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Ordering Information

MSD Customer Service
 Phone: 1-301-947-2085
 Fax: 1-301-990-2776
 Email: CustomerService@mesoscale.com

Scientific Support

Phone: 1-301-947-2025
 Email: ScientificSupport@mesoscale.com

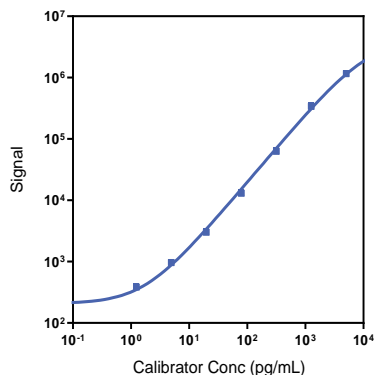
Company Address

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

Product Options	Catalog Number	Description
Multiplex	K15068M, K25068M	U-PLEX Biomarker Group 1 (NHP)
Singleplex	K156XIK-1/-2/-4	U-PLEX NHP MCP-3 Assay with SECTOR™ plates
	K156XIK-21/-22/-24	U-PLEX NHP MCP-3 Assay with QuickPlex [®] plates
	K256XIK-2/-4	U-PLEX NHP MCP-3 Assay with 384-well plates
Antibody Set	B21XI-2/-3	U-PLEX Human MCP-3 Antibody Set
Assay 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 NHP MCP-3 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 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)
MCP-3	0.79	0.79-0.84

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
MCP-3	High	693	3.3	10.8
	Mid	225	3.1	9.9
	Low	56	2.8	9.4

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 NHP MCP-3

Spike Recovery

	Spike Level	Serum (N=5)		Plasma (N=5)		Cell Culture Media (N=5)	
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	High	138	123-156	138	110-151	175	153-208
	Mid	121	103-139	121	95-130	153	137-161
	Low	94	86-102	91	76-97	149	131-166
Rhesus Monkey	High	121	42-149	119	111-126	175	153-208
	Mid	112	47-131	114	110-117	153	137-161
	Low	92	42-107	105	99-110	149	131-166

Normal serum, EDTA plasma, and cell culture media 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

Tested Samples

	Sample Type	Serum (N=11)	Plasma (N=11)	Cell Culture Media (N=10)
Cynomolgus Monkey	Median (pg/mL)	5.3	4.8	4.70
	Range (pg/mL)	ND-7.7	ND-11	ND-88
	% Detected	73	92	80
Rhesus Monkey	Median (pg/mL)	7.2	6.7	5.8
	Range (pg/mL)	ND-9.9	4.0-16	ND-34
	% Detected	82	100	90

Normal serum, EDTA plasma, and cell culture media samples were tested without dilution prior to the assay. ND = not detectable (<LLOD)

Dilution Linearity

	Fold Dilution	Serum (N=5)		Plasma (N=5)		Cell Culture Media (N=5)	
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	101	95-107	2	88	81-93	100-100
	4	88	84-95	4	78	73-83	56-74
	8	87	80-94	8	77	73-84	54-61
Rhesus Monkey	2	86	82-92	2	95	90-101	100-100
	4	74	68-86	4	83	77-92	56-74
	8	70	65-84	8	80	71-100	54-61

Normal serum, EDTA plasma, and cell culture media 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

MSD U-PLEX NHP MCP-3

Specificity

To assess specificity, the MCP-3 Antibody Set was tested individually against a larger panel of recombinant human analytes for nonspecific binding (CTACK, Eotaxin, Eotaxin-2, Eotaxin-3, ENA-78, FLT3L, Fractalkine, G-CSF, GM-CSF, GRO- α , I-309, IFN- α 2a, IFN- γ , IL-1 α , IL-1 β , IL-1RA, IL-2, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A, IL-17AF, IL-17B, IL-17C, IL-17D, IL-17F, IL-18, IL-22, IL-23, IP-10, I-TAC, MCP-1, MCP-2, MCP-3, MCP-4, M-CSF, MDC, MIF, MIP-1 α , MIP-1 β , MIP-3 α , MIP-3 β , MIP-5, SDF-1 α , TARC, TNF- α , TNF- β , TPO, TRAIL, VEGF-A, and YKL-40). Nonspecific binding was less than 0.5%.

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

Diluent Compatibility

Diluents 57 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: MCP-3 is included in Calibrator 10. The full-length recombinant protein is expressed in *E. coli*.

Antibodies: The U-PLEX NHP MCP-3 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 than the representative data shown.

