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## Ordering Information

MSD Customer Service  
Phone: 1-240-314-2795  
Fax: 1-301-990-2776  
Email: [CustomerService@mesoscale.com](mailto:CustomerService@mesoscale.com)

## Scientific Support

Phone: 1-240-314-2798  
Email: [ScientificSupport@mesoscale.com](mailto:ScientificSupport@mesoscale.com)

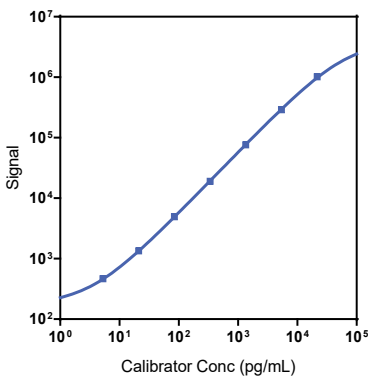
## Company Address

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

Product Options	Catalog Number	Description
Multiplex	K15067M	U-PLEX Biomarker Group 1 (human)
	K151AEM, K251AEM	U-PLEX Immuno-oncology Group 1 (human)
	K151ACM	U-PLEX Metabolic Group 1 (human)
Singleplex	K151WGK-1/-2/-4	U-PLEX Human IL-23 Assay with SECTOR™ plates
	K151WGK-21	U-PLEX Human IL-23 Assay with QuickPlex® APT plates
Antibody Set	B21WG-2/-3	U-PLEX Human IL-23 Antibody Set
Protocol	U-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">http://www.mesoscale.com</a>	

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 IL-23 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)
IL-23	1.4	0.99-2.0

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	5,250	4.7	11.5
Mid	731	5.5	22.1
Low	105	5.3	16.9

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 IL-23

## Tested Samples

Sample Type	Serum (N=8)	Plasma (N=8)
Median (pg/mL)	ND	NA
Range (pg/mL)	ND-2.1	NA
% Detected	13	0

Normal serum and plasma samples were diluted 2-fold prior to testing in the assay. ND = non-detectable (<LLOD); NA = not applicable due to 0% detected

## Dilution Linearity

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2	100	93-112	2	110	99-129
4	96	88-106	4	114	99-131
8	91	83-98	8	109	97-129

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 measured in undiluted samples. 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	93	75-101	99	73-111
Mid	96	78-105	98	72-108
Low	94	75-105	96	73-106

Normal serum and plasma were spiked with Calibrator at 3 levels. Percent recovery at each spike level was calculated by dividing the measured concentration by the expected concentration. Expected concentration was calculated by adding the nominal spike and endogenous values. Samples may require additional dilution with assay diluent to reduce matrix effects.

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

## Specificity

The IL-23 Antibody Set was tested against all of the analytes in Biomarker Group 1, Metabolic Group 1, and Immuno-Oncology Group 1. Any non-specific binding 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 57 and 3 are provided when this product is ordered in singleplex and when multiplexed with other Biomarker Group 1 assays. Other diluents may be provided when combined with assays from other U-PLEX Groups. See the appropriate Product Insert for details.

## Assay Components

**Calibrator:** IL-23 is included in Calibrator 6. The IL-23 Calibrator is a full length recombinant protein expressed in insect cells.

**Antibodies:** The U-PLEX Human IL-23 Assay uses a mouse monoclonal antibody for capture and a mouse monoclonal antibody for detection.

**Assay generation:** B

**Note:** This datasheet contains representative assay performance data. In custom multiplex formats, the assay may perform differently from the representative data shown.

