

# Human ApoA1



[www.mesoscale.com](http://www.mesoscale.com)

## Ordering Information

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## Scientific Support

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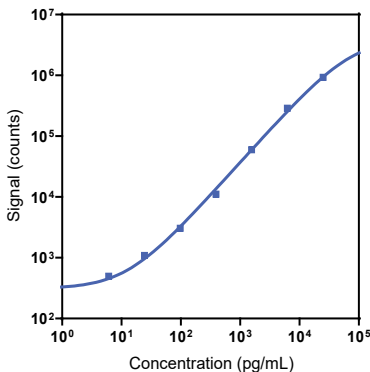
## Company Address

Meso Scale Discovery  
A division of  
Meso Scale Diagnostics, LLC.  
1601 Research Boulevard  
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Product Options	Catalog Number	Description
<b>Multiplex</b>	K151AGM, K251AGM	U-PLEX Biomarker Group 3 (human)
<b>Singleplex</b>	K151S9K-1/-2/-4	U-PLEX Human ApoA1 Assay with SECTOR™ plates
	K151S9K-21/-22/-24	U-PLEX Human ApoA1 Assay with QuickPlex Ultra™ plates
	K251S9K-2/-4	U-PLEX Human ApoA1 Assay with 384-well plates
<b>Antibody Set</b>	B21S9-2/-3	U-PLEX Human ApoA1 Antibody Set
<b>Protocol</b>	U-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">www.mesoscale.com</a>	

The MESO SCALE DISCOVERY® U-PLEX platform was designed to provide ultimate flexibility for detection of biomarkers in a wide variety of sample types. This datasheet provides the representative performance of the U-PLEX® Human ApoA1 Assay tested on U-PLEX 96-well SECTOR plates run as a multiplex. The data do not represent the product specifications. Under your experimental conditions, the assay may perform differently from the representative data. U-PLEX assays are offered in either singleplex or multiplex; both are available in 96- or 384-well plates. See a U-PLEX product insert for instrument compatibility.

## Representative Calibration Curve and Sensitivity



Assay	Median LLOD (pg/mL)	LLOD Range (pg/mL)
ApoA1	4.9	4.7-8.8

The Calibrator curve was fitted with a 4-parameter logistic model with a  $1/Y^2$  weighting. The lower limit of detection (LLOD) is a calculated concentration corresponding to the signal 2.5 standard deviations above the background (zero Calibrator).

## Precision

Control	Average Conc. (pg/mL)	Average intra-run Conc. (%CV)	Inter-run Conc. (%CV)
High	3,350	4.2	7.2
Mid	979	5.3	12.2
Low	287	5.3	18.5

Controls were made by spiking Calibrator into assay diluent at 3 levels within the quantitative range of the assay. Average intra-run concentration %CV is the average %CV of the control replicates within an individual run. Inter-run concentration %CV is the variability of controls across multiple runs.

For Research Use Only.  
Not for use in diagnostic procedures.

# MSD® U-PLEX Human ApoA1

## Tested Samples

Sample Type	Serum (N=10)	EDTA Plasma (N=10)	Citrate Plasma (N=5)
Median (µg/mL)	1,250	974	492
Range (µg/mL)	393-3,110	477-1,330	313-1,030
% Detected	100	100	100

Normal serum, EDTA plasma, and citrate plasma urine samples were diluted 200,000-fold prior to the assay.

## Parallelism

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
100,000	106	95-114	100,000	105	93-112
400,000	96	94-98	400,000	94	88-98
800,000	88	85-91	800,000	93	85-101

Normal human serum and EDTA plasma were tested at different dilutions. Percent recovery at each dilution level was normalized to the concentration of 200,000-fold diluted samples.

% Recovery = (measured concentration / expected concentration) x 100

## Specificity

To assess specificity, the ApoA1 Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (A2M, Adiponectin, ApoA1, ApoC3, CA1, Clusterin, Complement C9, Complement factor D, CRP, Cystatin C, DPPIV, Factor VII, ICAM-1, NGAL/LCN2, RBP4, SAA, Serpin A1, SHBG, sTfR-1, VCAM-1, vWF). Nonspecific binding was less than 0.5%.

% Nonspecificity = (nonspecific signal / specific signal) x 100

## Diluent Compatibility

The data included in this document have been collected with Assay Diluent 12 and Antibody Diluent 11. MSD offers a range of assay and antibody diluents for separate purchase. Depending on your assay needs, other diluents may be tested.

## Assay Components

**Calibrator:** ApoA1 is included in Calibrator 26. The human ApoA1 Calibrator is a native protein purified from human plasma.

**Antibodies:** The MESO SCALE DISCOVERY® U-PLEX Human ApoA1 Assay uses a mouse monoclonal antibody for capture and a mouse monoclonal antibody for detection.

**Assay generation:** A

**Note:** This datasheet contains representative assay performance data. In custom multiplex formats, the assay may perform differently from the representative data shown.

**Note:** MSD recommends that samples be diluted 200,000-fold prior to analysis in this assay.

