

CERTIFICATE OF ANALYSIS

Page 1 of 4

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: K0081006
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	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

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1460	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	587	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	1510	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	287	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	742	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	598	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	378	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	520	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	501	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	378	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.

CERTIFICATE OF ANALYSIS

Standard Curve Data:

hu IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1460	228,000	2.5
365	59,200	2.3
91.3	14,600	2.8
22.8	3,870	2.9
5.70	1,270	2.5
1.43	674	3.5
0.356	510	4.6
0.00	464	4.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
587	1,630,000	2.2
147	464,000	1.9
36.7	121,000	2.3
9.17	31,200	2.3
2.29	9,180	1.7
0.573	3,840	2.5
0.143	2,470	2.8
0.00	2,010	3.2

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1510	1,170,000	4.5
378	333,000	1.2
94.4	87,200	2.8
23.6	22,000	2.5
5.90	6,230	5.0
1.47	2,020	3.7
0.369	995	3.5
0.00	669	4.0

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
287	861,000	2.4
71.8	260,000	3.1
17.9	68,600	3.4
4.48	17,000	5.4
1.12	4,200	5.9
0.280	1,220	5.0
0.0701	442	3.8
0.00	184	13.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
742	1,360,000	3.6
186	317,000	1.9
46.4	67,000	3.8
11.6	15,200	2.4
2.90	3,880	2.8
0.725	1,090	3.2
0.181	391	5.1
0.00	166	13.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
598	1,040,000	2.6
150	258,000	1.5
37.4	61,900	1.6
9.34	15,300	2.0
2.34	4,070	1.7
0.584	1,230	2.3
0.146	531	5.2
0.00	282	7.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
378	665,000	2.0
94.5	194,000	1.7
23.6	50,000	2.2
5.91	12,600	2.7
1.48	3,470	2.3
0.369	1,150	2.5
0.0923	567	2.7
0.00	363	7.1

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
520	460,000	5.2
130	132,000	3.9
32.5	34,700	4.4
8.13	8,640	3.9
2.03	2,350	3.9
0.508	841	5.5
0.127	454	10.0
0.00	335	12.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
501	1,180,000	2.6
125	201,000	1.8
31.3	27,000	2.2
7.83	4,200	2.3
1.96	1,120	3.5
0.489	429	7.3
0.122	265	8.4
0.00	210	12.0

CERTIFICATE OF ANALYSIS

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
378	371,000	2.6
94.5	91,300	2.8
23.6	22,600	3.7
5.91	5,590	2.8
1.48	1,720	2.9
0.369	679	5.6
0.0923	419	7.0
0.00	324	9.6


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046751	2-8°C	31 Jul 2020
Anti-hu IFN- γ Antibody	D0081014	2-8°C	31 Jan 2020
Anti-hu IL-1 β Antibody	D0081082	2-8°C	30 Sep 2021
Anti-hu IL-2 Antibody	D0081036	2-8°C	29 Feb 2020
Anti-hu IL-4 Antibody	D0081017	2-8°C	31 Jan 2020
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	D0081024	2-8°C	31 Jan 2020
Anti-hu IL-12p70 Antibody	D0081019	2-8°C	31 Jan 2020
Anti-hu IL-13 Antibody	D0081083	2-8°C	30 Sep 2021
Anti-hu TNF- α Antibody	D0081065	2-8°C	30 Jun 2020
Proinflammatory Panel 1 (human) Calibrator Blend	A0080153	2-8°C	31 Oct 2022
Diluent 2	M0020096	$\leq -10^{\circ}\text{C}$	30 Nov 2019
Diluent 3	M0030077	$\leq -10^{\circ}\text{C}$	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), 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		11 MAY 2018