

Datasheet for ABIN3044714

APOE ELISA Kit[Go to Product page](#)**1** Image

Overview

Quantity:	96 tests
Target:	APOE
Binding Specificity:	AA 19-317
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	3.12-200 ng/mL
Minimum Detection Limit:	3.12 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human APOE
Brand:	PicoKine™
Sample Type:	Milk, Cell Culture Supernatant, Urine, Serum, Plasma (heparin), Saliva, Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Immunogen sequence: K19-H317
Specificity:	Expression system for standard: E.coli Immunogen sequence: K19-H317
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<50pg/mL

Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl
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Target Details

Target:	APOE
Alternative Name:	APOE (APOE Products)
Background:	<p>Protein Function: 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.</p> <p>Background: Apolipoprotein E (APOE) is a class of apolipoprotein found in the chylomicron and Intermediate-density lipoprotein (IDLs) that is essential for the normal catabolism of triglyceride-rich lipoprotein constituents. In peripheral tissues, APOE is primarily produced by the liver and macrophages, and mediates cholesterol metabolism in an isoform- dependent manner. In the central nervous system, APOE is mainly produced by astrocytes, and transports cholesterol to neurons via APOE receptors, which are members of the low density lipoprotein receptor gene family. This protein is involved in Alzheimer's disease and cardiovascular disease.</p> <p>Synonyms: Apolipoprotein E,Apo-E,APOE,</p> <p>Full Gene Name: Apolipoprotein E</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	348
UniProt:	P02649
Pathways:	Regulation of Cell Size , Lipid Metabolism

Application Details

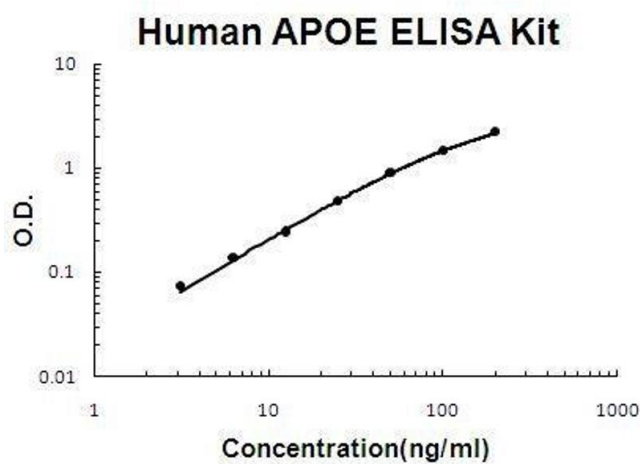
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Occurs in all lipoprotein fractions in plasma. It constitutes 10-20 % of very low density lipoproteins (VLDL) and 1-2 % of high density lipoproteins (HDL). APOE is produced in most organs. Significant quantities are produced in liver, brain, spleen, lung, adrenal, ovary, kidney and muscle.

Application Details

Plate:	Pre-coated
Protocol:	human APOE ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for APOE has been precoated onto 96-well plates. Standards(Expression system for standard: E.coli, Immunogen sequence: K19-H317) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for APOE is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human APOE amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 200 ng/mL, 100 ng/mL, 50 ng/mL, 25 ng/mL, 12.5 ng/mL, 6.25 ng/mL, 3.12 ng/mL human APOE standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA), saliva, milk or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human APOE standard solution and each sample be measured in duplicate.
Restrictions:	For Research Use only

Handling

Buffer:	heparin or EDTA
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Human APOE PicoKine ELISA Kit standard curve