

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: K0081014

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	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	1290	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	574	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	1440	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	227	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	765	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	621	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	341	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	511	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	497	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	369	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
1290	244,000	1.6
323	63,600	2.0
80.6	16,400	1.9
20.2	4,340	2.2
5.04	1,440	2.7
1.26	725	4.2
0.315	519	5.1
0.00	474	3.8

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
574	1,330,000	1.9
144	370,000	1.9
35.9	95,500	1.6
8.97	24,000	2.6
2.24	6,660	2.5
0.561	2,240	3.3
0.140	1,150	2.9
0.00	776	6.4

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1440	1,160,000	2.2
360	334,000	2.6
90.0	90,500	2.4
22.5	23,200	3.2
5.63	6,380	3.1
1.41	1,960	4.0
0.352	916	3.5
0.00	526	6.5

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
227	962,000	3.0
56.8	289,000	2.7
14.2	78,600	2.0
3.55	19,800	3.5
0.887	4,980	3.6
0.222	1,420	4.0
0.0554	485	5.2
0.00	191	9.1

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
765	1,570,000	1.9
191	377,000	2.3
47.8	82,000	1.3
12.0	18,700	2.9
2.99	4,730	2.0
0.747	1,310	2.4
0.187	466	4.9
0.00	186	11.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
621	1,180,000	1.7
155	297,000	2.2
38.8	73,700	2.0
9.70	18,400	2.1
2.43	4,870	2.2
0.606	1,420	2.5
0.152	580	3.5
0.00	294	5.5

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
341	663,000	1.8
85.3	195,000	1.6
21.3	51,400	1.7
5.33	13,100	2.1
1.33	3,630	2.5
0.333	1,230	3.0
0.0833	606	3.8
0.00	415	7.8

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
511	546,000	4.4
128	162,000	3.1
31.9	43,200	2.9
7.98	10,800	7.3
2.00	2,890	4.7
0.499	959	4.1
0.125	471	8.6
0.00	315	10.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
497	1,270,000	1.2
124	219,000	1.9
31.1	28,800	1.8
7.77	4,560	4.4
1.94	1,190	2.7
0.485	423	3.7
0.121	247	7.6
0.00	189	12.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
369	408,000	1.4
92.3	101,000	2.7
23.1	25,600	2.8
5.77	6,360	3.8
1.44	1,930	3.1
0.360	777	4.1
0.0901	501	5.0
0.00	381	7.8

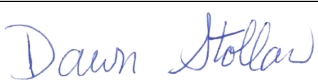
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046830	2-8°C	31 Oct 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	D0081011	2-8°C	31 Dec 2019
Anti-hu IL-4 Antibody	D0080917	2-8°C	31 Jul 2019
Anti-hu IL-6 Antibody	D0081018	2-8°C	31 Jan 2020
Anti-hu IL-8 Antibody	D0081037	2-8°C	29 Feb 2020
Anti-hu IL-10 Antibody	D0081007	2-8°C	30 Nov 2019
Anti-hu IL-12p70 Antibody	D0080921	2-8°C	31 Jul 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	A0080169	2-8°C	31 May 2023
Diluent 2	M0020099	\leq -10°C	31 Mar 2020
Diluent 3	M0030082	\leq -10°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), 1000mL	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		27 JUN 2018