U-PLEX®

NHP Eotaxin-2

Product Options	Catalog Number	Description
Multiplex	K15068M, K25068M	U-PLEX Biomarker Group 1 (NHP)
Singleplex	K156XQK-1/-2/-4	U-PLEX NHP Eotaxin-2 Assay with SECTOR™ plates
	K156XQK-21/-22/-24	U-PLEX NHP Eotaxin-2 Assay with QuickPlex® plates
	K256XQK-2/-4	U-PLEX NHP Eotaxin-2 Assay with 384-well plates
Antibody Set	B21XQ-2/-3	U-PLEX Human Eotaxin-2 Antibody Set
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 Eotaxin-2 Assay tested on U-PLEX 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-2	3.1	2.4-3.9

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
Eotaxin-2	High	797	5.1	8.9
	Mid	288	3.7	0.1
	Low	100	3.8	9.4

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

		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	82	59-88	94	84-110	101	93-108
	Mid	99	89-112	99	92-109	104	98-109
	Low	105	103-111	92	85-100	101	93-110
Rhesus Monkey	High	99	76-120	86	64-108	101	93-108
	Mid	114	95-139	90	66-119	104	98-109
	Low	97	73-112	86	70-113	101	93-110

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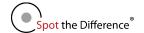
% Recovery = (measured concentration / expected concentration) x 100

Tested Samples

	Sample Type	Serum (N=11)	Plasma (N=11)	Cell Culture Media (N=10)
Cynomolgus Monkey	Median (pg/mL)	653	165	16.2
	Range (pg/mL)	321-1,000	37-598	5.5-125
	% Detected	100	100	100
Rhesus Monkey	Median (pg/mL)	67	100	21
	Range (pg/mL)	7.7-1,010	53-215	12-69
	% Detected	100	100	100

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

Dilution Linearity

		Serum (N=5)		Plasma (N=3)		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	106	89-124	2	105	99-114	2	89	86-94
	4	104	75-132	4	105	99-114	4	79	74-85
	8	129	74-231	8	107	104-109	8	78	74-82
Rhesus Monkey	2	101	93-114	2	106	89-124	2	89	86-94
	4	92	81-100	4	104	75-132	4	79	74-85
	8	93	80-112	8	129	74-231	8	78	74-82

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

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Specificity

To assess specificity, the Eotaxin-2 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%.

MIP-3α detection antibody interacts with Eotaxin-2 capture antibody resulting in elevated background.

% 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: Eotaxin-2 is included in Calibrator 10. The full-length recombinant protein is expressed in *E. coli.*
Antibodies: The U-PLEX NHP Eotaxin-2 Assay uses a mouse monoclonal antibody for capture and a goat polyclonal 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.

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