



Anti-APOE monoclonal antibody, clone WUE-4 [HRP] (CABT-51039MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

Mouse anti Human Apolipoprotein E antibody, clone WUE-4 recognizes an epitope within amino acids 140-160 of human apolipoprotein E (Apo-E), a major component of very low-density lipoproteins (VLDLs). Apo-E is the principle apolipoprotein in the central nervous system, and is secreted by most organs into the plasma, playing a vital role in the binding, internalization and catabolism of triglyceride-rich lipoprotein constituents. Apo-E acts as a ligand for both the specific apo-E receptor (chylomicron remnant) of hepatic tissues, and the apoB,E (LDL) receptor. Three isoforms of Apo-E have been identified, ApoE2, E3 and E4, and have been linked with various disorders. ApoE2 has been shown to bind LPL receptors with low affinity, resulting in increased plasma cholesterol and triglyceride levels, and thereby an increased risk in cardiovascular disorders. ApoE4 is a known high risk factor for Alzheimers disease, and in particular late onset Alzheimer disease 2 (AD2), whilst ApoE3 is the most common isoform, and considered the normal/natural Apo-E genotype. Mouse anti Human Apolipoprotein E antibody, clone WUE-4 has been shown to inhibit Apo-E mediated binding of lipoproteins to the apoB,E cell receptor. Western Blotting detects a major band of approximately 34-36kDa in human liver cell lysates.

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| Specificity | APOE |
| Immunogen | Purified ApoHDL fraction |
| Isotype | IgG1 |
| Source/Host | Mouse |
| Species Reactivity | Human, Mouse |
| Clone | WUE-4 |
| Conjugate | HRP |

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| Applications | ELISA; WB |
| Format | Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid |
| Size | 100 µg |
| Preservative | None |
| Storage | in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |

GENE INFORMATION

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| Gene Name | APOE apolipoprotein E [Homo sapiens (human)] |
| Official Symbol | APOE |
| Synonyms | APOE; apolipoprotein E; AD2; LPG; APO-E; LDLCQ5; apolipoprotein E3; |
| Entrez Gene ID | 348 |
| Protein Refseq | NP_000032 |
| UniProt ID | P02649 |
| Chromosome Location | 19q13.2 |
| Pathway | Alzheimers disease; Alzheimers Disease; Binding and Uptake of Ligands by Scavenger Receptors; Chylomicron-mediated lipid transport; Disease; Diseases associated with visual transduction; HDL-mediated lipid transport; Lipid digestion, mobilization, and transport; |
| Function | antioxidant activity; beta-amyloid binding; cholesterol binding; cholesterol transporter activity; heparin binding; hydroxyapatite binding; identical protein binding; lipid binding; lipid transporter activity; lipoprotein particle binding; low-density lipoprotein particle receptor binding; metal chelating activity; phosphatidylcholine-sterol O-acyltransferase activator activity; phospholipid binding; protein binding; protein homodimerization activity; tau protein binding; very-low-density lipoprotein particle receptor binding; |