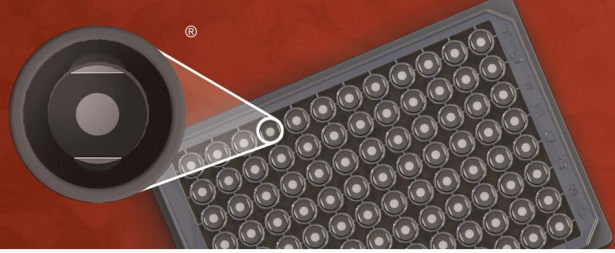
U-PLEX®

Human proMMP-10



www.mesoscale.com®

Ordering Information

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Company Address

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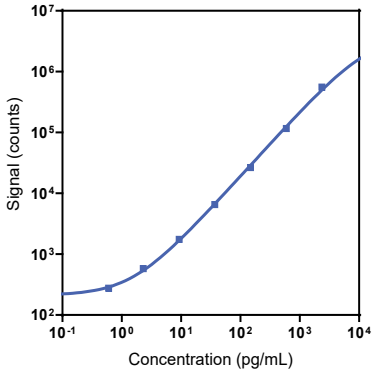
Product Options	Catalog Number	Description
Multiplex	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (human)
Singleplex	K151AQTK-1/-2/-4	U-PLEX Human proMMP-10 Assay with SECTOR™ plates
	K!51AQTK-21	U-PLEX Human proMMP-10 Assay with QuickPlex® plates
	K251AQTK-2/-4	U-PLEX Human proMMP-10 with 384-well plates
Antibody Set	B21AQT-2/-3	U-PLEX Human proMMP-10 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 proMMP-10 Assay tested on U-PLEX 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 on 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)
proMMP-10	0.38	0.31–0.55

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 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	1,357	2.5	16.4
Mid	288	3.1	12.6
Low	69	1.8	13.8

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.

MSD® U-PLEX Human proMMP-10

Tested Samples

Sample Type	Serum (N = 8)	EDTA Plasma (N = 8)	Citrate Plasma (N = 8)	Normal Lysate (N = 5)	Tumor Lysate (N = 15)
Median (pg/mL)	272	6.0	375	2.5	2.6
Range (pg/mL)	74–588	ND–6.0	105–819	1.1–2.6	1.2–3.7
% Detected	100	13	100	100	100

Normal serum and plasma samples were diluted 4-fold prior to the assay. Lysates were tested at a protein concentration of 0.5 mg/mL. ND = non-detectable (<LLOD). EDTA and citrate in samples may adversely affect this assay and are not recommended.

Dilution Linearity

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2	135	121–158	2	ND	ND
8	90	72–108	8	ND	ND
16	76	67–107	16	ND	ND

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 dilution-adjusted, 4-fold concentration. Samples may benefit from additional dilution with assay diluent to reduce matrix effects. ND = non-detectable (<LLOD).

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

Spike Recovery

	Serum		EDTA Plasma	
Spike Level	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
High	104	82–123	ND	ND
Mid	102	89–116	ND	ND
Low	104	94–115	ND	ND

Normal serum and plasma were spiked with Calibrator at 3 levels. Spiked samples were diluted 4-fold to determine the expected concentration of the analyte. Samples may benefit from additional dilution with assay diluent to reduce matrix effects. ND = non-detectable (<LLOD).

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

Specificity

The proMMP-10 Antibody Set was tested for nonspecific binding against all of the analytes in the Immuno-Oncology Group 1 and the majority of analytes in Biomarker Group 1. Any cross-reactivity greater than 2.0% is noted below. The U-PLEX Assay Designer shows compatible assays.

The proMMP-10 assay cross-reacts with the MMP-10 assay as expected. We do not recommend multiplexing these assays on the same plate.

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

Diluent Compatibility

Diluents 58 and 3 are provided when this is ordered in singleplex and multiplex assays.

Assay Components

Calibrator: proMMP-10 is included in Calibrator 32. The human proMMP-10 Calibrator is MMP-10 (18–476) recombinant protein expressed in a mouse cell line.
Antibodies: The U-PLEX Human proMMP-10 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.