

HRP anti-Apo E, 154-162 Antibody

Catalog# / Size	852803 / 25 µg 852804 / 100 µg
Clone	A17065A
Regulatory Status	RUO
Other Names	Apolipoprotein E, APO-E, Alzheimer Disease 2, LDLQC5, APOE, LPG, AD2
Isotype	Mouse IgG2b, κ
Description	Apolipoprotein E (Apo E) belongs to a class of apolipoproteins that mediate the binding, internalization, and catabolism of lipoprotein particles. Apo E is produced by the liver and macrophages in peripheral tissues where it regulates cholesterol metabolism. In the central nervous system, Apo E is primarily produced by astrocytes and plays an important role in transporting cholesterol to neurons via Apo E receptors. Apo E has three alleles (Apo E ₂ , Apo E ₃ and Apo E ₄) that differ from each other by only one or two amino acids at positions 112 and 158. Apo E ₄ is one of the largest known genetic risk factors for late-onset Alzheimer's disease. Furthermore, Apo E is associated with cardiovascular disease, Lipoprotein Glomerulopathy and Sea-Blue Histiocyte Disease.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	KLH conjugated Apo E peptide encompassing amino acids 154-162.
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 1.0 - 5.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This antibody cross-reacts with Apo E ₂ , Apo E ₃ , and Apo E ₄ .
RRID	AB_2783423 (BioLegend Cat. No. 852803) AB_2783424 (BioLegend Cat. No. 852804)

Antigen Details

Structure	Human Apo E is a 299 amino acid protein with a molecular mass of 32 kD, and exists as 3 major alleles, Apo E ₂ , Apo E ₃ , and Apo E ₄ .
Distribution	Tissue sources: Ubiquitously expressed. Highest levels in liver, brain, spleen, adrenal gland, and kidney. Cellular distribution: Plasma membrane, nucleus, endoplasmic reticulum, golgi apparatus, endosome, and extracellular.
Function	Apo E is involved in lipoprotein metabolism as well as the transport of fat-soluble vitamins, and

cholesterol. Apo E also forms complexes with amyloid beta peptides leading to its uptake and degradation by microglia.

Interaction	Tau, amyloid beta
Ligand/Receptor	LDL receptor, SORL1.
Biology Area	Cell Biology, Neurodegeneration, Neuroscience, Protein Misfolding and Aggregation
Molecular Family	Apolipoproteins

Antigen References

1. Mahley RW. 2016. *Arterioscler Thromb Vasc Biol.* 36: 1305-1315.
2. Riedel BC, et al. 2016 *J Steroid Biochem Mol Biol.* 160:134-47.
3. Tai LM, et al. 2016 *Acta Neuropathol.* 131(5):709-23.
4. Kim J, et al. 2014. *Mol. Cells.* 37:767
5. Holtzman DM, et al. 2012. *Cold Spring Harb. Perspect. Med.* 2:a006312

Gene ID [348](#)

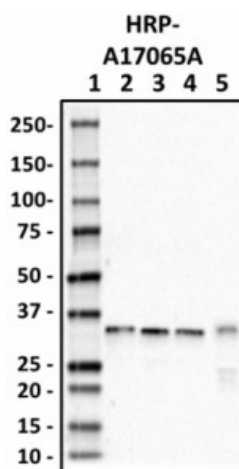
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-Apo E, 154-162, Biotin anti-Apo E, 154-162, HRP anti-Apo E, 154-162

Product Data



Western blot of HRP anti-Apo E, 154-162 antibody (clone A17065A). Lane 1: Molecular weight marker; Lane 2: 50 ng of Apo E2 recombinant human protein; Lane 3: 50 ng of Apo E3 recombinant human protein; Lane 4: 50 ng of Apo E4 recombinant human protein; Lane 5: 45 µg of human plasma. The blot was incubated with 1.0 µg/mL of the primary antibody overnight at 4°C. Enhanced chemiluminescence (Cat. No. 426302) was used as the detection system.

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