

## Purified anti-Apo E Antibody (Previously Covance catalog# SIG-39740)

<b>Catalog# / Size</b>	803301 / 200 µL 803303 / 1 mL
<b>Clone</b>	D6E10
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Apolipoprotein E, apolipoprotein E3, AD2, LDLQC5, LPG, ApoE
<b>Previously</b>	Signet Catalog# 9740-02 Signet Catalog# 9740-05 Signet Catalog# 9740-10 Covance Catalog# SIG-39740
<b>Isotype</b>	Mouse IgG1
<b>Description</b>	Apo-E is a class of apolipoprotein primarily synthesized in the liver, but is also found in other tissues such as brain, kidneys, and spleen. Apo-E is a protein component of serum chylomicron and lipoprotein particles, playing essential roles in cholesterol transportation, homeostasis, and metabolism. The expression of Apo-E is induced by cholesterol-rich diets and hyperlipoproteinemia. In the central nervous system, Apo-E is produced by astrocytes and microglia. The Apo-E-containing lipoprotein particles play important functions in brain injury repair, neurogenesis, and synaptic plasticity. Apo-E has been found to be involved in the regulation of amyloid-β aggregation and clearance. Genetic polymorphisms of Apo-E are associated with neuron degenerative disorders including Alzheimer's disease.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	This antibody was raised against a peptide sequence corresponding to aa 141-160 of human Apo-E.
<b>Formulation</b>	Phosphate-buffered solution (no preservatives or carrier proteins).
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	1 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. Please note the storage condition for this antibody has been changed from -20°C to between 2°C and 8°C. You can also check your vial or your CoA to find the most accurate storage condition for this antibody.
<b>Application</b>	<a href="#">WB - Quality tested</a> <a href="#">IHC-P - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . For Western blotting, the suggested use of this reagent is 0.5 - 1.0 µg/mL. For immunohistochemistry on formalin-fixed paraffin-embedded tissue sections, a concentration range of 5 - 10 µg/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	This antibody is effective in immunoblotting (WB).
<b>Application References</b>	
<b>(PubMed link indicates BioLegend citation)</b>	<ol style="list-style-type: none"><li>Munoz DG and Feldman H. 2000. <i>CMAJ</i>. 162(1):65-72.</li><li>Hagberg JM, et al. 2000. <i>Physiol Genomics</i>. 4(2):101-108.</li><li>Saunders AM. 2000. <i>J Neuropathol Exp Neurol</i>. 59(9):751-8.</li><li>Golabek AA, et al. 2000. <i>Biophys J</i>. 79(2):1008-15.</li><li>Zunarelli E, et al. 2000. <i>Breast Cancer Res Treat</i>. 63(3):193-8.</li><li>Zunarelli E, et al. 2000. <i>Clin Neuropathol</i>. 19(1):1-6.</li><li>Tomiyama T, et al. 1999. <i>Cell Mol Life Sci</i>. 6(3-4):268-79.</li><li>Golabek AA, et al. 1996. <i>J Biol Chem</i>. 271(18):10602-6.</li></ol>

## Product Citations

1. McQuade A, *et al.* 2020. Nat Commun. 4.1875. [PubMed](#)

## RRID

AB\_2564662 (BioLegend Cat. No. 803301)  
AB\_2564661 (BioLegend Cat. No. 803303)

## Antigen Details

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### Biology Area

Cell Biology, Neurodegeneration, Neuroscience, Protein Trafficking and Clearance

### Gene ID

[348](#)

## Related Protocols

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[Sandwich ELISA Protocol](#)

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

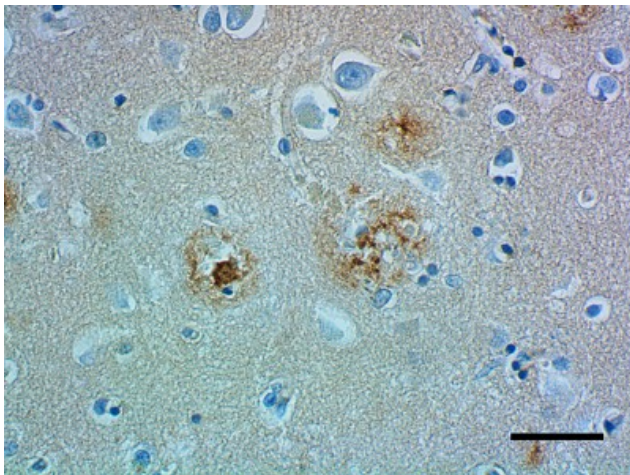
## Other Formats

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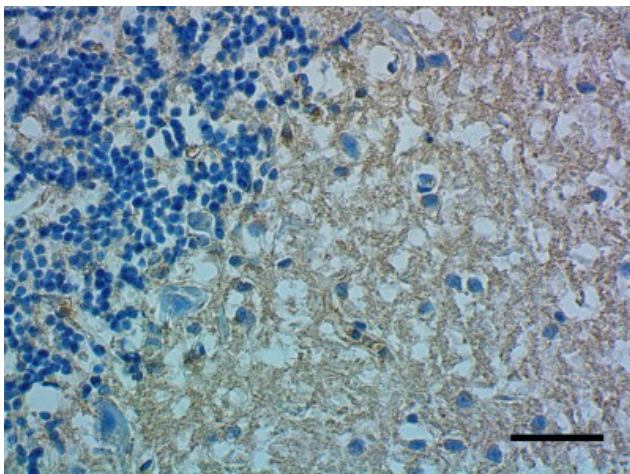
Purified anti-Apo E , Biotin anti-Apo E, HRP anti-Apo E

## Product Data

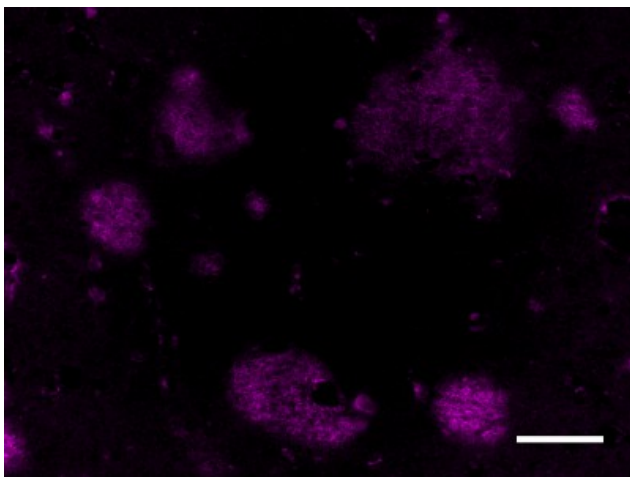
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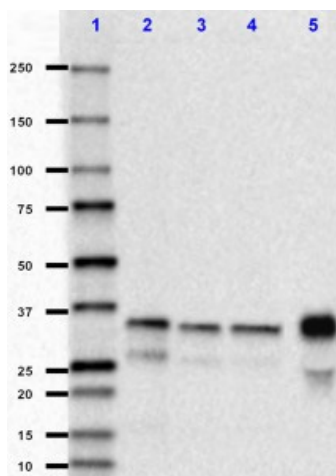
IHC staining of purified anti-Apo E antibody (clone D6E10) on formalin-fixed paraffin-embedded Alzheimer's disease brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 5 µg/mL of the primary antibody overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm



IHC staining of purified anti-Apo E antibody (clone D6E10) on formalin-fixed paraffin-embedded human cerebellum tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 10 µg/mL of the primary antibody overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm



IHC staining of purified anti-Apo E antibody (clone D6E10) antibody on formalin-fixed paraffin-embedded Alzheimer's disease brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 10 µg/mL of the primary antibody overnight at 4°C, followed by incubation with Alexa Fluor® 647 goat anti-mouse IgG (Cat No. 405322) for one hour at room temperature. The image was captured with a 40X objective. Scale bar: 50 µm



Western blot of purified anti-Apo E antibody (clone D6E10). Lane 1: Molecular weight marker; Lane 2: 40 ng of Apo E2 recombinant protein; Lane 3: 40 ng of Apo E3 recombinant protein; Lane 4: 40 ng of Apo E4 recombinant protein; Lane 5: 40 µg of human plasma. The blot was incubated with 1 µg/mL of the primary antibody overnight at 4°C, followed by incubation with HRP labeled goat anti-mouse IgG (Cat. No. 405306). Enhanced chemiluminescence was used as the detection system.

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