



www.mesoscale.com

Ordering Information

MSD Customer Service
Phone: 1-301-947-2023 NOV
: 1-301-990-2776
Email: CustomerService@
mesoscale.com

Scientific Support

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

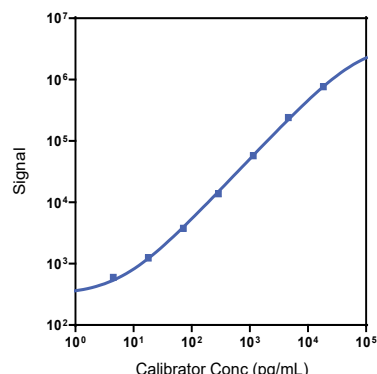
Company Address

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	K156VYK-1/-2/-4	U-PLEX NHP IL-17A/F Assay with SECTOR™ plates
	K156VYK-21/-22/-24	U-PLEX NHP IL-17A/F Assay with QuickPlex® plates
	K256VYK-2/-4	U-PLEX NHP IL-17A/F Assay with 384-well plates
Antibody Set	B21VY-2-2/-3	U-PLEX Human IL-17A/F 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 IL-17A/F 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/F	1.8	1.4–7.9

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/F	High	7,630	2.5	13.6
	Mid	1,390	4.3	14.3
	Low	253	4.9	14.9

For Research Use Only.
Not for use in diagnostic
procedures.

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.

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	84	73-91	91	89-95	116	109-127
	Mid	75	65-83	78	72-82	118	112-122
	Low	67	57-72	71	69-74	116	106-125
Rhesus Monkey	High	91	52-109	83	63-95	116	109-127
	Mid	88	51-102	90	67-104	118	112-122
	Low	87	50-106	87	69-99	116	106-125

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)	ND	ND	324
	Range (pg/mL)	ND-4.0	ND-46	11-9,020
	% Detected	18	36	100
Rhesus Monkey	Median (pg/mL)	ND	ND	12.5
	Range (pg/mL)	ND-18	ND-132	ND-2,890
	% Detected	36	27	60

Normal serum and plasma 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=4)		
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	109	100-119	114	101-131	2	108	105-111
	4	109	97-130	119	101-141	4	103	99-107
	8	103	88-136	121	94-150	8	100	97-103
Rhesus Monkey	2	109	97-118	101	96-110	2	108	105-111
	4	99	82-109	92	83-103	4	103	99-107
	8	99	84-111	97	87-107	8	100	97-103

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 IL-17A/F

Specificity

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

We do not recommend multiplexing IL-17A/F with IL-17A. Both assays capture the IL-17A protein. If Calibrator 1 and Calibrator 6 are blended, then sample quantitation of IL-17A and IL-17A/F will be impacted.

% 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: IL-17A/F is included in Calibrator 6. The IL-17A/F Calibrator is a hetero-dimer consisting of recombinant IL-17A (24—155) and IL-17F (31—163) proteins expressed in Chinese hamster cells.

Antibodies: The U-PLEX NHP IL-17A/F 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 than the representative data shown.

