

## CERTIFICATE OF ANALYSIS

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

**Kit Catalog Numbers:** K15047-Series

**Kit Lot Number:** K0081059

**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
1	hu Eotaxin	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	hu MIP-1β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	hu Eotaxin-3	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	hu TARC	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	hu IP-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	hu MIP-1α	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	hu IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	hu MCP-1	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	hu MDC	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	hu MCP-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	hu Eotaxin	12.3	80% - 120%	< 20%	1120	80% - 120%	< 20%
2	hu MIP-1β	1.02	80% - 120%	< 20%	750	80% - 120%	< 20%
3	hu Eotaxin-3	10.2	80% - 120%	< 20%	3750	80% - 120%	< 20%
4	hu TARC	3.32	80% - 120%	< 20%	1120	80% - 120%	< 20%
5	hu IP-10	1.37	80% - 120%	< 20%	500	80% - 120%	< 20%
6	hu MIP-1α	13.8	80% - 120%	< 20%	743	80% - 120%	< 20%
7	hu IL-8	713	75% - 125%	< 20%	43400	75% - 125%	< 20%
8	hu MCP-1	1.09	80% - 120%	< 20%	375	80% - 120%	< 20%
9	hu MDC	88.3	80% - 120%	< 20%	7500	80% - 120%	< 20%
10	hu MCP-4	5.13	80% - 120%	< 20%	469	80% - 120%	< 20%

### Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	hu Eotaxin	< 1.0%
2	hu MIP-1β	< 1.0%
3	hu Eotaxin-3	< 1.0%
4	hu TARC	< 1.0%
5	hu IP-10	< 1.0%
6	hu MIP-1α	< 1.0%
7	hu IL-8	< 1.0%
8	hu MCP-1	< 1.0%
9	hu MDC	< 1.0%
10	hu MCP-4	< 1.0%

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**Stock Concentration of Material Tested :**

Spot	Name	Item	Conc	Units
1	hu Eotaxin	Calibrator	1790	pg/mL
		Chemokine Panel 1 (human) Control 1	1620	pg/mL
		Chemokine Panel 1 (human) Control 2	592	pg/mL
		Chemokine Panel 1 (human) Control 3	189	pg/mL
2	hu 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	hu 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	hu 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	hu 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	hu 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	hu 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	hu 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	hu 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	hu 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.

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**Standard Curve Data:**

hu Eotaxin - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1790	875,000	2.3
448	135,000	3.3
112	15,900	7.6
28.0	1,440	9.8
6.99	261	7.2
1.75	140	12.0
0.437	123	14.0
0.00	119	21.0

hu MIP-1β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1180	1,270,000	3.0
295	286,000	4.9
73.8	42,900	6.7
18.4	5,270	7.0
4.61	929	4.4
1.15	288	7.4
0.288	169	9.9
0.00	123	15.0

hu Eotaxin-3 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
5180	230,000	1.7
1300	63,300	2.7
324	16,300	3.6
80.9	4,040	3.3
20.2	1,180	2.0
5.06	404	5.4
1.26	207	10.0
0.00	144	15.0

hu TARC - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1700	974,000	2.6
425	268,000	2.9
106	59,800	3.9
26.6	14,800	5.3
6.64	3,880	3.2
1.66	1,390	3.2
0.415	696	4.5
0.00	511	5.9

hu IP-10 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
2090	813,000	3.3
523	342,000	3.4
131	99,700	4.8
32.7	25,200	5.3
8.16	6,490	4.6
2.04	1,690	3.1
0.510	501	4.6
0.00	91	18.0

hu MIP-1α - Spot 6		
Conc. pg/mL	ECL Signal	%CV
1060	645,000	2.5
265	100,000	3.1
66.3	10,600	5.0
16.6	973	5.0
4.14	284	6.0
1.04	209	7.0
0.259	198	5.2
0.00	187	7.6

hu IL-8 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
62200	792,000	6.7
15600	127,000	10.0
3890	11,200	10.0
972	1,200	6.9
243	405	6.3
60.7	229	9.7
15.2	215	12.0
0.00	189	8.7

hu MCP-1 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
540	852,000	4.9
135	225,000	3.6
33.8	53,700	7.0
8.44	12,700	6.3
2.11	3,230	4.5
0.527	928	4.5
0.132	331	5.9
0.00	134	11.0

hu MDC - Spot 9		
Conc. pg/mL	ECL Signal	%CV
9980	2,360,000	3.5
2500	324,000	4.8
624	36,100	5.9
156	5,600	5.0
39.0	1,380	3.6
9.75	460	4.0
2.44	248	6.5
0.00	178	7.8

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hu MCP-4 - Spot 10		
Conc. pg/mL	ECL Signal	%CV
714	700,000	3.4
179	83,800	4.9
44.6	7,640	7.6
11.2	621	13.0
2.79	199	8.1
0.697	143	16.0
0.174	141	10.0
0.00	139	12.0

**Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Chemokine Panel 1 (human) Plate	Z0046880	2-8°C	31 Dec 2020
Anti-hu Eotaxin Antibody	D0080990	2-8°C	30 Apr 2020
Anti-hu MIP-1 $\beta$ Antibody	D0080991	2-8°C	31 Dec 2019
Anti-hu Eotaxin-3 Antibody	D0081122	2-8°C	31 Jan 2022
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	M0430027	$\leq$ -10°C	31 Dec 2020
Diluent 3	M0030084	$\leq$ -10°C	31 Jan 2021
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

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**Additional Comments:**

	Assay	Spot	Specification	Comment
1	hu MIP-1β	2	Historical Signal	Measured Avg Signal Ratio = 39.7%

**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	<i>Dawn Stollar</i>	20 SEP 2018