

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: K0081017

Expiration Date: 30 Nov 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	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	hu IL-1 β	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	hu IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	hu IL-4	0.218	80% - 120%	< 20%	158	80% - 120%	< 20%
5	hu IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	hu IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	hu IL-10	0.298	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	1730	pg/mL
		Proinflammatory Panel 1 (human) Control 1	574	pg/mL
		Proinflammatory Panel 1 (human) Control 2	155	pg/mL
		Proinflammatory Panel 1 (human) Control 3	41.8	pg/mL
2	hu IL-1 β	Calibrator	566	pg/mL
		Proinflammatory Panel 1 (human) Control 1	202	pg/mL
		Proinflammatory Panel 1 (human) Control 2	50.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.7	pg/mL
3	hu IL-2	Calibrator	1620	pg/mL
		Proinflammatory Panel 1 (human) Control 1	400	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.48	pg/mL
4	hu IL-4	Calibrator	249	pg/mL
		Proinflammatory Panel 1 (human) Control 1	100	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.97	pg/mL
5	hu IL-6	Calibrator	756	pg/mL
		Proinflammatory Panel 1 (human) Control 1	264	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.24	pg/mL
6	hu IL-8	Calibrator	661	pg/mL
		Proinflammatory Panel 1 (human) Control 1	233	pg/mL
		Proinflammatory Panel 1 (human) Control 2	36.9	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.93	pg/mL
7	hu IL-10	Calibrator	370	pg/mL
		Proinflammatory Panel 1 (human) Control 1	125	pg/mL
		Proinflammatory Panel 1 (human) Control 2	23.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.47	pg/mL
8	hu IL-12p70	Calibrator	496	pg/mL
		Proinflammatory Panel 1 (human) Control 1	182	pg/mL
		Proinflammatory Panel 1 (human) Control 2	34	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.95	pg/mL
9	hu IL-13	Calibrator	504	pg/mL
		Proinflammatory Panel 1 (human) Control 1	164	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.9	pg/mL
10	hu TNF- α	Calibrator	373	pg/mL
		Proinflammatory Panel 1 (human) Control 1	86.7	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.06	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
1730	341,000	1.6
433	90,800	2.1
108	22,600	2.2
27.0	5,970	2.7
6.76	1,820	2.2
1.69	852	2.9
0.422	592	6.0
0.00	495	4.3

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
566	1,550,000	2.1
142	429,000	1.8
35.4	111,000	2.3
8.84	28,200	1.7
2.21	7,830	2.5
0.553	2,740	2.9
0.138	1,480	13.0
0.00	943	4.8

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1620	1,410,000	3.1
405	410,000	1.9
101	113,000	2.1
25.3	28,300	4.6
6.33	7,840	2.3
1.58	2,320	3.4
0.396	1,010	6.5
0.00	506	3.0

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
249	1,040,000	3.1
62.3	327,000	2.3
15.6	89,200	2.8
3.89	23,100	3.3
0.973	5,790	2.8
0.243	1,670	3.9
0.0608	532	5.1
0.00	190	14.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
756	1,760,000	2.7
189	415,000	2.6
47.3	89,500	3.2
11.8	20,600	4.2
2.95	5,110	2.0
0.738	1,440	2.4
0.185	500	4.2
0.00	202	7.5

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
661	1,170,000	3.1
165	302,000	1.9
41.3	73,100	1.8
10.3	17,600	3.4
2.58	4,910	2.9
0.646	1,430	2.9
0.161	568	5.3
0.00	271	8.8

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
370	735,000	2.4
92.5	215,000	1.5
23.1	57,000	1.7
5.78	14,300	2.7
1.45	4,040	1.9
0.361	1,310	4.1
0.0903	632	4.4
0.00	401	8.6

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
496	429,000	2.6
124	132,000	1.6
31.0	35,400	2.6
7.75	9,290	3.0
1.94	2,540	2.6
0.484	885	4.6
0.121	453	7.0
0.00	333	11.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
504	1,260,000	2.1
126	220,000	1.4
31.5	29,300	2.2
7.88	4,540	4.1
1.97	1,200	3.5
0.492	430	4.9
0.123	245	9.6
0.00	181	12.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
373	451,000	1.9
93.3	112,000	1.6
23.3	27,900	2.2
5.83	6,830	2.7
1.46	2,120	2.6
0.364	806	3.0
0.0911	504	5.9
0.00	365	6.7


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046836	2-8°C	30 Nov 2020
Anti-hu IFN- γ Antibody	D0081074	2-8°C	31 Aug 2021
Anti-hu IL-1 β Antibody	D0081091	2-8°C	31 Oct 2021
Anti-hu IL-2 Antibody	D0081036	2-8°C	29 Feb 2020
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	D0081037	2-8°C	29 Feb 2020
Anti-hu IL-10 Antibody	D0081024	2-8°C	31 Jan 2020
Anti-hu IL-12p70 Antibody	D0081008	2-8°C	30 Nov 2019
Anti-hu IL-13 Antibody	D0081092	2-8°C	31 Oct 2021
Anti-hu TNF- α Antibody	D0081065	2-8°C	30 Jun 2020
Proinflammatory Panel 1 (human) Calibrator Blend	A0080102	2-8°C	30 Sep 2021
Diluent 2	M0020099	$\leq -10^{\circ}\text{C}$	31 Mar 2020
Diluent 3	M0030081	$\leq -10^{\circ}\text{C}$	30 Sep 2020
MDS Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
Plate Seals	Not Kit Specific
MSD Wash Buffer (20X), 100 mL	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		25 JUN 2018