U-PLEX®

NHP Eotaxin

Product Options	Catalog Number	Description
Multiplex	K15068M, K25068M	U-PLEX Biomarker Group 1 (NHP)
Singleplex	K156UDK-1/-2/-4	U-PLEX NHP Eotaxin Assay with SECTOR™ plates
	K156UDK-21/-22/-24	U-PLEX NHP Eotaxin Assay with QuickPlex Ultra™ plates
	K256UDK-2/-4	U-PLEX NHP Eotaxin Assay with 384-well plates
Antibody Set	B26UD-2	U-PLEX NHP Eotaxin Antibody Set (1 plate size)
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 Eotaxin 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
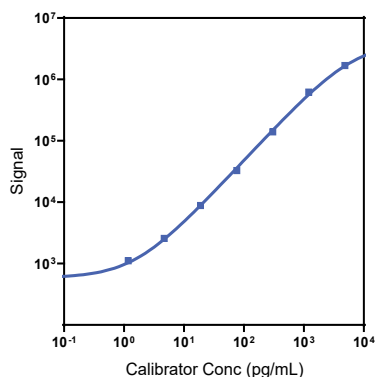
Assay	Median LLOD (pg/mL)	LLOD Range (pg/mL)
Eotaxin	0.30	0.22-0.63

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
Eotaxin	High	474	6.2	17.3
	Mid	47	8.1	18.8
	Low	4.4	11.2	22.2

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

		Serum (N=5)		Plasma (N=5)		Cell Culture Media (N=5)	
	Spike Level	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	High	110	90-140	78	71-82	110	104-114
	Mid	129	90-191	82	69-89	114	111-119
	Low	110	61-277	85	69-93	115	112-121
Rhesus Monkey	High	88	72-96	94	86-114	—	—
	Mid	101	89-111	100	90-108	—	—
	Low	102	99-106	96	85-108	—	—

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

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

Tested Samples

	Sample Type	Serum (N=8)	Plasma (N=8)	Cell Culture Media (N=8)
Cynomolgus Monkey	Median (pg/mL)	411	140	NA
	Range (pg/mL)	280-11,000	119-221	NA
	% Detected	100	100	0
Rhesus Monkey	Median (pg/mL)	597	251	0
	Range (pg/mL)	169-1,450	79-516	ND-1.5
	% Detected	100	100	25

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

Dilution Linearity

		Serum (N=4)		Plasma (N=4)		Cell Culture Media (N=4)	
	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	95	86-108	2	104	90-110	2	116	107-120
	4	108	98-116	4	123	115-136	4	127	120-143
	8	111	105-117	8	130	109-150	8	138	114-171
Rhesus Monkey	2	113	96-139	2	104	101-108	2	—	—
	4	124	102-162	4	101	97-109	4	—	—
	8	129	104-183	8	99	92-113	8	—	—

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

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

Specificity

To assess specificity, the Eotaxin 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-α2a, IFN-γ, IL‑1α, IL-1β, 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-1α, MIP‑1β, MIP-3α, MIP-3β, MIP-5, SDF-1α, TARC, TNF-α, TNF-β, TPO, TRAIL, VEGF-A, and YKL-40). Nonspecific binding was less than 0.5%.

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

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: Eotaxin is included in Calibrator 2. The full-length recombinant protein is expressed in *E. coli*.
Antibodies: The U-PLEX NHP Eotaxin 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.

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