

U-PLEX[®] NHP FLT3L Assay



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Ordering Information

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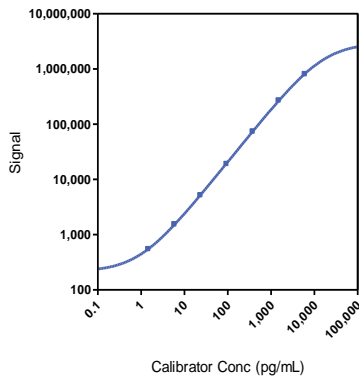
Company Address

MESO SCALE DISCOVERY[®]
A division of
Meso Scale Diagnostics, LLC.
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Product Options	Available as part of U-PLEX Biomarker Group 1 (NHP) multiplex combination: K15068L-1/-2/-4 Individual assay: K156XFK-1/-2/-4; Antibody Set: B26XF-2/B26XF-3 For more ordering options, please visit www.mesoscale.com
Instrument Compatibility	SECTOR [®] Imager 2400, SECTOR Imager 6000, MESO [®] SECTOR S 600, MESO QuickPlex [®] SQ 120
Sample Type	NHP (Cynomolgus monkey and Rhesus monkey) serum, EDTA plasma, and cell culture supernatants
Assay Protocol	Refer to the U-PLEX Biomarker Group 1 (NHP) product insert available at www.mesoscale.com/U-PLEX-documents

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 FLT3L Assay tested on U-PLEX plates run as a multiplex. The data were generated during the development of the assay and do not represent the product specifications. Under your experimental conditions and with your specific multiplex, the assay may perform differently than the representative data shown. U-PLEX assays are available in multiplex format with other compatible assays. The same assay can also be used to detect a single analyte on MSD GOLD[™] Small Spot Streptavidin plates.

Representative Calibration Curve and Sensitivity



Assay	Median LLOD (pg/mL)	LLOD Range (pg/mL)
FLT3L	0.49	0.47-0.50

The calibration curves used to calculate analyte concentrations were established by fitting the signals from the Calibrators using a 4-parameter logistic (or sigmoidal dose-response) model with a $1/Y^2$ weighting. Analyte concentrations were determined from the electrochemiluminescence signals by back-fitting to the calibration curve. The lower limit of detection (LLOD) is a calculated concentration corresponding to the signal 2.5 standard deviations above the background (zero Calibrator).

Precision

	Control	Average Conc. (pg/mL)	Average Intra-run Conc. %CV	Inter-run Conc. %CV
FLT3L	High	691	3.7	5.9
	Mid	139	4.0	5.8
	Low	24	4.8	6.3

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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.

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Spike Recovery

	Spike Level	Serum		Plasma		Cell Culture Media	
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	High	73	59-79	67	61-72	97	91-102
	Mid	72	61-78	65	61-70	91	80-101
	Low	69	58-73	65	59-71	86	75-94
Rhesus Monkey	High	74	67-82	73	71-78	97	91-102
	Mid	74	69-77	75	72-82	91	80-101
	Low	74	68-80	76	72-81	86	75-94

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 require additional dilution with assay diluent to reduce matrix effects.

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

Tested Samples

	Sample Type	Serum	Plasma	Stimulated PBMC Sample
Cynomolgus Monkey	Median (pg/mL)	15	8.4	1.0
	Range (pg/mL)	4.3-39	2.9-18	ND-3.9
	% Detected	100	100	60
Rhesus Monkey	Median (pg/mL)	11	18	3.0
	Range (pg/mL)	ND-22	3.0-23	1.8-22
	% Detected	91	100	100

ND = non-detectable (< LLOD)

Normal serum and EDTA plasma samples were tested without dilution prior to the assay.

Dilution Linearity

	Serum			Plasma			Cell Culture Media		
	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	112	102-127	2	113	108-123	2	106	99-112
	4	114	99-142	4	111	104-121	4	109	103-111
	8	119	97-158	8	115	107-134	8	76	71-81
Rhesus Monkey	2	105	93-117	2	104	102-108	2	106	99-112
	4	108	95-118	4	100	95-105	4	109	103-111
	8	103	90-119	8	99	90-105	8	76	71-81

Normal serum, EDTA plasma, and cell culture media were spiked with recombinant Calibrator and tested at different dilutions. Undiluted samples were tested to determine the expected concentration of the analyte. Samples may require additional dilution with assay diluent to reduce matrix effects.

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

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Specificity

To assess specificity, the FLT3L Antibody Set was tested individually against a larger panel of recombinant NHP 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-2R α , 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, TGF- β 1, TGF- β 2, TGF- β 3, TNF- α , TNF- β , TPO, TRAIL, VEGF-A, YKL-40). Nonspecific binding was less than 0.5%.

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

Diluent Compatibility

The data included in this document has been collected using Diluents 3 and 43. 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: NHP FLT3L is included in Calibrator 9 blend. The full-length recombinant protein expressed in Sf21 Insect Cells is used.

Antibodies: The U-PLEX NHP FLT3L Assay uses mouse monoclonal antibody for capture and 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.

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