abcam

ab52945

Anti-Apolipoprotein A I antibody [EP1368Y]

Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) is a rabbit monoclonal antibody detecting Apolipoprotein A I in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF, ELISA**. Suitable for **Human,**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 40 publications
- Trusted since 2007

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1368Y
Purification technique	Affinity purification Protein A
Concentration	0.204 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/60
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

ELISA

Tested

Species	Synthetic peptide
Dilution info	-
Notes	Antibody conc. = 0 - 1000 ng/ml

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	For unpurified use at 1/20000 dilution.

Not recommended

Species	Synthetic peptide
Dilution info	-

Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	

Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

Target data

See full target information APOA1

Function	Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol acyltransferase (LCAT). As part of the SPAP complex, activates spermatozoa motility.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Stable for 12 months at -20°C

Notes

What is this antibody validated in?
Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF), ELISA in Human, samples.

What is the molecular weight of Apolipoprotein A I?
Anti-Apolipoprotein A I [EP1368Y] (ab52945) specifically detects a band for Apolipoprotein A I (UniProt: P02647) at a

molecular weight of 31kDa.

Trusted by the scientific community
Anti-Apolipoprotein A I [EP1368Y] (ab52945) was first used in a scientific publication in 2007 and has been cited over 40 times in peer-reviewed journals.

Reviewed by scientists
Anti-Apolipoprotein A I [EP1368Y] (ab52945) has over 5 independent reviews from customers.

Other related products
We have a range of other formats of antibody clone [EP1368Y] also available for your convenience: ab52945, Carrier free - ab185132, Carrier free - ab271849, Alexa Fluor® 488 - ab279676, Alexa Fluor® 647 - ab279677, PE - ab282174

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Apolipoprotein A-I (ApoA-I) is a major component of high-density lipoprotein (HDL) particles often referred to as 'good cholesterol'. It has a molecular mass of approximately 28 kDa. ApoA-I is mainly expressed in the liver and intestine. It plays a mechanical role in the reverse transport of cholesterol acting to facilitate the efflux of cholesterol from tissues to the liver for excretion. Its alternative names include ApoAI ApoA1 and a component of the AI kits used for measuring this protein.
Biological function summary	ApoA-I functions in cholesterol homeostasis and inflammation. It is a structural component of the HDL complex that mobilizes cholesterol. ApoA-I acts as an activator of the enzyme lecithin-cholesterol acyltransferase (LCAT) which is essential for the maturation of HDL particles. This maturation is necessary for effective cholesterol transport and clearance. ApoA-I's ability to stabilize HDL

	particles and enhance their functionality makes it significant for maintaining lipid balance and cellular homeostasis.
Pathways	The interaction of ApoA-I with HDL formation and function marks its role in lipid metabolism pathways. Its participation in the reverse cholesterol transport pathway highlights its influence on cardiovascular health. ApoA-I also interacts with other proteins like ApoA-II and paraoxonase-1 which further influence lipid metabolism and antioxidant activities. Understanding these relationships helps elucidate the dynamics of cholesterol removal from the bloodstream.
Associated diseases and disorders	Disturbances in ApoA-I levels correlate with cardiovascular disease and atherosclerosis. Deficiency or dysfunction in ApoA-I can impair HDL function leading to poor cholesterol removal and buildup within arteries. It is also connected to amyloidosis where misfolded ApoA-I forms deposits in tissues. Understanding these pathological conditions helps researchers target ApoA-I in therapeutic strategies to mitigate disease progression often studying it alongside proteins like ApoB which is associated with low-density lipoprotein (LDL) particles.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

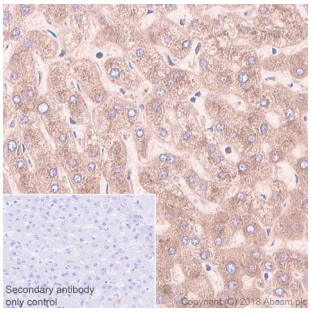
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

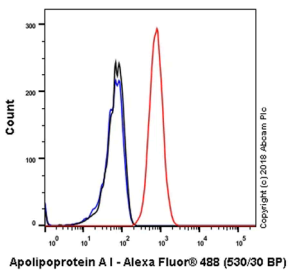
Full details and terms and conditions can be found here:
Terms & Conditions.

11 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

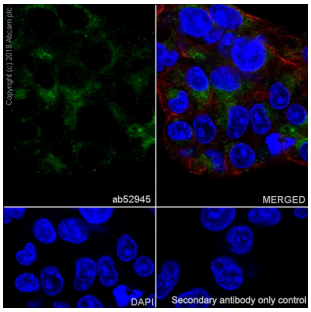
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling Apolipoprotein A I with purified ab52945 at 1/100 dilution (1.95 µg/ml). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Flow Cytometry (Intracellular) staining using rabbit Anti-Apolipoprotein A I antibody

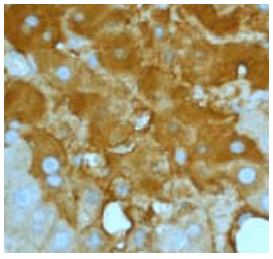
Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with purified ab52945 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Apolipoprotein A I antibody

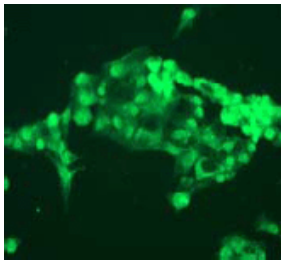
Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with purified ab52945 at 1/250 dilution (0.8 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml) dilution. Goat anti rabbit IgG (Alexa Fluor® 488 ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Apolipoprotein A I antibody

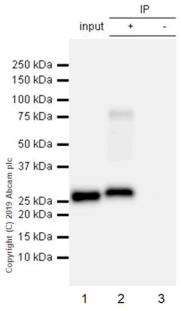
ab52945 (unpurified) at 1/100 dilution staining Apolipoprotein A I in human liver by Immunohistochemistry Paraffin embedded tissue.



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Apolipoprotein A I antibody

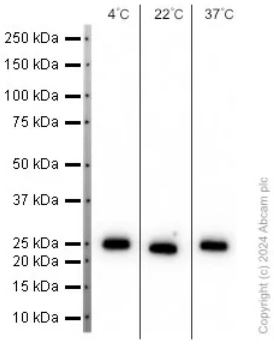
ab52945 (unpurified) at 1/100 dilution staining Apolipoprotein A I in HEPG2 cells by Immunofluorescence.



Immunoprecipitation - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

ab52945 (purified) at 1/20 dilution (1ug) immunoprecipitating Apolipoprotein A I in Human fetal liver lysates.
Lane 1: Human fetal liver lysates 10ug
Lane 2 (+): ab52945 & Human fetal liver lysates
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab52945 in Human fetal liver lysates
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.
All lanes:
Immunoprecipitation - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Predicted band size: 30 kDa



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Western blot staining of Human liver lysate using rabbit Anti-Apolipoprotein A I antibody

This blot was produced using 4-20% SDS-PAGE containing 15 µg of human liver lysate per lane at 150V for 1hr before being transferred onto a 0.45 µm PVDF membrane at 75V for 1hr. The membrane was then blocked for 1hr using 5% NFDM/TBST, then incubated with ab52945 (1/1000) at room temperature for 1hr. After being washed three times in TBST, the membrane was incubated with Peroxidase conjugated goat anti-rabbit IgG with minimal cross-reactivity with human IgG at 1/2000 dilution for 1hr at room temperature. The membrane was washed three times again. Then the signal was developed using the ECL technique.

ab52945 was stored at a range of temperatures (+4°C, +22°C, +37°C) for 1 week before being tested in WB. The image shows the band intensity remains relatively constant across all storage temperatures, demonstrating that antibody activity is not affected under these conditions. This data was generated as part of a structured antibody stability study supporting Abcam’ s transition from cold⊠chain to ambient shipping.

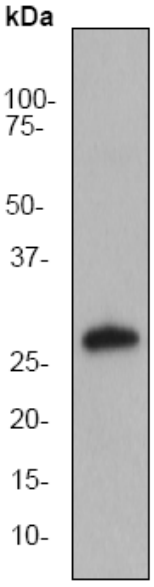
All lanes:
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution

All lanes:
Human liver lysate at 15 µg with NDFM/TBST

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/2000 dilution

Exposure time: 7s



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Apolipoprotein A I Western blot staining of fetal liver lysate using rabbit Anti-Apolipoprotein A I antibody

All lanes:
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/20000 dilution

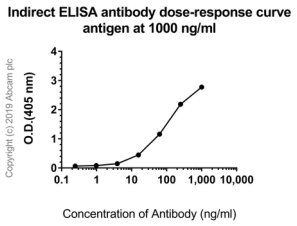
All lanes:
fetal liver lysate at 10 µg

Secondary

All lanes:
goat anti-rabbit HRP at 1/2000 dilution

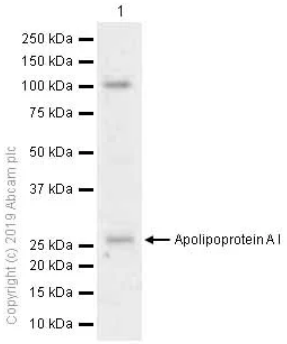
Predicted band size: 30 kDa

Observed band size: 31 kDa



Indirect ELISA - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

ELISA analysis of Apolipoprotein A I recombinant protein at 1000 ng/mL with ab52945 at 1000~0ng/mL. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

All lanes:
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution

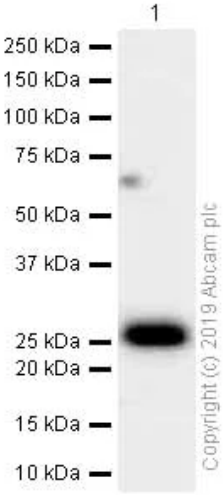
All lanes:
HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 30 kDa

Observed band size: 31 kDa



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

All lanes:
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution

All lanes:
Human liver lysates at 15 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 30 kDa

Observed band size: 31 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.