Datasheet for ABIN6975327
APOA1 ELISA Kit

1	Image	7	Publications

Go to Product page

Overview

Quantity:	96 tests
Target:	APOA1
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	31.25 ng/mL - 2000 ng/mL
Minimum Detection Limit:	31.25 ng/mL
Application:	ELISA

Product Details

Purpose:	For the quantitative determination of mouse apolipoprotein A1 (Apo-A1) concentrations in serum, plasma, cell culture supernates, tissue homogenates, urine.
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Homogenate, Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	This assay has high sensitivity and excellent specificity for detection of mouse Apo-A1. No significant cross-reactivity or interference between mouse Apo-A1 and analogues was observed. Note: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between mouse Apo-A1 and all the analogues, therefore, cross reaction may still exist.
Sensitivity:	7.81 ng/mL

Product Details

Components:	• Assay plate
	• Standard
	• HRP-avidin (100 x concentrate)
	• Biotin-antibody (100 x concentrate)
	• Sample Diluent
	• HRP-avidin Diluent
	• Biotin-antibody Diluent
	• Wash Buffer (25 x concentrate)
	• TMB Substrate
	• Stop Solution
	• Adhesive Strip

Target Details

Target:	APOA1
Alternative Name:	apolipoprotein A-I (APOA1 Products)
Background:	Abbreviation: APOA1
	Alias: MGC117399, OTTHUMP00000069346|OTTHUMP00000069347|OTTHUMP00000069348
UniProt:	Q00623
Pathways:	Regulation of Lipid Metabolism by PPARalpha, Production of Molecular Mediator of Immune Response, Lipid Metabolism

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	100 µL
Assay Time:	1 - 4.5 h
Plate:	Pre-coated
Protocol:	1. Prepare reagents, samples and standards as instructed.
	2. Add 100 µL standard or sample to each well. Incubate 2 hours at 37 °C.
	3. Remove the liquid of each well, don't wash.
	4. Add 100 µL Biotin-antibody (1x) to each well. Incubate 1 hour at 37 °C.
	5. Aspirate and wash 3 times.
	6. Add 100 µL HRP-avidin (1x) to each well. Incubate 1 hour at 37 °C
	7. Aspirate and wash 5 times.
	8. Add 90 µL of TMB Substrate to each well. Incubate for 15-30 minutes at 37 °C. Protect from light.

9. Add 50 μL Stop Solution to each well. Read at 450 nm within 5 minutes.

Reagent Preparation:	

1. Biotin-antibody (1x) - Centrifuge the vial before opening. Biotin-antibody requires a 100-fold dilution. A suggested 100-fold dilution is 10 μL of Biotin-antibody + 990 μL of Biotin-antibody Diluent.
2. HRP-avidin (1x) - Centrifuge the vial before opening. HRP-avidin requires a 100-fold dilution. A suggested 100-fold dilution is 10 μL of HRP-avidin + 990 μL of HRP-avidin Diluent.
3. Wash Buffer (1x) - If crystals have formed in the concentrate, warm up to room temperature and mix gently until the crystals have completely dissolved. Dilute 20 mL of Wash Buffer Concentrate (25 x) into deionized or distilled water to prepare 500 mL of Wash Buffer (1 x).
4. Standard Centrifuge the standard vial at 6000-10000rpm for 30s. Reconstitute the Standard with 1.0 mL of Sample Diluent. Do not substitute other diluents. This reconstitution produces a stock solution of 2000 ng/mL. Mix the standard to ensure complete reconstitution and allow the standard to sit for a minimum of 15 minutes with gentle agitation prior to making dilutions. Pipette 250 μL of Sample Diluent into each tube (S0-S6). Use the stock solution to produce a 2-fold dilution series (below). Mix each tube thoroughly before the next transfer. The undiluted Standard serves as the high standard (2000 ng/mL). Sample Diluent serves as the zero standard (0 ng/mL).

Note:

- Kindly use graduated containers to prepare the reagent. Please don't prepare the reagent directly in the Diluent vials provided in the kit.
- Bring all reagents to room temperature (18-25 °C) before use for 30 min.
- Prepare fresh standard for each assay. Use within 4 hours and discard after use.
- Making serial dilution in the wells directly is not permitted.
- Please carefully reconstitute Standards according to the instruction, and avoid foaming and mix gently until the crystals have completely dissolved. To minimize imprecision caused by pipetting, use small volumes and ensure that pipettors are calibrated. It is recommended to suck more than 10 μL for once pipetting.
- Distilled water is recommended to be used to make the preparation for reagents. Contaminated water or container for reagent preparation will influence the detection result.
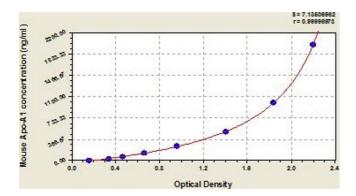
Sample Preparation:	

- It is recommended to use fresh samples without long storage, otherwise protein degradation and denaturationmay occur in these samples, leading to false results. Samples should therefore be stored for a short periodat 2 - 8 °C or aliquoted at -20 °C (≤1 month) or -80 °C (≤ 3 months). Repeated freeze-thawcycles should be avoided. Prior to assay, the frozen samples should be slowly thawed and centrifuged toremove precipitates.
- If the sample type is not specified in the instructions, a preliminary test is necessary to determinecompatibility with the kit.
- If a lysis buffer is used to prepare tissue homogenates or cell culture supernatant, there is a possibilityof causing a deviation due to the introduced chemical substance.The recommended dilution factor is for reference only.
- Please estimate the concentration of the samples before performing the test. If the values are not in therange of the standard curve, the optimal sample dilution for the particular

Application Details

experiment has to be determined.Samples should then be diluted with PBS (pH =7.0-7.2).

Note:

Recommend to dilute the serum or plasma samples with Sample Diluent (1:2000) before test. The suggested 2000-fold dilution can be achieved by adding 2 μL sample to 98 μL of Sample Diluent. Complete the 2000-fold dilution by adding 6 μL of this solution to 234 μL of Sample Diluent. The recommended dilution factor is for reference only. The optimal dilution factor should be determined by users according to their particular experiments.

Assay Precision:	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess.
	Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in twenty assays to assess.
Restrictions:	For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Unopened kit Store at 2 - 8°C. Do not use the kit beyond the expiration date. May be stored for up to 1 month at 2 - 8°C. Coated assay Try to keep it in a sealed aluminum foil bag, plate and avoid the damp. Standard May be stored for up to 1 month at 2 - 8° C. If Biotin-antibody don't make recent use, better keep it store at HRP-avidin -20°C. Biotin-antibody Diluent Opened kit HRP-avidin Diluent Sample May be stored for up to 1 month at 2 - 8°C. Diluent Wash Buffer TMB Substrate Stop Solution *Provided this is within the expiration date of the kit.
Expiry Date:	6 months

Publications

Product cited in:	Wang, Lv, Luo, Mou, Liu, Liu, Deng, Jiang, Lin, Wu, Liu, He, Jiang: "Plasma YKL-40 and NGAL are useful in distinguishing ACO from asthma and COPD." in: **Respiratory research**, Vol. 19, Issue 1, pp. 47, (2018) (PubMed).
	Zhang, Peng, Cheng, Shi, Zhang, Xu: "Paeoniflorin Atttenuates Amyloidogenesis and the Inflammatory Responses in a Transgenic Mouse Model of Alzheimer's Disease." in: **Neurochemical research**, Vol. 40, Issue 8, pp. 1583-92, (2015) (PubMed).
	Bakırcı, Ünver, Değirmenci, Kıvanç, Günay, Hamur, Büyüklü, Ceyhun, Topal, Çoban: "Serum YKL-

Publications

40/chitinase 3-like protein 1 level is an independent predictor of atherosclerosis development in patients with obstructive sleep apnea syndrome." in: **Tu⬚rk Kardiyoloji Derneg⬚i ars⬚ivi : Tu⬚rk Kardiyoloji Derneg⬚inin yayın organıdır**, Vol. 43, Issue 4, pp. 333-9, (2015) (PubMed).

There are more publications referencing this product on: Product page

Images

ELISA

Image 1. Typical Standard Curve