

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: K0081080

Expiration Date: 31 Jan 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
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
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
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
2	hu IL-1 β	Calibrator	576	pg/mL
		Proinflammatory Panel 1 (human) Control 1	203	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.9	pg/mL
3	hu IL-2	Calibrator	1470	pg/mL
		Proinflammatory Panel 1 (human) Control 1	390	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.34	pg/mL
4	hu IL-4	Calibrator	243	pg/mL
		Proinflammatory Panel 1 (human) Control 1	102	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.05	pg/mL
5	hu IL-6	Calibrator	764	pg/mL
		Proinflammatory Panel 1 (human) Control 1	264	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.18	pg/mL
6	hu IL-8	Calibrator	621	pg/mL
		Proinflammatory Panel 1 (human) Control 1	235	pg/mL
		Proinflammatory Panel 1 (human) Control 2	36.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.93	pg/mL
7	hu IL-10	Calibrator	340	pg/mL
		Proinflammatory Panel 1 (human) Control 1	133	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.32	pg/mL
8	hu IL-12p70	Calibrator	542	pg/mL
		Proinflammatory Panel 1 (human) Control 1	186	pg/mL
		Proinflammatory Panel 1 (human) Control 2	35.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.99	pg/mL
9	hu IL-13	Calibrator	525	pg/mL
		Proinflammatory Panel 1 (human) Control 1	170	pg/mL
		Proinflammatory Panel 1 (human) Control 2	43.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.7	pg/mL
10	hu TNF- α	Calibrator	369	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92	pg/mL
		Proinflammatory Panel 1 (human) Control 2	17.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.53	pg/mL

Controls tested may not be the same lot as shipped.

CERTIFICATE OF ANALYSIS

Standard Curve Data:

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
576	1,490,000	2.2
144	395,000	2.4
36.0	102,000	1.6
9.00	25,400	3.3
2.25	7,310	5.5
0.563	2,860	6.0
0.141	1,690	3.7
0.00	1,260	4.5

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1470	1,340,000	2.9
368	392,000	1.6
91.9	106,000	2.7
23.0	26,900	4.0
5.74	7,540	3.6
1.44	2,490	3.7
0.359	1,230	6.0
0.00	769	3.7

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
243	930,000	2.9
60.8	284,000	2.0
15.2	76,600	2.0
3.80	19,600	2.7
0.949	4,870	3.2
0.237	1,420	4.3
0.0593	498	4.6
0.00	194	13.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
764	1,430,000	2.0
191	351,000	1.6
47.8	78,100	2.0
11.9	18,100	3.8
2.98	4,600	2.2
0.746	1,320	3.7
0.187	493	4.5
0.00	218	7.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
621	783,000	2.2
155	206,000	2.1
38.8	51,600	2.2
9.70	12,800	3.1
2.43	3,600	1.9
0.606	1,180	3.4
0.152	551	4.4
0.00	350	5.1

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
340	719,000	1.8
85.0	213,000	1.5
21.3	55,400	2.2
5.31	13,900	3.1
1.33	3,810	2.4
0.332	1,250	3.4
0.0830	562	5.3
0.00	360	6.9

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
542	484,000	2.7
136	147,000	1.7
33.9	39,200	2.0
8.47	10,200	3.4
2.12	2,790	2.7
0.529	1,000	4.1
0.132	521	6.3
0.00	406	17.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
525	1,260,000	2.3
131	229,000	2.0
32.8	31,900	2.5
8.20	5,080	3.8
2.05	1,330	3.4
0.513	470	5.3
0.128	271	6.4
0.00	202	11.0

hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
369	378,000	2.4
92.3	94,200	2.5
23.1	23,500	2.8
5.77	5,880	3.0
1.44	1,840	2.9
0.360	748	3.7
0.0901	466	5.1
0.00	379	6.8

CERTIFICATE OF ANALYSIS


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046905	2-8°C	28 Feb 2021
Anti-hu IL-1β Antibody	D0081095	2-8°C	31 Dec 2021
Anti-hu IL-2 Antibody	D0081096	2-8°C	30 Nov 2021
Anti-hu IL-4 Antibody	D0081126	2-8°C	31 Jan 2022
Anti-hu IL-6 Antibody	D0081130	2-8°C	31 Jan 2022
Anti-hu IL-8 Antibody	D0081097	2-8°C	30 Nov 2021
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	D0081099	2-8°C	30 Nov 2021
Proinflammatory Panel 1 (human) Calibrator Blend	A0080178	2-8°C	31 Aug 2023
Diluent 2	M0020102	≤ -10°C	28 Feb 2021
Diluent 3	M0030084	≤ -10°C	31 Jan 2021
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
Wash Buffer (20X), 100 mL	Not Kit Specific
Plate Seals	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		19 DEC 2018