

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; K15348-Series; K15346-Series; K15349-Series; K15345-Series
Kit Lot Number: K0081442
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	1500	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	610	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	1360	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	211	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	690	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	612	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	356	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	464	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	509	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	367	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
1500	382,000	1.7
375	104,000	1.5
93.8	26,800	1.6
23.4	6,890	1.8
5.86	1,920	4.3
1.46	710	2.8
0.366	404	5.8
0.00	286	8.2

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
610	1,580,000	2.6
153	440,000	2.6
38.1	114,000	2.9
9.53	28,500	3.1
2.38	8,630	4.7
0.596	3,330	3.2
0.149	2,130	13.0
0.00	1,580	6.5

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1360	1,120,000	3.4
340	317,000	2.7
85.0	85,900	3.5
21.3	21,400	3.2
5.31	6,270	4.1
1.33	2,050	2.9
0.332	1,090	9.5
0.00	688	3.8

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
211	779,000	2.6
52.8	241,000	2.5
13.2	65,400	1.9
3.30	16,800	3.3
0.824	4,330	4.4
0.206	1,230	3.8
0.0515	448	6.1
0.00	176	14.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
690	931,000	1.9
173	210,000	2.4
43.1	44,200	2.4
10.8	9,740	3.6
2.70	2,630	2.9
0.674	799	4.5
0.168	355	6.1
0.00	201	7.8

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
612	852,000	4.2
153	211,000	3.8
38.3	53,100	2.7
9.56	12,700	4.6
2.39	3,630	3.1
0.598	1,040	4.3
0.149	434	8.2
0.00	195	9.3

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
356	736,000	2.2
89.0	217,000	2.7
22.3	56,700	3.1
5.56	14,000	3.6
1.39	3,840	3.2
0.348	1,150	5.5
0.0869	518	12.0
0.00	277	10.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
464	352,000	2.1
116	107,000	2.4
29.0	29,000	2.1
7.25	7,380	3.7
1.81	2,070	3.3
0.453	751	6.2
0.113	391	13.0
0.00	336	23.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
509	969,000	2.2
127	172,000	2.4
31.8	22,100	3.1
7.95	3,300	3.7
1.99	900	4.2
0.497	359	7.2
0.124	242	20.0
0.00	191	20.0

CERTIFICATE OF ANALYSIS

Page 4 of 4

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
367	403,000	3.1
91.8	102,000	5.1
22.9	25,400	3.8
5.73	6,370	4.0
1.43	2,050	5.5
0.358	885	11.0
0.0896	506	9.7
0.00	354	9.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047282	2-8°C	31 Aug 2022
Anti-hu IFN- γ Antibody	D0081426	2-8°C	30 Jun 2023
Anti-hu IL-1 β Antibody	D0081319	2-8°C	31 Dec 2022
Anti-hu IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-hu IL-6 Antibody	D0081398	2-8°C	30 Apr 2023
Anti-hu IL-8 Antibody	D0081399	2-8°C	30 Jun 2023
Anti-hu IL-10 Antibody	D0081437	2-8°C	30 Jun 2023
Anti-hu IL-12p70 Antibody	D0081339	2-8°C	31 Jan 2023
Anti-hu IL-13 Antibody	D0081424	2-8°C	31 Jul 2023
Anti-hu TNF- α Antibody	D0081382	2-8°C	31 Mar 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080242	2-8°C	31 Mar 2025
Diluent 2	M0020109	\leq -10°C	28 Feb 2022
Diluent 3	M0030096	\leq -10°C	30 Jun 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), 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	Karen Hamilla	Quality		22 APR 2020