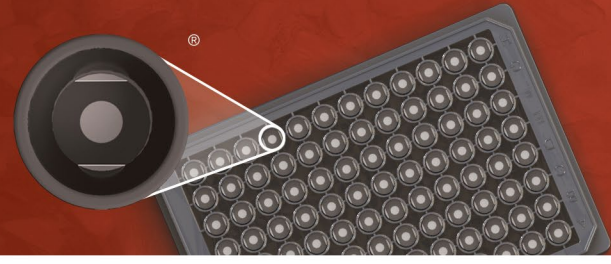


# Human P-Selectin



www.mesoscale.com®

### Ordering Information

MSD Customer Service  
 Phone: 1-240-314-2795  
 : 1-301-990-2776  
 Email: CustomerService@mesoscale.com

### Scientific Support

Phone: 1-240-314-2798  
 Email: ScientificSupport@mesoscale.com

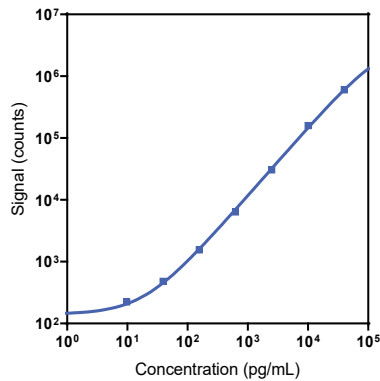
### Company Address

MESO SCALE DISCOVERY®  
 A division of  
 Meso Scale Diagnostics, LLC.  
 1601 Research Boulevard  
 Rockville, MD 20850-3173 USA

Product Options	Catalog Number	Description
<b>Multiplex</b>	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (human)
<b>Singleplex</b>	K151AHNK-1/-2/-4	U-PLEX Human P-Selectin Assay with SECTOR™ plates
	K151AHNK-21/-22/-24	U-PLEX Human P-Selectin Assay with QuickPlex® plates
	K251AHNK-2/-4	U-PLEX Human P-Selectin Assay with 384-well plates
<b>Antibody Set</b>	B21AHN-2/-3	U-PLEX Human P-Selectin Antibody Set
<b>Protocol</b>	U-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">www.mesoscale.com</a> .	

The U-PLEX® platform was designed to provide ultimate flexibility for the detection of biomarkers in a wide variety of sample types. This datasheet provides the representative performance of the U-PLEX Human P-Selectin 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 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)
P-Selectin	10.5	7.54–17.7

The Calibrator curve was fitted with a 4-parameter logistic model with a 1/Y<sup>2</sup> 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	8,090	2.1	6.8
Mid	2,437	2.0	7.9
Low	727	1.6	6.6

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 P-Selectin

## Tested Samples

Sample Type	Serum (N = 9)	EDTA Plasma (N = 9)	Citrate Plasma (N = 9)	Normal Lysate (N = 5)	Tumor Lysate (N = 5)
Median (pg/mL)	171,000	118,000	89,700	5,310	842
Range (pg/mL)	113,000–320,000	59,800–245,000	44,900–136,000	432–18,700	664–5,110
% Detected	100	100	100	100	100

Normal serum and plasma samples were diluted 100-fold prior to testing in 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	98	94–103	50	93	48–102
200	98	94–103	200	102	98–108
400	101	96–105	400	106	98–118

Samples were tested at different dilutions. One hundred-fold diluted samples were tested to determine the expected concentration of the analyte.

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

## Spike Recovery

Spike Level	Serum		EDTA Plasma	
	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
High	99	94–103	104	95–113
Mid	119	109–130	109	104–119
Low	113	103–129	101	97–108

Samples were diluted 100-fold prior to addition of spike. The expected concentration of the analyte in spiked samples was calculated by addition of the Calibrator spike concentration to the unspiked sample concentration.

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

## Specificity

To assess specificity, the P-Selectin Antibody Set was tested individually against a larger panel of analytes for nonspecific binding: APRIL/TNFSF13, BAFF-R/TNFRSF13C, BCMA/TNFRSF17, CD20, CD27, CD276/B7-H3, CD28, CD40L (soluble), CTACK, CTLA-4, ENA-78, Eotaxin, Eotaxin-2, Eotaxin-3, EPO, E-Selectin, FGF (basic), FLT3L, Fractalkine, G-CSF, Galectin-9, GITR/TNFRSF18, GITRL/TNFSF18, GM-CSF, gp130 (soluble), Granzyme A, Granzyme B, GRO- $\alpha$ , HAVCR2/TIM-3, HVEM/TNFRSF14, I-309, ICOS, ICOSL/B7-H2, IFN- $\alpha$ 2a, IFN- $\beta$ , IFN- $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-1RA, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A, IL-17A/F, IL-17C, IL-17D, IL-17E/IL 25, IL-17F, IL-18, IL-2, IL-21, IL-22, IL-23, IL-27, IL-29/IFN- $\lambda$ 1, IL-2R $\alpha$ , IL-3, IL-31, IL-33, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IP-10, I-TAC, LAG-3, LIGHT/TNFSF14, MCP-1, MCP-2, MCP-4, M-CSF, MDC, MIF, MIG, MIP-1 $\alpha$ , MIP-5, MMP-1, MMP-2, MMP-7, MMP-9, Nectin-4, OX40/TNFRSF4, PD1, PD-L1, PD-L2, Pentraxin 3, Perforin, PIGF, P-Selectin, RAGE (soluble), RANKL/TNFSF11, RANTES, S100A12, TARC, Tie-2, TIGIT, TLR-1, TNF-RI, TNF-RII, TNF- $\alpha$ , TNF- $\beta$ , TPO, TRAIL, TSLP, VEGF-A, VEGF-D, VEGFR-1/Flt-1 and YKL-40. Nonspecific binding was less than 2.0%.

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

## Diluent Compatibility

Diluents 58 and 3 are provided with this assay. 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:** P-Selectin is included in Calibrator 29. The human P-Selectin Calibrator is a full-length recombinant protein expressed in a human cell line.

**Antibodies:** The U-PLEX Human P-Selectin 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.

