

CERTIFICATE OF ANALYSIS

Page 1 of 4

Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (human) Kit
Kit Catalog Numbers: K151QR-Series; K151OD-Series; K15049-Series; K15052-Series; K15053-Series; K15056-Series
Kit Lot Number: K0081456
Expiration Date: 28 Feb 2022

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	IFN- γ	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	IL-1 β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	IL-13	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	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	IFN- γ	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	IL-1 β	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	IL-4	0.218	80% - 120%	< 20%	158	80% - 120%	< 20%
5	IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	IL-10	0.298	80% - 120%	< 20%	233	80% - 120%	< 20%
8	IL-12p70	1.22	80% - 120%	< 20%	315	80% - 120%	< 20%
9	IL-13	4.21	80% - 120%	< 20%	353	80% - 120%	< 20%
10	TNF- α	0.690	80% - 120%	< 20%	248	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	IFN- γ	< 1.0%
2	IL-1 β	< 1.0%
3	IL-2	< 1.0%
4	IL-4	< 1.0%
5	IL-6	< 1.0%
6	IL-8	< 1.0%
7	IL-10	< 1.0%
8	IL-12p70	< 1.0%
9	IL-13	< 1.0%
10	TNF- α	< 1.0%

CERTIFICATE OF ANALYSIS

Page 2 of 4

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	1800	pg/mL
		Proinflammatory Panel 1 (human) Control 1	546	pg/mL
		Proinflammatory Panel 1 (human) Control 2	167	pg/mL
		Proinflammatory Panel 1 (human) Control 3	32.2	pg/mL
2	IL-1 β	Calibrator	625	pg/mL
		Proinflammatory Panel 1 (human) Control 1	209	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10	pg/mL
3	IL-2	Calibrator	1540	pg/mL
		Proinflammatory Panel 1 (human) Control 1	384	pg/mL
		Proinflammatory Panel 1 (human) Control 2	37.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.96	pg/mL
4	IL-4	Calibrator	252	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.11	pg/mL
5	IL-6	Calibrator	774	pg/mL
		Proinflammatory Panel 1 (human) Control 1	289	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.89	pg/mL
6	IL-8	Calibrator	635	pg/mL
		Proinflammatory Panel 1 (human) Control 1	220	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.42	pg/mL
7	IL-10	Calibrator	414	pg/mL
		Proinflammatory Panel 1 (human) Control 1	135	pg/mL
		Proinflammatory Panel 1 (human) Control 2	24.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.62	pg/mL
8	IL-12p70	Calibrator	527	pg/mL
		Proinflammatory Panel 1 (human) Control 1	158	pg/mL
		Proinflammatory Panel 1 (human) Control 2	31.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.92	pg/mL
9	IL-13	Calibrator	624	pg/mL
		Proinflammatory Panel 1 (human) Control 1	121	pg/mL
		Proinflammatory Panel 1 (human) Control 2	40.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	13.2	pg/mL
10	TNF- α	Calibrator	361	pg/mL
		Proinflammatory Panel 1 (human) Control 1	110	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.37	pg/mL

Controls tested may not be the same lot as shipped.

CERTIFICATE OF ANALYSIS

Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1800	447,000	4.1
450	128,000	1.7
113	32,400	1.5
28.1	8,460	1.4
7.03	2,350	3.4
1.76	867	5.3
0.439	453	5.8
0.00	315	13.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
625	1,500,000	5.0
156	421,000	1.8
39.1	109,000	1.8
9.77	27,700	1.9
2.44	7,860	4.3
0.610	2,660	2.7
0.153	1,300	3.1
0.00	846	3.7

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1540	1,290,000	4.6
385	379,000	1.9
96.3	102,000	2.6
24.1	26,200	2.7
6.02	7,330	3.8
1.50	2,260	2.4
0.376	985	3.0
0.00	558	6.1

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
252	1,050,000	3.7
63.0	327,000	3.4
15.8	94,400	2.6
3.94	24,300	2.6
0.984	6,370	3.9
0.246	1,760	4.0
0.0615	583	8.0
0.00	189	28.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
774	1,180,000	2.2
194	286,000	2.3
48.4	63,100	2.1
12.1	14,900	2.7
3.02	3,900	3.0
0.756	1,160	2.9
0.189	441	5.4
0.00	195	12.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
635	1,020,000	2.5
159	265,000	2.1
39.7	66,800	2.2
9.92	16,500	3.1
2.48	4,540	1.7
0.620	1,300	3.0
0.155	482	6.9
0.00	203	12.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
414	819,000	2.1
104	246,000	2.4
25.9	65,600	1.8
6.47	16,500	2.5
1.62	4,470	2.1
0.404	1,320	3.2
0.101	518	4.7
0.00	238	15.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
527	422,000	1.8
132	130,000	3.4
32.9	35,900	2.1
8.23	9,470	3.5
2.06	2,720	3.0
0.515	995	5.1
0.129	588	18.0
0.00	475	21.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
624	1,250,000	1.4
156	246,000	1.5
39.0	34,400	2.3
9.75	5,040	3.7
2.44	1,230	4.0
0.609	424	8.8
0.152	215	9.2
0.00	141	19.0

CERTIFICATE OF ANALYSIS

Page 4 of 4

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
361	434,000	2.4
90.3	113,000	2.2
22.6	28,400	2.3
5.64	7,160	3.8
1.41	2,040	2.4
0.353	719	4.4
0.0881	372	8.1
0.00	258	8.7


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047211	2-8°C	30 Apr 2022
Anti-hu IFN- γ Antibody	D0081379	2-8°C	31 Mar 2023
Anti-hu IL-1 β Antibody	D0081380	2-8°C	31 Mar 2023
Anti-hu IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-hu IL-4 Antibody	D0081342	2-8°C	31 May 2023
Anti-hu IL-6 Antibody	D0081333	2-8°C	31 Jan 2023
Anti-hu IL-8 Antibody	D0081168	2-8°C	30 Apr 2022
Anti-hu IL-10 Antibody	D0081343	2-8°C	31 Jan 2023
Anti-hu IL-12p70 Antibody	D0081339	2-8°C	31 Jan 2023
Anti-hu IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
Anti-hu TNF- α Antibody	D0081438	2-8°C	30 Jun 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080239	2-8°C	31 Oct 2024
Diluent 2	M0020109	\leq -10°C	28 Feb 2022
Diluent 3	M0030092	\leq -10°C	31 Mar 2022
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	Karen Hamilla	Quality		24 MAR 2020