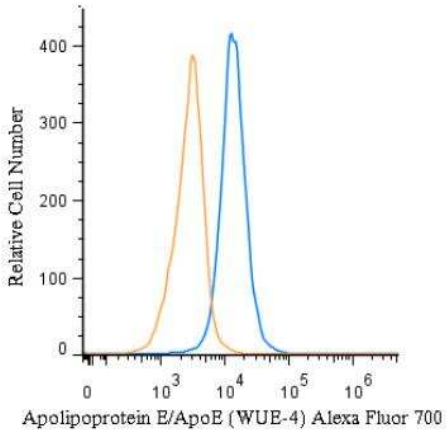
Synonyms: AD2; APO-E; LDLCQ5; LPG

Note: 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.

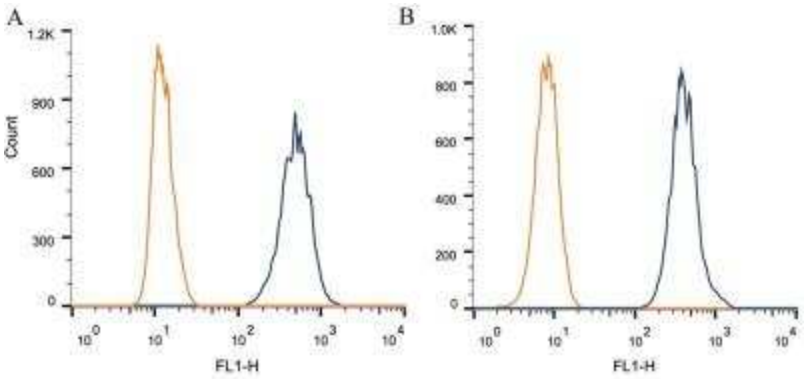
Protein Families: Adult stem cells, Druggable Genome, Secreted Protein, Stem cell - Pluripotency

Protein Pathways: Alzheimer's disease

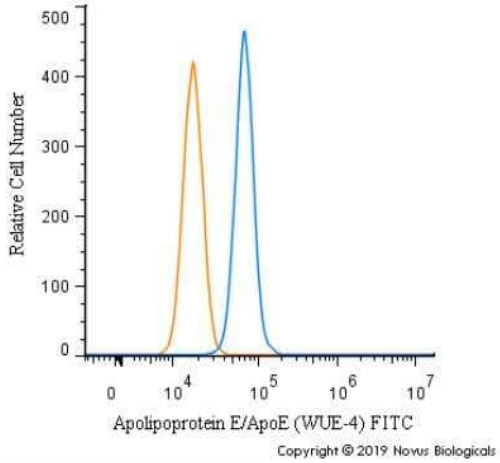
Product images:



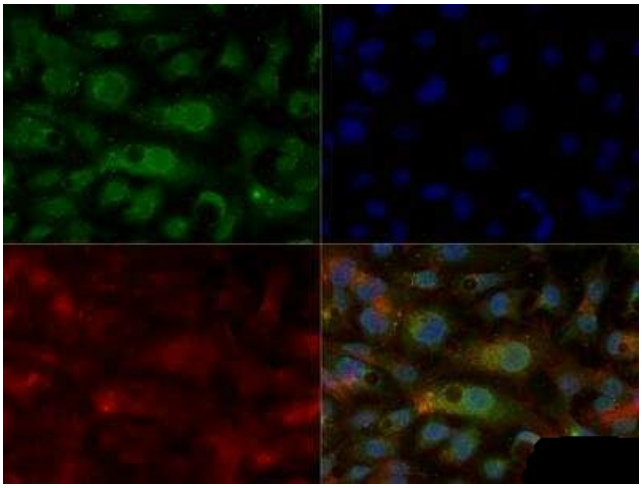
Flow (Intracellular): Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on HepG2 cells with TA336538AF700 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 700.



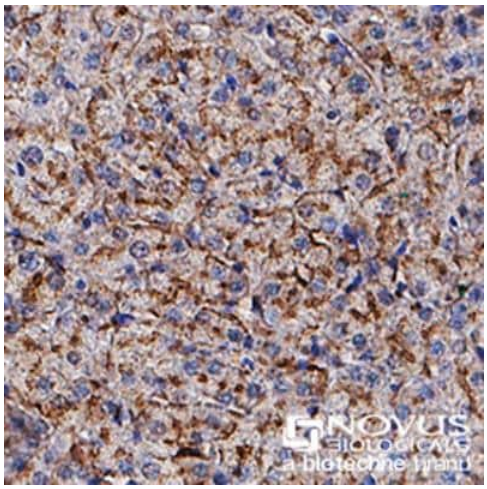
Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - ApoE Antibody (WUE-4) TA336538 - Intracellular flow cytometric staining of 1 x 10^6 CHO (A) and HEK-293 (B) cells using ApoE antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.



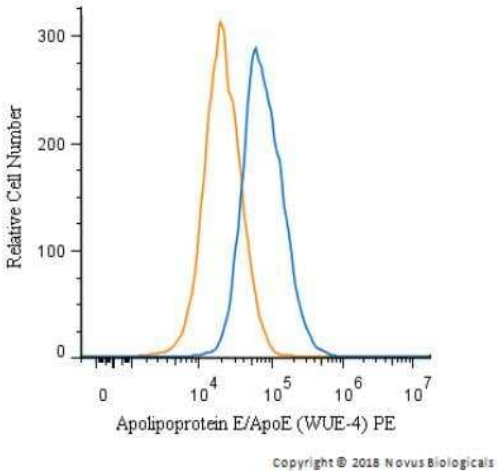
Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on SK-MEL-28 cells with Apolipoprotein E/ApoE Antibody [WUE-4] TA336538F (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 10 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to FITC.



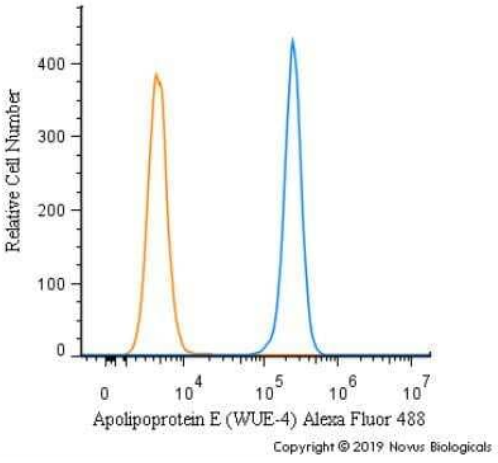
Immunocytochemistry/Immunofluorescence: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-ApoE (WUE-4) TA336538 at a 1:200 dilution overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



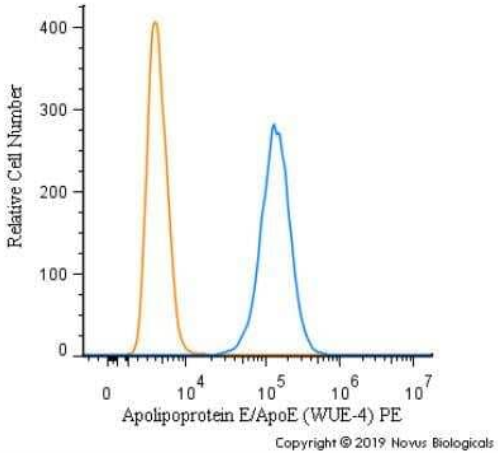
Immunohistochemistry-Paraffin: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - ApoE was detected in immersion fixed paraffin-embedded sections of human liver using anti-human mouse monoclonal antibody (Catalog # TA336538) at 1:200 dilution overnight at 4C. Tissue was stained using the VisuCyte anti-mouse HRP polymer detection reagent (Catalog # VC001) with DAB chromogen (brown) and counterstained with hematoxylin (blue). Images may not be copied, printed or otherwise disseminated without express written permission of Novus Biologicals a bio-techne brand.



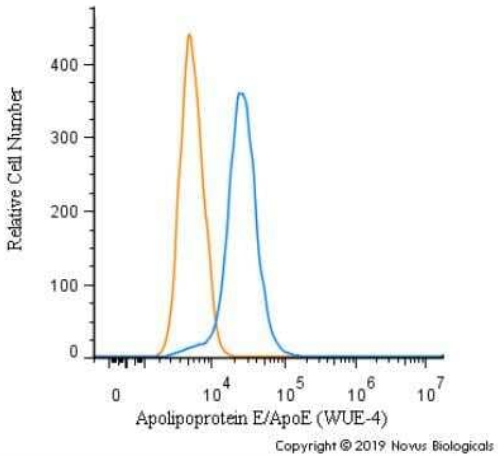
Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on HepG2 cells with TA336538PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Phycoerythrin.



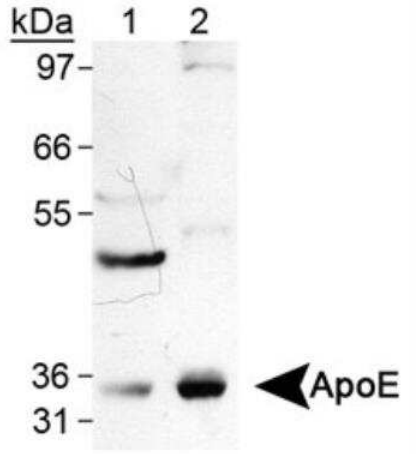
Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on SK-MEL-28 cells with alpha-Synuclein [2A7] Antibody TA336538AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488.



Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on SK-MEL-28 cells with Apolipoprotein E/ApoE [WUE-4] Antibody TA336538PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Phycoerythrin.



Flow Cytometry: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - An intracellular stain was performed on HepG2 cells with Apolipoprotein E/ApoE Antibody TA336538 [WUE-4] (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 488.



Western Blot: Apolipoprotein E/ApoE Antibody (WUE-4) TA336538 - ApoE Antibody (WUE-4) TA336538 - Detection of ApoE in human tissue lysate using TA336538. Lane 1: liver Lane 2: brain