

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, K151QR-Series, K151OD-Series
Kit Lot Number: K0081146
Expiration Date: 28 Feb 2021

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%

CERTIFICATE OF ANALYSIS

Page 2 of 4

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1280	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	hu IL-1 β	Calibrator	554	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	hu IL-2	Calibrator	1440	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
4	hu IL-4	Calibrator	218	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	21.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.4	pg/mL
5	hu IL-6	Calibrator	742	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	hu IL-8	Calibrator	545	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	hu IL-10	Calibrator	378	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	pg/mL
8	hu IL-12p70	Calibrator	549	pg/mL
		Proinflammatory Panel 1 (human) Control 1	195	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.56	pg/mL
9	hu IL-13	Calibrator	529	pg/mL
		Proinflammatory Panel 1 (human) Control 1	172	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.6	pg/mL
10	hu TNF- α	Calibrator	349	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92.5	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.13	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
1280	206,000	1.7
320	55,100	1.6
80.0	14,100	2.8
20.0	3,840	2.4
5.00	1,330	2.7
1.25	731	4.6
0.313	544	4.6
0.00	501	4.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
554	1,480,000	1.7
139	419,000	1.5
34.6	110,000	1.9
8.66	28,700	1.8
2.16	8,440	3.3
0.541	3,250	2.7
0.135	1,940	4.4
0.00	1,500	3.4

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1440	1,160,000	3.0
360	331,000	2.8
90.0	88,900	3.5
22.5	22,900	3.1
5.63	6,260	3.6
1.41	1,970	4.5
0.352	871	4.0
0.00	511	3.8

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
218	802,000	2.0
54.5	248,000	2.1
13.6	67,500	2.4
3.41	17,400	3.4
0.852	4,630	3.1
0.213	1,390	3.7
0.0532	548	4.3
0.00	267	9.4

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
742	1,290,000	1.9
186	307,000	1.6
46.4	66,300	2.2
11.6	15,700	2.4
2.90	4,040	3.3
0.725	1,230	3.5
0.181	514	3.2
0.00	276	6.5

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
545	839,000	3.1
136	220,000	1.7
34.1	56,100	2.3
8.52	14,200	2.5
2.13	3,940	2.6
0.532	1,250	2.3
0.133	574	3.0
0.00	341	4.5

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
378	756,000	1.6
94.5	229,000	2.0
23.6	61,600	2.2
5.91	15,800	2.5
1.48	4,520	2.4
0.369	1,510	2.5
0.0923	759	4.7
0.00	514	5.5

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
549	454,000	2.9
137	141,000	2.0
34.3	37,600	3.2
8.58	10,000	3.0
2.14	2,760	2.4
0.536	976	3.7
0.134	500	5.5
0.00	368	10.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
529	1,210,000	2.3
132	220,000	1.9
33.1	30,100	2.3
8.27	4,790	2.8
2.07	1,270	4.4
0.517	496	2.8
0.129	311	4.9
0.00	253	8.7

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
349	324,000	2.5
87.3	80,700	2.4
21.8	20,600	3.0
5.45	5,360	3.5
1.36	1,740	3.9
0.341	792	4.2
0.0852	551	6.5
0.00	453	6.0

CERTIFICATE OF ANALYSIS

Page 4 of 4

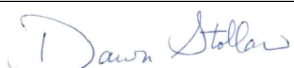
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047033	2-8°C	31 Jul 2021
Anti-hu IFN- γ Antibody	D0081180	2-8°C	31 Mar 2022
Anti-hu IL-1 β Antibody	D0081128	2-8°C	31 Jan 2022
Anti-hu IL-2 Antibody	D0081209	2-8°C	31 May 2022
Anti-hu IL-4 Antibody	D0081133	2-8°C	28 Feb 2022
Anti-hu IL-6 Antibody	D0081210	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081168	2-8°C	30 Apr 2022
Anti-hu IL-10 Antibody	D0081098	2-8°C	31 Jan 2022
Anti-hu IL-12p70 Antibody	D0081127	2-8°C	31 Jan 2022
Anti-hu IL-13 Antibody	D0081120	2-8°C	31 Jan 2022
Anti-hu TNF- α Antibody	D0081228	2-8°C	31 May 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080186	2-8°C	30 Nov 2023
Diluent 2	M0020103	$\leq -10^{\circ}\text{C}$	31 Mar 2021
Diluent 3	M0030085	$\leq -10^{\circ}\text{C}$	28 Feb 2021
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		27 MAR 2019