

Apolipoprotein E Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50986**Specification**

Apolipoprotein E Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P02649
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36 KDa

Apolipoprotein E Antibody - Additional Information**Gene ID** 348**Other Names**

Apolipoprotein E, Apo-E, APOE

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Apolipoprotein E. The exact sequence is proprietary.

Dilution

WB~~1:1000

IHC-P~~N/A

E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Apolipoprotein E Antibody - Protein Information**Name** APOE ([HGNC:613](#))**Function**

APOE is an apolipoprotein, a protein associating with lipid particles, that mainly functions in lipoprotein-mediated lipid transport between organs via the plasma and interstitial fluids (PubMed: [14754908](http://www.uniprot.org/citations/14754908)), (PubMed: [1911868](http://www.uniprot.org/citations/1911868)), (PubMed: [6860692](http://www.uniprot.org/citations/6860692)). APOE is a core component of plasma lipoproteins and is involved in their production, conversion and clearance (PubMed: [14754908](http://www.uniprot.org/citations/14754908), PubMed: [1911868](http://www.uniprot.org/citations/1911868))

Page 2/4

[23620513](http://www.uniprot.org/citations/23620513)). Second, it is enriched in circulating HDLs and mediates their uptake by hepatocytes (PubMed:[9395455](http://www.uniprot.org/citations/9395455)). APOE also plays an important role in lipid transport in the central nervous system, regulating neuron survival and sprouting (PubMed:[25173806](http://www.uniprot.org/citations/25173806)), PubMed:[8939961](http://www.uniprot.org/citations/8939961)). APOE is also involved in innate and adaptive immune responses, controlling for instance the survival of myeloid-derived suppressor cells (By similarity). Binds to the immune cell receptor LILRB4 (PubMed:[30333625](http://www.uniprot.org/citations/30333625)). APOE may also play a role in transcription regulation through a receptor-dependent and cholesterol-independent mechanism, that activates MAP3K12 and a non-canonical MAPK signal transduction pathway that results in enhanced AP-1-mediated transcription of APP (PubMed:[28111074](http://www.uniprot.org/citations/28111074)).

Cellular Location

Secreted. Secreted, extracellular space. Secreted, extracellular space, extracellular matrix. Extracellular vesicle. Endosome, multivesicular body. Note=In the plasma, APOE is associated with chylomicrons, chylomicrons remnants, VLDL, LDL and HDL lipoproteins (PubMed:1911868, PubMed:8340399). Lipid poor oligomeric APOE is associated with the extracellular matrix in a calcium- and heparan-sulfate proteoglycans-dependent manner (PubMed:9488694) Lipidation induces the release from the extracellular matrix (PubMed:9488694). Colocalizes with CD63 and PMEL at exosomes and in intraluminal vesicles within multivesicular endosomes

Tissue Location

Produced by several tissues and cell types and mainly found associated with lipid particles in the plasma, the interstitial fluid and lymph (PubMed:25173806). Mainly synthesized by liver hepatocytes (PubMed:25173806). Significant quantities are also produced in brain, mainly by astrocytes and glial cells in the cerebral cortex, but also by neurons in frontal cortex and hippocampus (PubMed:10027417, PubMed:3115992). It is also expressed by cells of the peripheral nervous system (PubMed:10027417, PubMed:25173806). Also expressed by adrenal gland, testis, ovary, skin, kidney, spleen and adipose tissue and macrophages in various tissues (PubMed:25173806)

Apolipoprotein E Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Apolipoprotein E Antibody - Images

Apolipoprotein E Antibody - Background

Mediates the binding, internalization, and catabolism of lipoprotein particles. It can serve as a ligand for the LDL (apo B/E) receptor and for the specific apo-E receptor (chylomicron remnant) of hepatic tissues.

Apolipoprotein E Antibody - References

Zannis V.I.,et al.J. Biol. Chem. 259:5495-5499(1984).
McLean J.W.,et al.J. Biol. Chem. 259:6498-6504(1984).
Paik Y.-K.,et al.Proc. Natl. Acad. Sci. U.S.A. 82:3445-3449(1985).
Emi M.,et al.Genomics 3:373-379(1988).
Freitas E.M.,et al.DNA Seq. 9:89-100(1998).