ApoA1 Monoclonal Antibody (311)

Product Details	
Size	1 mg
Species Reactivity	Human, Mouse
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	311
Conjugate	Unconjugated
Immunogen	Purified human plasma Apo A-1
Form	Liquid
Concentration	5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.09% sodium azide
Storage conditions	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C
RRID	AB_11152130

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	-
Immunohistochemistry (Paraffin) (IHC (P))	1:100	-
Immunocytochemistry (ICC/IF)	2 µg/mL	-
ELISA (ELISA)	1 µg/mL	1 Publication
Immunoprecipitation (IP)	Assay-dependent	-
Functional Assay (FN)	-	1 Publication
Radioimmune Assays (RIA)	Assay-dependent	-
In vitro Assay (IV)	-	1 Publication

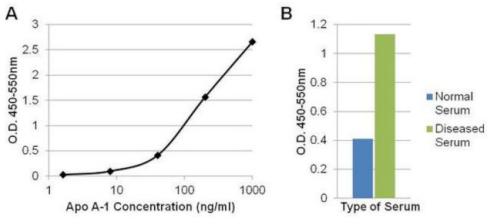
Product Specific Information

By sandwich ELISA, MIA1402 can be used as a detection antibody with Product # 710263 or # 701239 as a coating antibody, to generate a matched pair. Using these matched pairs, recombinant human Apo A-1, but not recombinant mouse Apo A-1, was detected. MIA1402 can be used to detect Apo A-1 from serum samples. To increase sensitivity of sandwich ELISAs with MIA1402, a biotinylated detection antibody followed by Streptavidin-HRP is recommended.

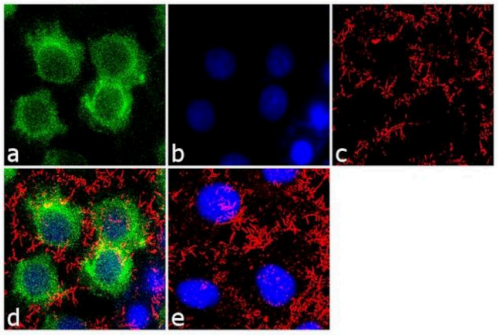
By Western blot, MIA1402 detects recombinant human Apo A-1, but not recombinant mouse Apo A-1. MIA1402 may not be as successful for detecting endogenous Apo A-1 by Western blot.

MIA1402 was formerly sold as a Seradyn product.

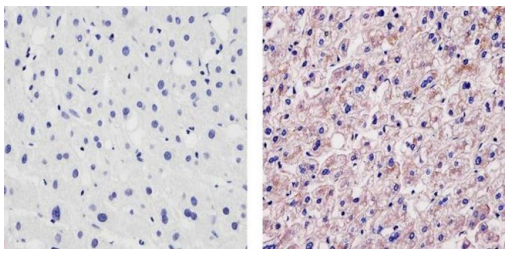
Product Images For ApoA1 Monoclonal Antibody (311)



ApoA1 Antibody (MIA1402)
Antibody specificity was demonstrated by detection of relative expression of the target protein across patient samples owing to their inherent genetic constitution. Increased expression of Apolipoprotein A1 in serum from patients suffering from dyslipidemia was detected in ELISA using anti-Apolipoprotein A1 monoclonal antibody (311) (Product # MIA1402). {RE}



ApoA1 Antibody (MIA1402) in ICC/IF
Immunofluorescence analysis of Apolipoprotein A1 was performed 70% confluent log phase Hep G2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with Apolipoprotein A1 (311) Mouse Monoclonal Antibody (Product # MIA1402) 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) 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.



ApoA1 Antibody (MIA1402) in IHC (P)
Immunohistochemistry analysis of Apolipoprotein A-1 showing staining in the cytoplasm of paraffin-embedded human liver tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Apolipoprotein A-1 Mouse Monoclonal Antibody (Product # MIA1402) diluted in 3% BSA-PBS at a dilution of 1:100 for 1 hour at 37ºC in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

View more figures on thermofisher.com

3 References

ELISA (1)

Experimental and therapeutic medicine

Proteomic profiling of biomarkers by MALDI-TOF mass spectrometry for the diagnosis of tracheobronchial stenosis after tracheobronchial tuberculosis.

"MIA1402 was used in Enzyme-linked immunosorbent assay to identify biomarkers for the diagnosis of tracheobronchial stenosis (TBS) secondary to tracheobronchial TB."

Authors: Peng B,Qiu X,Dong Z,Zhang J,Pei Y,Wang T

Year
2021

Species
Human

Dilution
1:5000

Functional Assay (1)

Journal of clinical laboratory analysis

Association of ANGPTL3 polymorphisms with high-density lipoprotein cholesterol uptake capacity in patients with cardiovascular disease.

"MIA1402 was used in Functional assays to investigate the relationship between genetic angiopoietin-like 3 polymorphism and Cholesterol uptake capacity in patients with cardiovascular disease."

Authors: Aghasizadeh M,Nosrati M,Saberi-Karimian M,Safarian H,Assadian P,Akbarpour E,Sahebkar A,Avan A,Ferns GA,Kazemi T,Miri-Moghaddam E,Ghayour-Mobarhan M

Year
2021

Species
Human

In vitro Assay (1)

Journal of clinical laboratory analysis

Serum HDL cholesterol uptake capacity in subjects from the MASHAD cohort study: Its value in determining the risk of cardiovascular endpoints.

"MIA1402 was used in In vitro Assay to investigate cholesterol uptake capacity (CUC) by a newly developed assay in samples from the MASHAD (Mashhad Stroke and Heart Atherosclerotic Disorders) cohort study."

Authors: Aghasizadeh M,Samadi S,Sahebkar A,Miri-Moghaddam E,Esmaily H,Souktanloo M,Avan A,Mansoori A,Ferns GA,Kazemi T,Ghayour-Mobarhan M

Year
2021

Species
Human