

Alexa Fluor® 647 anti-ApoE Antibody

Catalog# / Size	803309 / 25 µg 803310 / 100 µg
Clone	D6E10
Regulatory Status	RUO
Other Names	Apolipoprotein E, apolipoprotein E3, AD2, LDLCQ5, LPG, ApoE
Isotype	Mouse IgG1, κ
Description	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

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	This antibody was raised against a peptide sequence corresponding to aa 141-160 of human Apo-E.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	IHC-P - Quality tested ICC - Verified
Recommended Usage	Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 5.0 - 10.0 µg/mL is suggested. For immunocytochemistry, a concentration range of 5.0 - 10.0 µg/mL is recommended. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Additional Product Notes	For use in immunohistochemistry on formalin-fixed paraffin-embedded tissue (IHC-P), it is recommended to perform antigen retrieval using either Citrate Buffer, 10X (Cat. No. 420902) or Tris-EDTA pH 9.0 Antigen Retrieval Buffer (10X) (Cat. No. 422704). For use in immunocytochemistry (ICC), it is recommended to fix/permeabilize with any of the following: -100% ice-cold methanol only -Fixation buffer (Cat. No. 420801) with 100% ice-cold methanol

Fixation/permeabilization using Fixation buffer (Cat. No. 420801) with 0.5 % Triton X-100 is not recommended.

Application References

(PubMed link indicates BioLegend citation)

1. Munoz DG and Feldman H. 2000. *CMAJ*. 162(1):65-72.

2. Hagberg JM, *et al.* 2000. *Physiol Genomics*. 4(2):101-108.

3. Saunders AM. 2000. *J Neuropathol Exp Neurol*. 59(9):751-8.

4. Golabek AA, *et al.* 2000. *Biophys J*. 79(2):1008-15.

5. Zunarelli E, *et al.* 2000. *Breast Cancer Res Treat*. 63(3):193-8.

6. Zunarelli E, *et al.* 2000. *Clin Neuropathol*. 19(1):1-6.

7. Tomiyama T, *et al.* 1999. *Cell Mol Life Sci*. 6(3-4):268-79.

8. Golabek AA., *et al.* 1996. *J Biol Chem*. 271(18):10602-6.

RRID

AB_3720618 (BioLegend Cat. No. 803309)
AB_3720618 (BioLegend Cat. No. 803310)

Antigen Details

Biology Area

Cell Biology, Neurodegeneration, Neuroscience, Protein Trafficking and Clearance

Gene ID

[348](#)

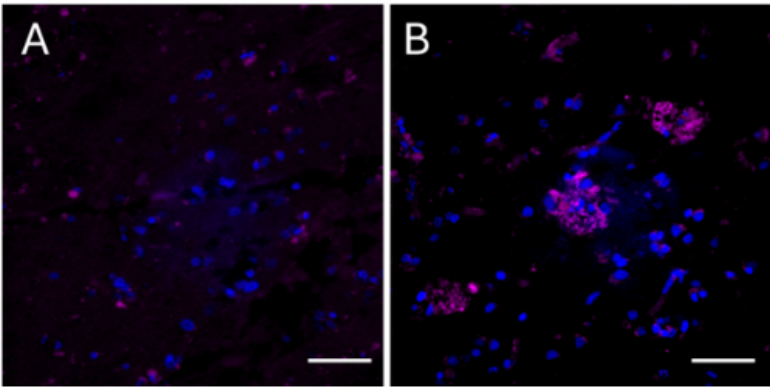
Related Protocols

- [Immunocytochemistry Staining for Methanol Fixed Cells](#)
- [Immunocytochemistry Staining Protocol](#)
- [Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

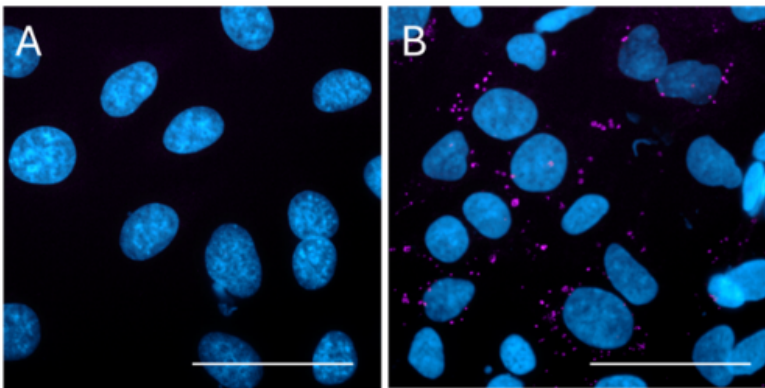
Other Formats

Purified anti-Apo E , Alexa Fluor® 647 anti-ApoE Antibody, Biotin anti-Apo E

Product Data



IHC staining with Alexa Fluor® 647 anti-ApoE (clone D6E10) on formalin-fixed paraffin-embedded human Alzheimer's Brain diseased cortex. Following antigen retrieval using 1X Tris-EDTA pH 9.0 Antigen Retrieval Buffer (Cat. No. 422704), the tissue was incubated without (panel A) and with (panel B) Alexa Fluor® 647 anti-ApoE (clone D6E10). Nuclei were counterstained with DAPI (Cat. No. 422801). Images were captured with a 40X objective and merged. Scale bar: 50 μm



HeLa cells (negative cell line, panel A) and HepG2 cells (positive cell line, panel B) were fixed with 4% PFA Fixation Buffer (Cat. No. 420801) for 10 minutes, permeabilized with 100% ice-cold methanol for 10 minutes, and blocked with 5% FBS for 1 hour at room temperature. Cells were then stained with Alexa Fluor® 647 anti-ApoE (clone D6E10). Nuclei were counterstained with DAPI (Cat. No. 422801). The images were captured on a Revvity Operetta CLS™ High Content Analysis System with a 63X objective and merged. Scale bar: 50 μm

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