

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: K0080898
Expiration Date: 30 Sep 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

Page 2 of 4

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1500	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	589	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	1490	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	263	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	721	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	553	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	365	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	487	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	465	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	388	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 4

Standard Curve Data:

hu IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1500	251,000	1.6
375	67,500	2.4
93.8	17,200	3.1
23.4	4,640	3.3
5.86	1,380	5.7
1.46	569	3.8
0.366	345	5.3
0.00	393	36.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
589	1,440,000	2.5
147	394,000	2.4
36.8	99,100	2.6
9.20	26,100	2.7
2.30	7,170	1.7
0.575	2,450	2.4
0.144	1,170	3.4
0.00	838	14.0

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,180,000	2.5
373	349,000	1.9
93.1	98,300	1.8
23.3	25,600	2.0
5.82	7,140	3.3
1.46	2,040	3.1
0.364	792	3.4
0.00	415	20.0

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
263	918,000	2.3
65.8	286,000	2.8
16.4	80,900	3.0
4.11	21,200	3.8
1.03	5,540	2.6
0.257	1,520	3.1
0.0642	470	4.7
0.00	135	20.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
721	1,340,000	3.8
180	327,000	2.8
45.1	75,200	4.5
11.3	18,200	4.7
2.82	4,720	2.9
0.704	1,320	3.6
0.176	456	3.9
0.00	269	36.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
553	615,000	1.8
138	166,000	2.5
34.6	42,400	2.9
8.64	11,100	3.4
2.16	3,070	3.3
0.540	948	4.0
0.135	388	6.7
0.00	270	33.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
365	643,000	1.5
91.3	191,000	1.3
22.8	52,000	1.8
5.70	13,400	1.7
1.43	3,700	2.6
0.356	1,130	2.9
0.0891	485	6.3
0.00	311	29.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
487	374,000	3.5
122	115,000	2.3
30.4	31,800	3.1
7.61	8,400	3.8
1.90	2,280	3.5
0.476	743	3.1
0.119	361	7.9
0.00	243	12.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
465	630,000	3.5
116	112,000	1.5
29.1	15,100	1.7
7.27	2,380	2.4
1.82	654	3.2
0.454	279	9.0
0.114	179	12.0
0.00	206	35.0

CERTIFICATE OF ANALYSIS

Page 4 of 4

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
388	428,000	3.7
97.0	108,000	1.6
24.3	27,800	2.9
6.06	7,050	2.8
1.52	2,090	2.5
0.379	720	3.6
0.0947	385	10.0
0.00	451	46.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046661	2-8°C	30 Apr 2020
Anti-hu IFN- γ Antibody	D0081014	2-8°C	31 Jan 2020
Anti-hu IL-1 β Antibody	D0081016	2-8°C	31 Jan 2020
Anti-hu IL-2 Antibody	D0081011	2-8°C	31 Dec 2019
Anti-hu IL-4 Antibody	D0081005	2-8°C	30 Nov 2019
Anti-hu IL-6 Antibody	D0081018	2-8°C	31 Jan 2020
Anti-hu IL-8 Antibody	D0081012	2-8°C	31 Dec 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	D0080922	2-8°C	30 Sep 2019
Anti-hu TNF- α Antibody	D0081020	2-8°C	31 Jan 2020
Proinflammatory Panel 1 (human) Calibrator Blend	A0080141	2-8°C	31 Aug 2022
Diluent 2	M0020098	$\leq$ -10°C	28 Feb 2020
Diluent 3	M0030078	$\leq$ -10°C	31 Jan 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), 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		12 DEC 2017