

## CERTIFICATE OF ANALYSIS

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**Product Description:** V-PLEX® and V-PLEX Plus Chemokine Panel 1 (NHP) Kit

**Kit Catalog Numbers:** K15055-Series

**Kit Lot Number:** K0080919

**Expiration Date:** 31 Jul 2019

**Acceptance Data/ Percent Recovery Specifications:**

Spot	Name	Calibrator		Chemokine Panel 1 (human) Control 1		Chemokine Panel 1 (human) Control 2		Chemokine Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
2	NHP MIP-1 $\beta$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	NHP Eotaxin-3	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	NHP TARC	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	NHP IP-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	NHP MIP-1 $\alpha$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	NHP IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	NHP MCP-1	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	NHP MDC	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	NHP MCP-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
2	NHP MIP-1 $\beta$	2.27	80% - 120%	< 20%	750	80% - 120%	< 20%
3	NHP Eotaxin-3	10.2	80% - 120%	< 20%	3750	80% - 120%	< 20%
4	NHP TARC	3.32	80% - 120%	< 20%	1120	80% - 120%	< 20%
5	NHP IP-10	1.37	80% - 120%	< 20%	500	80% - 120%	< 20%
6	NHP MIP-1 $\alpha$	13.8	80% - 120%	< 20%	743	80% - 120%	< 20%
7	NHP IL-8	713	75% - 125%	< 20%	43400	75% - 125%	< 20%
8	NHP MCP-1	1.09	80% - 120%	< 20%	375	80% - 120%	< 20%
9	NHP MDC	88.3	80% - 120%	< 20%	7500	80% - 120% *	< 20%
10	NHP MCP-4	5.13	80% - 120%	< 20%	469	80% - 120%	< 20%

\* See Additional Comments.

**Acceptance Data/ Non Specific Binding Specifications:**

Spot	Name	NSB Spec
2	NHP MIP-1 $\beta$	< 1.0%
3	NHP Eotaxin-3	< 1.0%
4	NHP TARC	< 1.0%
5	NHP IP-10	< 1.0%
6	NHP MIP-1 $\alpha$	< 1.0%
7	NHP IL-8	< 1.0%
8	NHP MCP-1	< 1.0%
9	NHP MDC	< 1.0%
10	NHP MCP-4	< 1.0%

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### Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
2	NHP MIP-1 $\beta$	Calibrator	1050	pg/mL
		Chemokine Panel 1 (human) Control 1	980	pg/mL
		Chemokine Panel 1 (human) Control 2	170	pg/mL
		Chemokine Panel 1 (human) Control 3	30	pg/mL
3	NHP Eotaxin-3	Calibrator	5410	pg/mL
		Chemokine Panel 1 (human) Control 1	4050	pg/mL
		Chemokine Panel 1 (human) Control 2	580	pg/mL
		Chemokine Panel 1 (human) Control 3	90	pg/mL
4	NHP TARC	Calibrator	1630	pg/mL
		Chemokine Panel 1 (human) Control 1	1460	pg/mL
		Chemokine Panel 1 (human) Control 2	220	pg/mL
		Chemokine Panel 1 (human) Control 3	40	pg/mL
5	NHP IP-10	Calibrator	2420	pg/mL
		Chemokine Panel 1 (human) Control 1	590	pg/mL
		Chemokine Panel 1 (human) Control 2	90	pg/mL
		Chemokine Panel 1 (human) Control 3	16	pg/mL
6	NHP MIP-1 $\alpha$	Calibrator	1030	pg/mL
		Chemokine Panel 1 (human) Control 1	910	pg/mL
		Chemokine Panel 1 (human) Control 2	410	pg/mL
		Chemokine Panel 1 (human) Control 3	160	pg/mL
7	NHP IL-8	Calibrator	86200	pg/mL
		Chemokine Panel 1 (human) Control 1	66500	pg/mL
		Chemokine Panel 1 (human) Control 2	22500	pg/mL
		Chemokine Panel 1 (human) Control 3	8800	pg/mL
8	NHP MCP-1	Calibrator	686	pg/mL
		Chemokine Panel 1 (human) Control 1	610	pg/mL
		Chemokine Panel 1 (human) Control 2	160	pg/mL
		Chemokine Panel 1 (human) Control 3	16	pg/mL
9	NHP MDC	Calibrator	12200	pg/mL
		Chemokine Panel 1 (human) Control 1	11600	pg/mL
		Chemokine Panel 1 (human) Control 2	3300	pg/mL
		Chemokine Panel 1 (human) Control 3	1010	pg/mL
10	NHP MCP-4	Calibrator	787	pg/mL
		Chemokine Panel 1 (human) Control 1	710	pg/mL
		Chemokine Panel 1 (human) Control 2	270	pg/mL
		Chemokine Panel 1 (human) Control 3	82	pg/mL

Controls tested may not be the same lot as shipped.

The calibrator and controls for this assay contain a human recombinant cytokine calibrator sequence that is highly homologous to the non-human primate cytokine. This assay has been verified to cross-react with homologs of rhesus and cynomolgus monkeys. See Product Insert for experimental data.

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### Standard Curve Data:

NHP MIP-1 $\beta$ - Spot 2			NHP Eotaxin-3 - Spot 3			NHP TARC - Spot 4		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
1050	1,530,000	3.4	5410	118,000	3.7	1630	876,000	3.8
263	404,000	3.5	1350	34,600	3.9	408	269,000	2.7
65.6	77,300	4.0	338	9,300	5.2	102	67,400	2.3
16.4	12,800	3.7	84.5	2,370	5.4	25.5	17,600	3.7
4.10	2,410	5.1	21.1	704	6.0	6.37	4,860	3.6
1.03	610	4.3	5.28	255	6.6	1.59	1,740	5.2
0.256	228	8.9	1.32	135	17.0	0.398	857	5.8
0.00	111	16.0	0.00	100	24.0	0.00	585	8.9

NHP IP-10 - Spot 5			NHP MIP-1 $\alpha$ - Spot 6			NHP IL-8 - Spot 7		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
2420	516,000	4.2	1030	658,000	2.5	86200	759,000	5.0
605	299,000	3.6	258	116,000	2.5	21600	119,000	9.3
151	92,500	3.8	64.4	13,100	2.3	5390	11,400	8.4
37.8	24,400	3.2	16.1	1,160	3.5	1350	1,500	9.0
9.45	6,320	3.3	4.02	238	6.1	337	469	7.4
2.36	1,700	4.3	1.01	151	10.0	84.2	249	11.0
0.591	489	4.5	0.251	138	12.0	21.0	206	11.0
0.00	93	24.0	0.00	132	13.0	0.00	176	9.5

NHP MCP-1 - Spot 8			NHP MDC - Spot 9			NHP MCP-4 - Spot 10		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
686	888,000	5.7	12200	2,040,000	2.7	787	965,000	3.0
172	232,000	4.9	3050	273,000	4.4	197	133,000	4.2
42.9	53,200	4.1	763	33,600	3.7	49.2	15,000	4.6
10.7	12,300	6.3	191	5,780	4.1	12.3	1,360	7.1
2.68	3,050	6.5	47.7	1,470	2.6	3.07	249	7.8
0.670	991	9.6	11.9	484	6.4	0.769	148	13.0
0.167	365	18.0	2.98	232	7.7	0.192	132	15.0
0.00	184	30.0	0.00	149	13.0	0.00	126	20.0

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### Components:

Description	Lot Number	Storage Temperature	Expiration Date
Chemokine Panel 1 (human) Plate	Z0046694	2-8°C	30 Apr 2020
Anti-hu MIP-1β Antibody	D0080991	2-8°C	31 Dec 2019
Anti-hu Eotaxin-3 Antibody	D0080899	2-8°C	31 Jul 2019
Anti-hu TARC Antibody	D0080993	2-8°C	31 Oct 2019
Anti-hu IP-10 Antibody	D0080901	2-8°C	31 Jul 2019
Anti-hu MIP-1α Antibody	D0080995	2-8°C	31 Oct 2019
Anti-hu IL-8 (HA) Antibody	D0080903	2-8°C	31 Jul 2019
Anti-hu MCP-1 Antibody	D0080904	2-8°C	31 Jul 2019
Anti-hu MDC Antibody	D0080905	2-8°C	31 Jul 2019
Anti-hu MCP-4 Antibody	D0080999	2-8°C	31 May 2020
Chemokine Panel 1 (human) Calibrator Blend	A0080131	2-8°C	31 Jul 2022
Diluent 43	M0430024	≤ -10°C	31 Jan 2020
Diluent 3	M0030078	≤ -10°C	31 Jan 2020
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A


Additional Components Included in V-PLEX Plus	
Plate Seals	Not Kit Specific
Wash Buffer (20X), 100mL	Not Kit Specific
Chemokine Panel 1 (human) Control 1	Not Kit Specific
Chemokine Panel 1 (human) Control 2	Not Kit Specific
Chemokine Panel 1 (human) Control 3	Not Kit Specific

### Additional Comments:

	Assay	Spot	Specification	Comment
1	NHP MDC	9	ULOQ Conc.	ULOQ recovery at 120.9% (Specifications 80-120%)

### Statement:

The above product is intended for Research Use Only. Not for use in Diagnostic Procedures.

	Name	Function	Signature	Date
<b>Review/Approval</b>	Dawn Stollar	Quality Assurance		10 MAY 2018