

# Mouse IP-10



### www.mesoscale.com®

### **Ordering Information**

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#### Scientific Support

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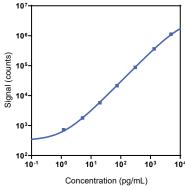
### **Company Address**

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

Product Options	Catalog Number	Description	
Multiplex	K15069M, K25069M K152ACM, K252ACM	U-PLEX Biomarker Group 1 (mouse) U-PLEX Metabolic Group 1 (mouse)	
Singleplex	K152UFK-1/-2/-4	U-PLEX Mouse IP-10 Assay with SECTOR™ plates	
	K152UFK-21/-22/-24	U-PLEX Mouse IP-10 Assay with QuickPlex® plates	
	K252UFK-2/-4	U-PLEX Mouse IP-10 Assay with 384-well plates	
Antibody Set	B22UF-2/-3	U-PLEX Mouse IP-10 Antibody Set	
Protocol	U-PLEX Product Inserts are available at <a href="https://www.mesoscale.com">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 Mouse IP-10 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 in 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)	
IP-10	0.50	0.30-0.51	

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 2.5X the standard deviations above the background (zero Calibrator).

### Precision

Control	Average Conc. (pg/mL)	Average Intra-run Conc. (%CV)	Inter-run Conc. (%CV)
High	917	2.6	11.5
Mid	125	3.8	13.4
Low	19	3.9	17.5

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 Mouse IP-10

### **Tested Samples**

Sample Type	Serum (N=8)	Plasma (N=8)	Stimulated Sample (N=8)	
Median (pg/mL)	26	76	1,860	
Range (pg/mL)	20-32	55-101	ND-6,270	
% Detected	100	100	88	

Normal serum and plasma samples were diluted 2-fold prior to the assay. ND = non-detectable (<LLOD)

### **Dilution Linearity**

Serum			EDTA Plasma		
Fold Dilution		% Recovery Range	Fold Dilution		% Recovery Range
2	124	118-131	2	110	108-114
4	140	135-149	4	115	110-117
8	140	128-147	8	120	113-128

Normal mouse serum and EDTA plasma were spiked with Calibrator and tested at different dilutions. Undiluted samples were tested to determine the expected concentration of the analyte. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

### Spike Recovery

	Ser	um	EDTA I	Plasma
Spike Level	Average % Recovery		Average % Recovery	% Recovery Range
High	62	54-68	78	72-82
Mid	68	61-77	83	75-88
Low	75	71-77	86	82-90

Normal serum and plasma were spiked with Calibrator at 3 levels. Undiluted samples were tested to determine the expected concentration of the analyte. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

### Specificity

To assess specificity, the IP-10 Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (6CKine/Ccl21, BAFF, BCA-1/BLC, CD40, Eotaxin, EPO, GM-CSF, IFN- $\alpha$ , IFN- $\beta$ , IFN- $\gamma$ , IL-1 $\beta$ , IL-2, IL-4, IL-5, IL-6, IL-9, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A/F, IL-17C, IL-17E/IL-25, IL-17F, IL-21, IL-22, IL-23, IL-27p28/IL-30, IL-31, IL-33, IP-10, KC/GR0, MCP-1, MCP-5/Ccl12, MDC, MIP-1 $\alpha$ , MIP-1 $\beta$ , MIP-2, MIP-3 $\alpha$ , MMP-9 (total), NGAL/LCN2, RANTES, SDF-1 $\alpha$ , TARC, TNF-RI, TNF- $\alpha$ , VEGF-A). Nonspecific binding was less than 0.5%.

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

The assay may benefit from additional dilution of the sample during testing.

### **Diluent Compatibility**

The data included in this document have been collected with Assay Diluent 41 and Antibody Diluent 45. 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: IP-10 is included in Calibrator 12. The IP-10 Calibrator is a full-length recombinant protein expressed in E. coli.

Antibodies: The U-PLEX Mouse IP-10 Assay uses a goat polyclonal 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.

