

Human proMMP-8



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Ordering Information

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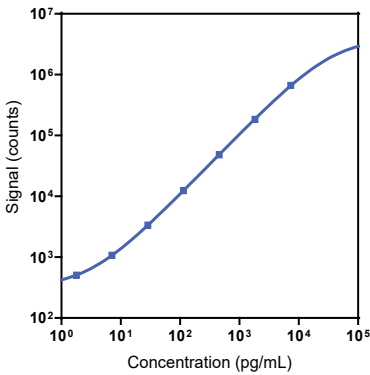
Company Address

MESO SCALE DISCOVERY®
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Product Options	Catalog Number	Description
Multiplex	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (human)
Singleplex	K151AQDK-1/-2/-4	U-PLEX Human proMMP-8 Assay with SECTOR™ plates
	K151AQDK-21	U-PLEX Human proMMP-8 Assay with QuickPlex® plates
	K251AQDK-2/-4	U-PLEX Human proMMP-8 with 384-well plates
Antibody Set	B21AQD-2/-3	U-PLEX Human proMMP-8 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-8 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-8	0.89	0.62–1.4

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	4,209	2.1	6.1
Mid	669	2.2	6.9
Low	103	2.8	8.2

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 proMMP-8

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)	45,900	463	4,890	825	802
Range (pg/mL)	4,500–91,400	ND–2,500	1,120–28,900	53–1,320	23–5,540
% Detected	100	75	100	100	100

Normal serum and plasma samples were diluted 100-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.

Parallelism

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
50	103	100–109	50	88	83–94
200	94	91–98	200	107	98–117
400	92	90–96	400	102	101–103

Normal human serum and EDTA plasma were tested at different dilutions. Percent recovery at each dilution level was normalized to the dilution-adjusted, 100-fold concentration. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

Spike Recovery

Spike Level	Serum		EDTA Plasma	
	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
High	105	90–147	107	86–161
Mid	102	87–138	102	83–146
Low	102	88–136	107	89–164

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.

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

Specificity

The proMMP-8 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-8 assay cross-reacts with the MMP-8 (total) assay as expected. We do not recommend multiplexing these assays on the same plate.

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

Diluent Compatibility

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

Assay Components

Calibrator: proMMP-8 is included in Calibrator 30. The human proMMP-8 Calibrator is MMP-8 (21–467) recombinant protein expressed in a mouse cell line.

Antibodies: The U-PLEX Human proMMP-8 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 100-fold prior to analysis in this assay.

