

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: K0081500
Expiration Date: 30 Apr 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	1560	pg/mL
		Proinflammatory Panel 1(human) Control 1	612	pg/mL
		Proinflammatory Panel 1(human) Control 2	164	pg/mL
		Proinflammatory Panel 1(human) Control 3	44.2	pg/mL
2	IL-1 β	Calibrator	583	pg/mL
		Proinflammatory Panel 1(human) Control 1	235	pg/mL
		Proinflammatory Panel 1(human) Control 2	55.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1250	pg/mL
		Proinflammatory Panel 1(human) Control 1	390	pg/mL
		Proinflammatory Panel 1(human) Control 2	39.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.46	pg/mL
4	IL-4	Calibrator	213	pg/mL
		Proinflammatory Panel 1(human) Control 1	94.3	pg/mL
		Proinflammatory Panel 1(human) Control 2	20	pg/mL
		Proinflammatory Panel 1(human) Control 3	2.8	pg/mL
5	IL-6	Calibrator	663	pg/mL
		Proinflammatory Panel 1(human) Control 1	255	pg/mL
		Proinflammatory Panel 1(human) Control 2	47.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	7.83	pg/mL
6	IL-8	Calibrator	575	pg/mL
		Proinflammatory Panel 1(human) Control 1	233	pg/mL
		Proinflammatory Panel 1(human) Control 2	36.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	6.29	pg/mL
7	IL-10	Calibrator	346	pg/mL
		Proinflammatory Panel 1(human) Control 1	134	pg/mL
		Proinflammatory Panel 1(human) Control 2	25.5	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.93	pg/mL
8	IL-12p70	Calibrator	447	pg/mL
		Proinflammatory Panel 1(human) Control 1	177	pg/mL
		Proinflammatory Panel 1(human) Control 2	31.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	6.39	pg/mL
9	IL-13	Calibrator	466	pg/mL
		Proinflammatory Panel 1(human) Control 1	164	pg/mL
		Proinflammatory Panel 1(human) Control 2	45.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	12.1	pg/mL
10	TNF- α	Calibrator	338	pg/mL
		Proinflammatory Panel 1(human) Control 1	96.2	pg/mL
		Proinflammatory Panel 1(human) Control 2	16.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	2.32	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
1560	340,000	1.8
390	91,200	1.7
97.5	23,400	2.4
24.4	5,970	3.1
6.09	1,700	3.1
1.52	622	5.2
0.381	342	11.0
0.00	271	14.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
583	1,510,000	2.8
146	396,000	1.9
36.4	101,000	2.7
9.11	26,300	2.4
2.28	7,020	3.5
0.569	2,320	2.6
0.142	1,140	11.0
0.00	719	5.2

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1250	1,080,000	2.3
313	299,000	1.7
78.1	82,700	2.5
19.5	21,200	2.4
4.88	5,610	2.4
1.22	1,610	3.2
0.305	634	5.0
0.00	300	9.9

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
213	794,000	2.5
53.3	233,000	3.3
13.3	62,500	3.1
3.33	16,400	4.5
0.832	4,280	4.1
0.208	1,220	5.5
0.0520	438	8.8
0.00	181	15.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
663	1,080,000	2.4
166	240,000	2.2
41.4	52,500	2.8
10.4	12,400	2.2
2.59	3,270	3.0
0.647	967	3.1
0.162	375	5.8
0.00	190	11.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
575	830,000	2.4
144	213,000	1.8
35.9	55,100	1.9
8.98	14,100	1.9
2.25	3,770	1.9
0.562	1,180	2.5
0.140	522	3.3
0.00	306	8.2

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
346	600,000	2.1
86.5	171,000	1.2
21.6	45,400	1.7
5.41	11,500	2.2
1.35	3,050	1.8
0.338	924	3.0
0.0845	377	7.0
0.00	193	15.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
447	340,000	3.9
112	101,000	2.2
27.9	26,500	3.6
6.98	6,910	3.8
1.75	2,050	4.5
0.437	789	10.0
0.109	446	12.0
0.00	386	22.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
466	1,100,000	3.1
117	187,000	1.8
29.1	25,800	1.9
7.28	4,270	2.3
1.82	1,130	3.3
0.455	395	5.2
0.114	212	10.0
0.00	157	13.0

CERTIFICATE OF ANALYSIS

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
338	342,000	2.7
84.5	83,000	2.1
21.1	21,000	2.3
5.28	5,270	3.9
1.32	1,570	2.8
0.330	557	4.2
0.0825	321	9.2
0.00	244	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047345	2-8°C	30 Nov 2022
Anti-hu IFN- γ Antibody	D0081474	2-8°C	30 Nov 2023
Anti-hu IL-1 β Antibody	D0081495	2-8°C	31 Oct 2023
Anti-hu IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-hu IL-4 Antibody	D0081513	2-8°C	31 Dec 2023
Anti-hu IL-6 Antibody	D0081514	2-8°C	31 Oct 2023
Anti-hu IL-8 Antibody	D0081255	2-8°C	31 Jul 2022
Anti-hu IL-10 Antibody	D0081496	2-8°C	31 Oct 2023
Anti-hu IL-12p70 Antibody	D0081512	2-8°C	30 Sep 2023
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081515	2-8°C	31 Oct 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080262	2-8°C	30 Jun 2025
Diluent 2	M0020113	\leq -10°C	30 Nov 2022
Diluent 3	M0030100	\leq -10°C	31 Oct 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		25 AUG 2020