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Ordering Information

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

Scientific Support

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

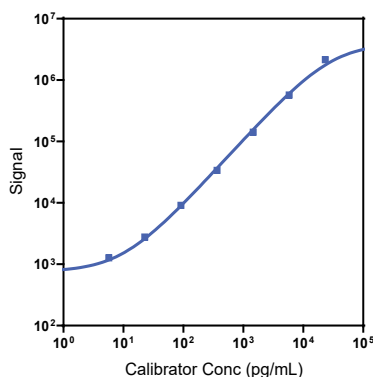
Company Address

Meso Scale Discovery
A division of
Meso Scale Diagnostics, LLC.
1601 Research Boulevard
Rockville, MD 20850-3173 USA

Product Options	Catalog Number	Description
Multiplex	K15068M, K25068M	U-PLEX Biomarker Group 1 (NHP)
Singleplex	K156UTK-1/-2/-4	U-PLEX NHP IL-17A Assay with SECTOR™ plates
	K156UTK-21/-22/-24	U-PLEX NHP IL-17A Assay with QuickPlex Ultra™ plates
	K256UTK-2/-4	U-PLEX NHP IL-17A Assay with 384-well plates
Antibody Set	B21UT-2/-3	U-PLEX Human IL-17A Antibody Set
Assay Protocol	U-PLEX Product Inserts are available at www.mesoscale.com	

The MESO SCALE DISCOVERY® 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 IL-17A 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)
IL-17A	2.3	1.5-5.6

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
IL-17A	High	12,600	9.5	9.6
	Mid	1,300	6.8	10.3
	Low	131	7.2	10.6

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.

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	71	65-78	77	62-87	115	109-124
	Mid	80	72-89	79	72-90	107	95-114
	Low	83	78-88	77	69-85	113	103-124
Rhesus Monkey	High	77	61-99	80	73-88	—	—
	Mid	84	60-100	76	65-82	—	—
	Low	95	72-104	78	69-86	—	—

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. dash (—) = not available

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

Tested Samples

	Sample Type	Serum (N=10)	Plasma (N=10)	Stimulated PBMC Sample (N=5)
Cynomolgus Monkey	Median (pg/mL)	NA	NA	788
	Range (pg/mL)	NA	NA	ND-6,410
	% Detected	0	0	63
Rhesus Monkey	Median (pg/mL)	NA	ND	958
	Range (pg/mL)	NA	ND	ND-18,400
	% Detected	0	10	63

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

Dilution Linearity

	Serum (N=5)			Plasma (N=5)			Cell Culture Media (N=5)		
	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	114	96-131	2	99	86-110	2	107	94-115
	4	134	114-151	4	125	110-145	4	105	97-113
	8	142	117-158	8	129	116-139	8	112	97-123
Rhesus Monkey	2	124	106-169	2	105	97-118	—	—	—
	4	132	109-179	4	109	96-122	—	—	—
	8	139	110-198	8	117	101-134	—	—	—

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. dash (—) = not available

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

MSD U-PLEX NHP IL-17A

Specificity

To assess specificity, the IL-17A 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-17A/F, 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%.

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

IL-17A measurement may be impacted by IL-17A/F. We do not recommend multiplexing these two assays on the same plate.

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: IL-17A is included in Calibrator 1. The full-length recombinant protein is expressed in *E. coli*.

Antibodies: The U-PLEX NHP IL-17A 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.

