

Human Complement factor D



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Ordering Information

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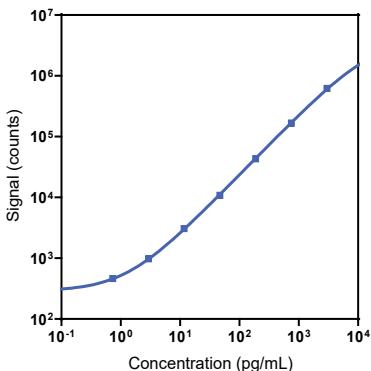
Company Address

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Product Options	Catalog Number	Description
Multiplex	K151AGM, K251AGM	U-PLEX Biomarker Group 3 (human)
Singleplex	K151K9K-1/-2/-4	U-PLEX Human Complement factor D Assay with SECTOR™ plates
	K151K9K-21	U-PLEX Human Complement factor D Assay with QuickPlex® APT plates
	K251K9K-2/-4	U-PLEX Human Complement factor D Assay with 384-well plates
Antibody Set	B21K9-2/-3	U-PLEX Human Complement factor D Antibody Set
Protocol	U-PLEX Product Inserts are available at www.mesoscale.com	

The 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 Complement factor D 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)
Complement factor D	0.31	0.30-0.33

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	382	3.9	7.9
Mid	101	1.6	7.7
Low	30	2.3	6.4

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 Complement factor D

Tested Samples

Sample Type	Serum (N=10)	EDTA Plasma (N=10)	Citrate Plasma (N=5)
Median (pg/mL)	1.7	1.7	1.4
Range (pg/mL)	1.2-2.7	1.4-2.1	1.3-3.0
% Detected	100	100	100

Normal serum, EDTA plasma, citrate plasma, and urine samples were diluted 4,000-fold prior to the assay.

Parallelism

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2,000	100	88-116	2,000	115	98-127
8,000	101	96-105	8,000	105	87-132
16,000	99	90-110	16,000	123	82-167

Normal human serum and EDTA plasma were spiked with Calibrator and tested at different dilutions. Percent recovery at each dilution level was normalized to the concentration of 4,000-fold diluted samples.

$$\% \text{ Recovery} = (\text{measured concentration} / \text{expected concentration}) \times 100$$

Specificity

To assess specificity, the Complement factor D 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%.

$$\% \text{ Nonspecificity} = (\text{nonspecific signal} / \text{specific signal}) \times 100$$

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: Complement factor D is included in Calibrator 25. The human Complement factor D Calibrator is a full-length recombinant protein expressed in a mouse cell line.

Antibodies: The U-PLEX Human Complement factor D Assay uses a mouse monoclonal antibody for capture and a goat polyclonal 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 4,000-fold prior to analysis in this assay.

