

CERTIFICATE OF ANALYSIS

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

Kit Catalog Numbers: K15049-series, K15052-series, K15053-series

Kit Lot Number: K0080801

Expiration Date: 31 Jul 2019

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (human) Control 1		Proinflammatory Panel 1 (human) Control 2		Proinflammatory Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	hu IFN- γ	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	hu IL-1 β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	hu IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	hu IL-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	hu IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	hu IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	hu IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	hu IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	hu IL-13	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	hu TNF- α	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	hu IFN- γ	7.47	80% - 120%	< 20%	938	80% - 120%	< 20%
2	hu IL-1 β	2.14	80% - 120%	< 20%	375	80% - 120%	< 20%
3	hu IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	hu IL-4	0.450	80% - 120%	< 20%	158	80% - 120%	< 20%
5	hu IL-6	1.58	80% - 120%	< 20%	488	80% - 120%	< 20%
6	hu IL-8	1.13	80% - 120%	< 20%	375	80% - 120%	< 20%
7	hu IL-10	0.680	80% - 120%	< 20%	233	80% - 120%	< 20%
8	hu IL-12p70	1.22	80% - 120%	< 20%	315	80% - 120%	< 20%
9	hu IL-13	4.21	80% - 120%	< 20%	353	80% - 120%	< 20%
10	hu TNF- α	0.690	80% - 120%	< 20%	248	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	hu IFN- γ	< 1.0%
2	hu IL-1 β	< 1.0%
3	hu IL-2	< 1.0%
4	hu IL-4	< 1.0%
5	hu IL-6	< 1.0%
6	hu IL-8	< 1.0%
7	hu IL-10	< 1.0%
8	hu IL-12p70	< 1.0%
9	hu IL-13	< 1.0%
10	hu TNF- α	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1400	pg/mL
		Proinflammatory Panel 1 (human) Control 1	682	pg/mL
		Proinflammatory Panel 1 (human) Control 2	183	pg/mL
		Proinflammatory Panel 1 (human) Control 3	52.3	pg/mL
2	hu IL-1 β	Calibrator	575	pg/mL
		Proinflammatory Panel 1 (human) Control 1	215	pg/mL
		Proinflammatory Panel 1 (human) Control 2	52	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11	pg/mL
3	hu IL-2	Calibrator	1530	pg/mL
		Proinflammatory Panel 1 (human) Control 1	431	pg/mL
		Proinflammatory Panel 1 (human) Control 2	42.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.83	pg/mL
4	hu IL-4	Calibrator	283	pg/mL
		Proinflammatory Panel 1 (human) Control 1	101	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.88	pg/mL
5	hu IL-6	Calibrator	765	pg/mL
		Proinflammatory Panel 1 (human) Control 1	275	pg/mL
		Proinflammatory Panel 1 (human) Control 2	50.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	9.03	pg/mL
6	hu IL-8	Calibrator	599	pg/mL
		Proinflammatory Panel 1 (human) Control 1	223	pg/mL
		Proinflammatory Panel 1 (human) Control 2	40.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.91	pg/mL
7	hu IL-10	Calibrator	374	pg/mL
		Proinflammatory Panel 1 (human) Control 1	133	pg/mL
		Proinflammatory Panel 1 (human) Control 2	27.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.61	pg/mL
8	hu IL-12p70	Calibrator	501	pg/mL
		Proinflammatory Panel 1 (human) Control 1	168	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.12	pg/mL
9	hu IL-13	Calibrator	496	pg/mL
		Proinflammatory Panel 1 (human) Control 1	150	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.3	pg/mL
10	hu TNF- α	Calibrator	368	pg/mL
		Proinflammatory Panel 1 (human) Control 1	89.6	pg/mL
		Proinflammatory Panel 1 (human) Control 2	18	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.72	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

hu IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	% CV
1400	390,000	1.3
350	107,000	2.5
87.5	27,300	2.9
21.9	6,870	2.5
5.47	1,920	2.5
1.37	726	5.7
0.342	431	6.1
0.00	323	6.5

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	% CV
575	1,670,000	2.0
144	440,000	1.8
35.9	110,000	2.0
8.98	26,500	2.6
2.25	7,400	3.3
0.562	2,480	3.4
0.140	1,360	10.0
0.00	856	6.6

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	% CV
1530	1,250,000	1.8
383	353,000	1.2
95.6	93,300	3.8
23.9	22,700	2.5
5.98	6,410	2.8
1.49	1,880	1.4
0.374	789	4.3
0.00	413	6.6

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	% CV
283	1,040,000	3.2
70.8	333,000	3.4
17.7	88,900	5.3
4.42	23,000	5.8
1.11	5,710	3.3
0.276	1,610	3.4
0.0691	546	6.5
0.00	190	12.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	% CV
765	1,460,000	3.5
191	337,000	3.4
47.8	70,500	2.0
12.0	15,300	2.9
2.99	3,820	1.9
0.747	1,100	2.3
0.187	403	6.1
0.00	170	9.7

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	% CV
599	707,000	2.8
150	179,000	1.8
37.4	43,500	2.9
9.36	10,400	3.5
2.34	3,060	2.9
0.585	980	4.9
0.146	558	11.0
0.00	374	13.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	% CV
374	769,000	1.6
93.5	228,000	1.7
23.4	59,500	1.6
5.84	14,700	2.2
1.46	4,150	3.1
0.365	1,350	7.9
0.0913	752	12.0
0.00	672	20.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	% CV
501	461,000	3.2
125	139,000	2.9
31.3	36,200	3.5
7.83	9,210	3.4
1.96	2,450	3.2
0.489	833	3.8
0.122	436	8.7
0.00	281	16.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	% CV
496	797,000	3.0
124	138,000	1.3
31.0	17,900	2.5
7.75	2,460	3.2
1.94	730	9.9
0.484	380	16.0
0.121	337	18.0
0.00	310	12.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	% CV
368	367,000	4.1
92.0	90,900	2.7
23.0	21,600	4.9
5.75	5,410	2.7
1.44	1,810	4.0
0.359	768	8.7
0.0898	563	10.0
0.00	483	9.3

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046484	2-8°C	30 Sep 2019
Anti-hu IFN- γ Antibody	D0080914	2-8°C	31 Jul 2019
Anti-hu IL-1 β Antibody	D0080915	2-8°C	31 Jul 2019
Anti-hu IL-2 Antibody	D0080916	2-8°C	31 Aug 2019
Anti-hu IL-4 Antibody	D0080917	2-8°C	31 Jul 2019
Anti-hu IL-6 Antibody	D0080918	2-8°C	31 Jul 2019
Anti-hu IL-8 Antibody	D0080884	2-8°C	31 Jul 2019
Anti-hu IL-10 Antibody	D0080920	2-8°C	31 Jul 2019
Anti-hu IL-12p70 Antibody	D0080921	2-8°C	31 Jul 2019
Anti-hu IL-13 Antibody	D0080922	2-8°C	30 Sep 2019
Anti-hu TNF- α Antibody	D0080923	2-8°C	31 Jul 2019
Proinflammatory Panel 1 (human) Calibrator Blend	A0080127	2-8°C	30 Apr 2022
Diluent 2	M0020095	$\leq$ -10°C	30 Sep 2019
Diluent 3	M0030076	$\leq$ -10°C	30 Sep 2019
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
Proinflammatory Panel 1 (human) Control 1	Not Kit Specific
Proinflammatory Panel 1 (human) Control 2	Not Kit Specific
Proinflammatory Panel 1 (human) Control 3	Not Kit Specific

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		19 SEP 2017