

## 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:** K0081010

**Expiration Date:** 31 Oct 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 $\beta$	1.02	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%

**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	1180	pg/mL
		Chemokine Panel 1 (human) Control 1	1000	pg/mL
		Chemokine Panel 1 (human) Control 2	176	pg/mL
		Chemokine Panel 1 (human) Control 3	25.8	pg/mL
3	NHP Eotaxin-3	Calibrator	5180	pg/mL
		Chemokine Panel 1 (human) Control 1	4450	pg/mL
		Chemokine Panel 1 (human) Control 2	661	pg/mL
		Chemokine Panel 1 (human) Control 3	100	pg/mL
4	NHP TARC	Calibrator	1700	pg/mL
		Chemokine Panel 1 (human) Control 1	1350	pg/mL
		Chemokine Panel 1 (human) Control 2	213	pg/mL
		Chemokine Panel 1 (human) Control 3	36	pg/mL
5	NHP IP-10	Calibrator	2090	pg/mL
		Chemokine Panel 1 (human) Control 1	601	pg/mL
		Chemokine Panel 1 (human) Control 2	92.1	pg/mL
		Chemokine Panel 1 (human) Control 3	15.5	pg/mL
6	NHP MIP-1 $\alpha$	Calibrator	1060	pg/mL
		Chemokine Panel 1 (human) Control 1	929	pg/mL
		Chemokine Panel 1 (human) Control 2	411	pg/mL
		Chemokine Panel 1 (human) Control 3	167	pg/mL
7	NHP IL-8	Calibrator	62200	pg/mL
		Chemokine Panel 1 (human) Control 1	66700	pg/mL
		Chemokine Panel 1 (human) Control 2	23000	pg/mL
		Chemokine Panel 1 (human) Control 3	9290	pg/mL
8	NHP MCP-1	Calibrator	540	pg/mL
		Chemokine Panel 1 (human) Control 1	478	pg/mL
		Chemokine Panel 1 (human) Control 2	73.3	pg/mL
		Chemokine Panel 1 (human) Control 3	12.8	pg/mL
9	NHP MDC	Calibrator	9980	pg/mL
		Chemokine Panel 1 (human) Control 1	9580	pg/mL
		Chemokine Panel 1 (human) Control 2	2840	pg/mL
		Chemokine Panel 1 (human) Control 3	948	pg/mL
10	NHP MCP-4	Calibrator	714	pg/mL
		Chemokine Panel 1 (human) Control 1	673	pg/mL
		Chemokine Panel 1 (human) Control 2	251	pg/mL
		Chemokine Panel 1 (human) Control 3	83.1	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		
Conc. pg/mL	ECL Signal	%CV
1180	1,240,000	5.4
295	348,000	3.9
73.8	66,500	4.5
18.4	10,700	6.6
4.61	2,000	6.5
1.15	490	10.0
0.288	200	11.0
0.00	117	28.0

NHP Eotaxin-3 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
5180	166,000	3.4
1300	45,300	2.3
324	11,600	3.2
80.9	2,840	3.9
20.2	848	4.7
5.06	274	11.0
1.26	137	17.0
0.00	117	39.0

NHP TARC - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1700	856,000	4.3
425	233,000	3.8
106	53,000	4.2
26.6	14,400	3.1
6.64	4,560	3.9
1.66	2,200	7.3
0.415	1,560	8.1
0.00	1,490	12.0

NHP IP-10 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
2090	829,000	2.7
523	315,000	1.8
131	90,700	2.5
32.7	24,200	3.0
8.16	6,380	3.1
2.04	1,650	3.9
0.510	502	11.0
0.00	128	34.0

NHP MIP-1 $\alpha$ - Spot 6		
Conc. pg/mL	ECL Signal	%CV
1060	1,100,000	2.4
265	205,000	1.7
66.3	24,500	3.4
16.6	2,040	3.9
4.14	320	6.4
1.04	160	10.0
0.259	151	24.0
0.00	215	31.0

NHP IL-8 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
62200	614,000	7.7
15600	82,600	13.0
3890	6,660	9.0
972	737	11.0
243	307	8.5
60.7	190	14.0
15.2	175	21.0
0.00	196	24.0

NHP MCP-1 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
540	857,000	4.3
135	224,000	3.2
33.8	52,500	3.9
8.44	12,400	3.9
2.11	3,230	3.1
0.527	930	4.4
0.132	381	15.0
0.00	207	30.0

NHP MDC - Spot 9		
Conc. pg/mL	ECL Signal	%CV
9980	2,340,000	3.5
2500	327,000	3.8
624	38,600	4.9
156	6,120	4.3
39.0	1,560	4.3
9.75	493	7.1
2.44	270	19.0
0.00	225	25.0

NHP MCP-4 - Spot 10		
Conc. pg/mL	ECL Signal	%CV
714	512,000	4.8
179	69,300	4.4
44.6	6,720	7.2
11.2	578	9.1
2.79	196	14.0
0.697	140	18.0
0.174	150	29.0
0.00	223	36.0

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### Components:

Description	Lot Number	Storage Temperature	Expiration Date
Chemokine Panel 1 (human) Plate	Z0046823	2-8°C	30 Sep 2020
Anti-hu MIP-1 $\beta$ Antibody	D0080991	2-8°C	31 Dec 2019
Anti-hu Eotaxin-3 Antibody	D0080992	2-8°C	31 Oct 2019
Anti-hu TARC Antibody	D0081090	2-8°C	31 Oct 2021
Anti-hu IP-10 Antibody	D0080994	2-8°C	31 Dec 2019
Anti-hu MIP-1 $\alpha$ Antibody	D0080995	2-8°C	31 Oct 2019
Anti-hu IL-8 (HA) Antibody	D0080996	2-8°C	31 Oct 2019
Anti-hu MCP-1 Antibody	D0080997	2-8°C	31 Oct 2019
Anti-hu MDC Antibody	D0080998	2-8°C	31 Oct 2019
Anti-hu MCP-4 Antibody	D0081068	2-8°C	31 Jul 2020
Chemokine Panel 1 (human) Calibrator Blend	A0080171	2-8°C	30 Jun 2023
Diluent 43	M0430026	$\leq -10^{\circ}\text{C}$	31 Aug 2020
Diluent 3	M0030082	$\leq -10^{\circ}\text{C}$	31 Oct 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 MCP-4	10	Calibrator CV	Signal Ratio = 45.4%

### Statement:

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

	Name	Function	Signature	Date
Review/Approval	Dawn Stollar	Quality Assurance		16 JUL 2018