

Anti-Apolipoprotein E APOE Monoclonal Antibody

Catalog Number: M00015

About APOE

The ion channels activated by glutamate are typically divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by alpha-amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as AMPA receptors (AMPA). The AMPAR are comprised of four distinct glutamate receptor subunits designated (GluR1-4) and they play key roles in virtually all excitatory neurotransmission in the brain (Keinänen et al., 1990; Hollmann and Heinemann, 1994). The GluR1 subunit is widely expressed throughout the nervous system. Phosphorylation of Ser-845 on GluR1 is thought to be mediated by PKA and phosphorylation of this site increases the conductance of the AMPAR (Roche et al., 1996; Banke et al., 2000). In addition, phosphorylation of this site has been linked to synaptic plasticity as well as learning and memory (Lee et al., 2003; Esteban et al., 2003).

Overview

Product Name	Anti-Apolipoprotein E APOE Monoclonal Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Apolipoprotein E APOE Monoclonal Antibody catalog # M00015. Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse.
Application	IP, IF, IHC, ICC, WB
Clonality	Monoclonal AbA15
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P02649

Technical Details

Immunogen	A synthesized peptide derived from human Apolipoprotein E
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

WB 1:500-1:2000

IHC 1:50-1:200

ICC/IF 1:50-1:200

IP 1:50

Anti-Apolipoprotein E APOE Monoclonal Antibody (M00015) Images

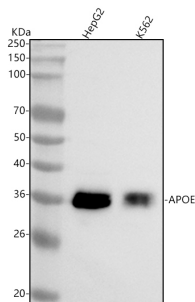


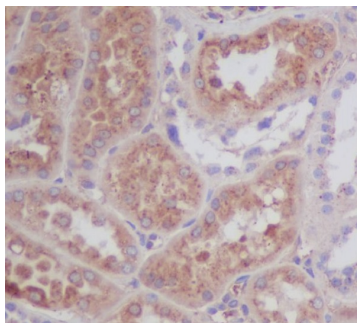
Figure 1. Western blot analysis of Apolipoprotein E using anti-Apolipoprotein E antibody (M00015).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Apolipoprotein E antigen affinity purified monoclonal antibody (Catalog # M00015) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Apolipoprotein E at approximately 36 kDa. The expected band size for Apolipoprotein E is at 36 kDa.



Immunohistochemical analysis of paraffin-embedded human kidney, using Apolipoprotein E Antibody.

2 Publications Citing This Product

1. PubMed ID: 33061590, Xue Y, Huang S, Huang J, Li S, Zhang C, Zhou X. Identification of Apolipoprotein E as a Potential Diagnostic Biomarker of Nasopharyngeal Carcinoma. Cancer Manag Res. 2020 Sep 24;12:8943-8950. doi:10.2147/CMAR.S239479. PMID:33061590; PMCID:PMC7522425.

2. PubMed ID: 33205615, Kong Y, Zhao C, Huang Y, Liu Y, Liu S, Guo Y, Li M, Xu T, Zhao B, Wang J. Angiopoietin-like protein 4 promotes very-low-density lipoprotein assembly and secretion in bovine hepatocytes in vitro. IUBMB Life. 2020 Nov 17. doi: 10.1002/iub.2403. Epub ahead of

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