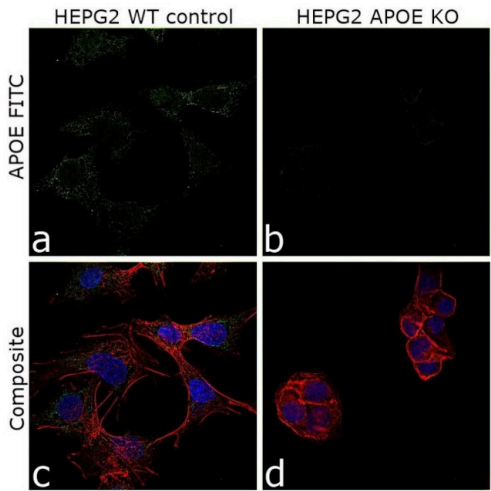


APOE Monoclonal Antibody (4E4)

Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	4E4
Conjugate	Unconjugated
Immunogen	Synthetic peptide made to an internal region of human ApoE4 (within residues 100-150).
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_11157884

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000-1:2,000	-
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	2-5 µg/mL	-
ELISA (ELISA)	1:100-1:2,000	-
Immunoprecipitation (IP)	1:10-1:500	-

Product Images For APOE Monoclonal Antibody (4E4)

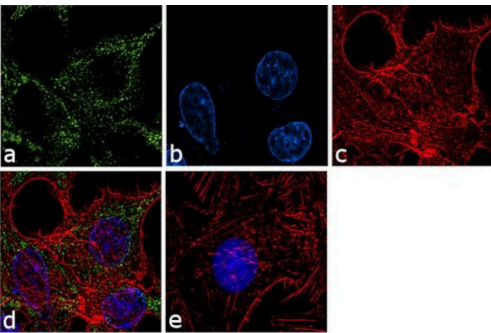


APOE Antibody (MA5-16146)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in APOE KO cell line compared to control cell line using APOE Monoclonal Antibody (Product # MA5-16146). {KO}

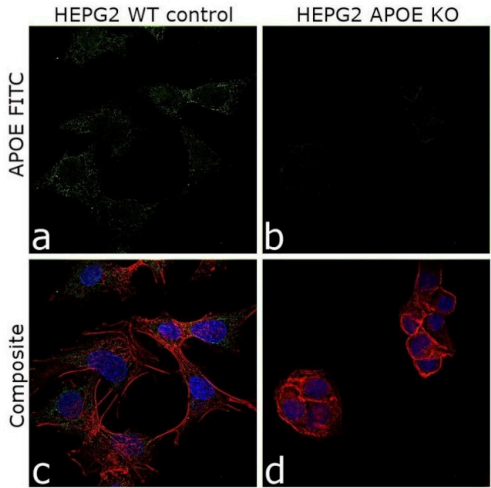
APOE Antibody (MA5-16146) in ICC/IF

Immunofluorescence analysis of APOE was performed using 70% confluent log phase HepG2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with APOE Mouse Monoclonal Antibody (Product # MA5-16146) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



APOE Antibody (MA5-16146) in ICC/IF

Knockout of APOE was achieved by CRISPR-Cas9 genome editing. Immunofluorescence analysis was performed on HEPG2 wild type control cells treated with Protein Transport Inhibitor (PTI) (1X for 4hr) (panels a,c) and HEPG2 APOE KO cells treated with Protein Transport Inhibitor (PTI) (1X for 4hr) (panel b, d). Cells were fixed, permeabilized, and labelled with APOE Monoclonal Antibody (Product # MA5-16146) at a concentration of 82032 µg/mL. Nuclei (blue) were stained using ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962), and Rhodamine Phalloidin (Product # R415) at a dilution of 1:300 was used for cytoskeletal F-actin (red) staining. Loss of signal (panel b, d) upon CRISPR mediated knockout (KO) confirms that antibody is specific to APOE (green). The images were captured at 60X magnification.



Immunohistochemistry (1)

Cell death & disease	Year 2022
Ageing related thyroid deficiency increases brain-targeted transport of liver-derived ApoE4-laden exosomes leading to cognitive impairment.	Species Mouse
<p>"MA5-16146 was used in Immunohistochemistry to study that age-associated TH decline increases ApoE4 transport into the brain thus contributing to the high incidence of AD-related dementia and neuronal impairments in ApoE4 allele carriers."</p> <p>Authors: Zhang M,Gong W,Zhang D, Ji M,Chen B,Chen B,Li X,Zhou Y,Dong C,Wen G,Zhan X,Wu X,Cui L,Feng Y, Wang S,Yuan H,Xu E,Xia M,Verkhatsky A,Li B</p>	

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