ApoE4 monoclonal antibody (4E4)

Apolipoproteins are plasma lipoproteins that function as transporters of lipids and cholesterol in the circulatory system. Human ApoE is an apolipoprotein that has three isoforms: ApoE2, ApoE3, and ApoE4.

The ApoE4 variant is the largest known genetic risk factor for late-onset Alzheimer's disease, and while the exact mechanism remains to be determined, it appears there may be an interaction with beta-amyloid. Alzheimer's disease is characterized by build-ups of aggregates of the peptide beta-amyloid. Apolipoprotein E enhances proteolytic break-down of this peptide, both within and between cells. The isoform ApoE4 is not as effective as the others at promoting these reactions, resulting in increased vulnerability to AD in individuals with that gene variation.

This antibody is covered by our Worry-Free Guarantee.

Ordering Information

Order Online »

ENZ-ABS295-0100	100µg

Manuals, SDS & CofA

View Online »

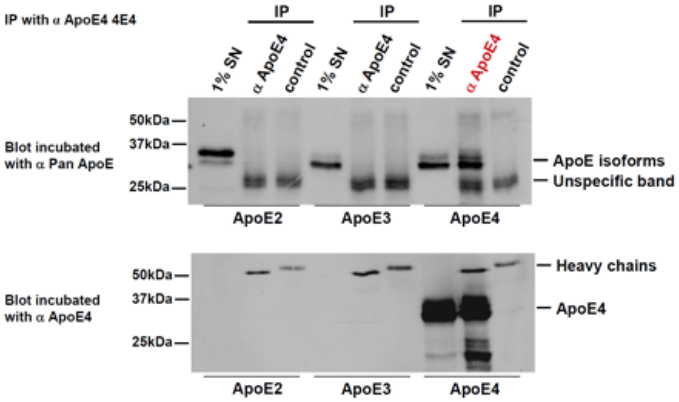


Figure 2. Immunoprecipitation. ApoE4, mAb (4E4) immunoprecipitates specifically ApoE4 but not ApoE2 or ApoE3.

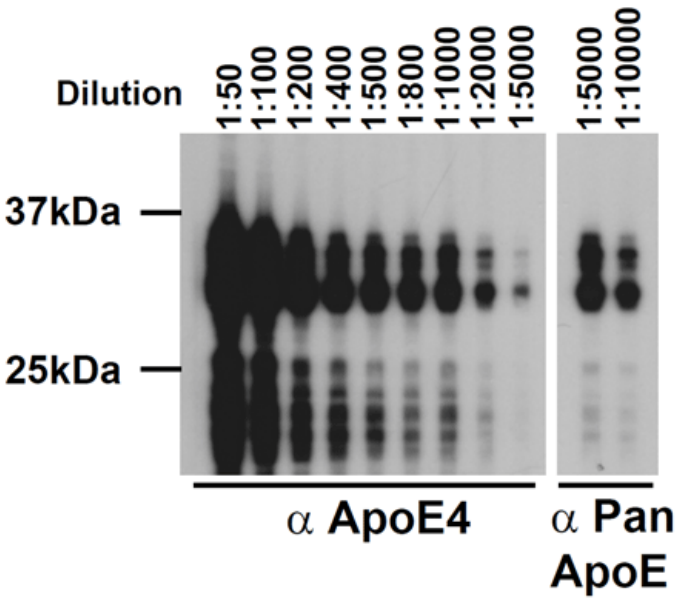


Figure 1. Western blot of ApoE4, mAb (4E4) (Prod. No. ENZ-ABS295). αApoE4 4E4: Mouse monoclonal antibody 4E4 specific for ApoE4, cell culture supernatant.
αPan ApoE: Rabbit polyclonal serum recognizing all three ApoE proteins.

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Apolipoprotein E4
Application	ELISA, IP, WB
Clone	4E4
Crossreactivity	Does not cross-react with ApoE2 or ApoE3.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Host	Mouse
Immunogen	Synthetic peptide corresponding to residues surrounding Arg110 of human ApoE4 protein.
Isotype	IgG1κ
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:1,000)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from ascites.
Species Reactivity	Human
Specificity	Recognizes endogenous levels of total ApoE4 protein.
UniProt ID	P02649

Worry-free Guarantee

This antibody is covered by our Worry-Free Guarantee .

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.