

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: K0080897

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	1380	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	566	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	1410	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	246	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	712	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	556	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	356	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	497	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	492	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	369	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			hu IL-1 β - Spot 2			hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
1380	233,000	2.6	566	1,350,000	4.6	1410	1,090,000	2.5
345	62,500	2.6	142	370,000	3.7	353	320,000	1.1
86.3	16,200	1.9	35.4	96,500	2.7	88.1	86,600	1.8
21.6	4,230	1.3	8.84	24,000	2.0	22.0	21,700	4.1
5.39	1,270	4.4	2.21	7,010	2.6	5.51	5,920	3.7
1.35	578	5.2	0.553	2,540	2.7	1.38	1,800	3.3
0.337	378	7.1	0.138	1,420	3.6	0.344	772	4.9
0.00	323	6.6	0.00	1,110	18.0	0.00	426	6.5

hu IL-4 - Spot 4			hu IL-6 - Spot 5			hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
246	947,000	4.1	712	1,320,000	3.5	556	630,000	1.9
61.5	297,000	2.2	178	319,000	1.4	139	169,000	3.9
15.4	80,900	1.9	44.5	70,900	2.4	34.8	42,700	1.9
3.84	21,000	1.5	11.1	16,600	3.2	8.69	10,700	2.9
0.961	5,170	2.8	2.78	4,100	3.3	2.17	3,010	2.5
0.240	1,490	3.0	0.695	1,180	3.7	0.543	961	3.1
0.0601	497	9.0	0.174	426	8.8	0.136	451	4.4
0.00	181	19.0	0.00	179	12.0	0.00	288	9.9

hu IL-10 - Spot 7			hu IL-12p70 - Spot 8			hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
356	640,000	1.5	497	354,000	3.0	492	745,000	2.1
89.0	188,000	1.1	124	111,000	2.3	123	136,000	3.7
22.3	49,900	2.5	31.1	29,600	3.1	30.8	17,000	2.7
5.56	12,500	2.4	7.77	7,570	7.5	7.69	2,450	3.7
1.39	3,450	2.1	1.94	2,110	3.4	1.92	690	3.5
0.348	1,130	2.5	0.485	759	7.4	0.480	293	5.2
0.0869	541	5.9	0.121	492	16.0	0.120	221	10.0
0.00	343	7.7	0.00	370	8.5	0.00	187	10.0

CERTIFICATE OF ANALYSIS

Page 4 of 5

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
369	385,000	2.0
92.3	97,000	3.2
23.1	24,300	3.2
5.77	6,100	2.8
1.44	2,000	2.4
0.360	838	3.1
0.0901	571	4.6
0.00	475	7.1

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046562	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	A0080147	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