

www.mesoscale.com®

Ordering Information

MSD Customer Service
 Phone: 1-301-947-2025
 : 1-301-990-2776
 Email: CustomerService@mesoscale.com

Scientific Support

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

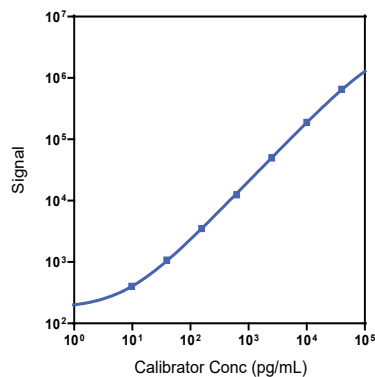
Company Address

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)
	K156X0K-1/-2/-4	U-PLEX NHP IL-17D Assay with SECTOR™ plates
	K156X0K-21/-22/-24	U-PLEX NHP IL-17D Assay with QuickPlex® plates
Singleplex	K256X0K-2/-4	U-PLEX NHP IL-17D Assay with 384-well plates
Antibody Set	B21X0-2/-3	U-PLEX Human IL-17D 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-17D 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-17D	4.8	4.1-4.9

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-17D	High	10,100	4.4	16.7
	Mid	2,600	5.5	12.8
	Low	586	5.1	13.1

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	124	111-137	100	89-116	112	101-123
	Mid	118	100-136	91	82-108	113	103-121
	Low	104	89-122	85	76-99	105	94-122
Rhesus Monkey	High	143	131-169	151	133-170	112	101-123
	Mid	137	120-163	137	129-156	113	103-121
	Low	128	111-143	124	111-139	105	94-122

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)	14.0	10	ND
	Range (pg/mL)	ND-32	3.6-17	ND-13.5
	% Detected	91	73	30
Rhesus Monkey	Median (pg/mL)	13.4	14.4	7.1
	Range (pg/mL)	ND-36	8.7-52	ND-12
	% Detected	82	100	90

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=5)		
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	
Cynomolgus Monkey	2	106	97-124	97	90-105	111	96-120	
	4	102	92-118	90	78-102	110	94-120	
	8	105	89-125	86	68-97	79	72-84	
Rhesus Monkey	2	96	86-103	101	96-109	111	96-120	
	4	93	85-101	101	92-112	110	94-120	
	8	87	80-97	93	86-107	79	72-84	

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-17D

Specificity

To assess specificity, the IL-17D 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: IL-17D is included in Calibrator 9. The full-length recombinant protein is expressed in *E. coli*.

Antibodies: The U-PLEX NHP IL-17D 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 than the representative data shown.

