

Human PDGF-B



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Ordering Information

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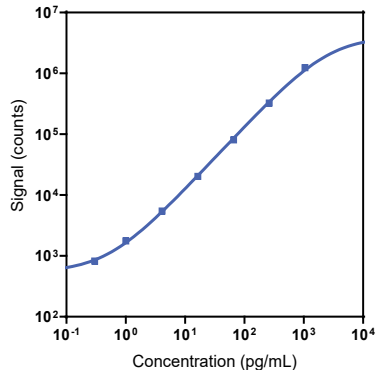
Company Address

MESO SCALE DISCOVERY[®]
 A division of
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Product Options	Catalog Number	Description
Multiplex	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (hu)
Singleplex	K151AQGK-1/-2/-4	U-PLEX Human PDGF-B Assay with SECTOR [™] plates
	K251AQGK-2/-4	U-PLEX Human PDGF-B with 384-well plates
Antibody Set	B21AQG-2/-3	U-PLEX Human PDGF-B 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 PDGF-B 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)
PDGF-B	0.09	0.05–0.11

The Calibrator curve was fitted with a 4-parameter logistic model with a 1/Y² 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	454	1.3	4.2
Mid	135	1.6	3.8
Low	46	1.4	5.7

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 PDGF-B

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)	3,090	843	389	13	10
Range (pg/mL)	1,890–5,670	140–2,570	178–1,490	6.6–16	4.7–48
% Detected	100	100	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.

Parallelism

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
50	106	103–109	50	103	99–106
200	94	92–97	200	96	93–100
400	93	90–95	400	95	90–104

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	115	97–167	113	95–177
Mid	111	99–164	109	92–160
Low	107	96–149	108	94–163

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 PDGF-B 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.

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

Diluent Compatibility

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

Assay Components

Calibrator: PDGF-B is included in Calibrator 30. The human PDGF-B Calibrator is PDGF-B (82–190) recombinant protein expressed in *E. coli*.

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

