

CERTIFICATE OF ANALYSIS

Page 1 of 5

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: K0080847

Expiration Date: 31 Jul 2019

Acceptance Data/ Percent Recovery Specifications:

		Calibrator		Proinflammatory Panel 1 (human) Control 1		Proinflammatory Panel 1 (human) Control 2		Proinflammatory Panel 1 (human) Control 3	
Spot	Name	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%

		LLOQ			ULOQ		
Spot	Name	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%

CERTIFICATE OF ANALYSIS

Page 2 of 5

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1360	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	561	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	1430	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	244	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	697	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	576	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	359	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	482	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	478	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	364	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.

CERTIFICATE OF ANALYSIS

Page 3 of 5

Standard Curve Data:

hu IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1360	233,000	2.2
340	62,200	2.4
85.0	16,100	1.9
21.3	4,190	1.8
5.31	1,350	4.2
1.33	635	4.3
0.332	442	4.1
0.00	390	3.7

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
561	1,320,000	5.5
140	373,000	2.8
35.1	97,400	2.2
8.77	25,400	3.2
2.19	7,490	2.6
0.548	2,970	2.6
0.137	1,840	3.4
0.00	1,470	4.2

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1430	1,090,000	3.6
358	323,000	1.6
89.4	87,700	2.6
22.3	22,400	2.6
5.59	6,220	3.4
1.40	1,880	2.6
0.349	872	3.8
0.00	527	6.7

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
244	834,000	2.8
61.0	266,000	2.8
15.3	71,300	2.0
3.81	18,900	1.8
0.953	4,850	2.1
0.238	1,390	2.8
0.0596	498	4.7
0.00	234	12.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
697	1,230,000	2.8
174	293,000	3.6
43.6	65,400	2.9
10.9	15,500	2.1
2.72	3,980	3.3
0.681	1,140	4.0
0.170	452	5.7
0.00	232	14.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
576	595,000	3.2
144	163,000	3.1
36.0	41,600	3.3
9.00	10,500	2.2
2.25	2,930	3.1
0.563	991	4.9
0.141	515	5.2
0.00	378	9.6

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
359	651,000	1.4
89.8	193,000	1.7
22.4	51,100	1.8
5.61	12,900	2.1
1.40	3,660	1.6
0.351	1,220	3.4
0.0876	611	4.4
0.00	434	9.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
482	348,000	2.6
121	108,000	2.6
30.1	28,700	2.2
7.53	7,650	1.9
1.88	2,180	3.3
0.471	821	6.3
0.118	501	14.0
0.00	426	16.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
478	699,000	2.0
120	128,000	4.5
29.9	16,700	2.8
7.47	2,580	3.8
1.87	783	8.6
0.467	381	18.0
0.117	289	18.0
0.00	250	14.0

CERTIFICATE OF ANALYSIS

Page 4 of 5

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
364	338,000	3.1
91.0	86,100	2.8
22.8	22,000	5.9
5.69	5,700	3.1
1.42	1,920	2.1
0.355	913	5.4
0.0889	681	6.7
0.00	579	7.8

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human)	Z0046570	2-8°C	31 Dec 2019
Anti- hu IFN- γ Antibody	D0081003	2-8°C	30 Nov 2019
Anti-hu IL-1 β Antibody	D0081004	2-8°C	30 Nov 2019
Anti-hu IL-2 Antibody	D0080982	2-8°C	31 Oct 2019
Anti-hu IL-4 Antibody	D0081005	2-8°C	30 Nov 2019
Anti-hu IL-6 Antibody	D0081006	2-8°C	30 Nov 2019
Anti-hu IL-8 Antibody	D0080919	2-8°C	31 Jul 2019
Anti-hu IL-10 Antibody	D0081007	2-8°C	30 Nov 2019
Anti-hu IL-12p70 Antibody	D0081008	2-8°C	30 Nov 2019
Anti-hu IL-13 Antibody	D0081009	2-8°C	30 Nov 2019
Anti-hu TNF- α Antibody	D0081002	2-8°C	31 Oct 2019
Proinflammatory Panel 1 (human) Calibrator Blend	A0080145	2-8°C	31 Aug 2022
Diluent 2	M0020096	$\leq$ -10°C	30 Nov 2019
Diluent 3	M0030077	$\leq$ -10°C	30 Nov 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

CERTIFICATE OF ANALYSIS

Page 5 of 5

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 OCT 2017