

CERTIFICATE OF ANALYSIS

Page 1 of 4

Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (human) Kit

Kit Catalog Numbers: K15049D-series, K1510D-series, K151QR-series, K15052-series, K15053 series, Ki5056-series

Kit Lot Number: K0081370

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

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	1550	pg/mL
		Proinflammatory Panel 1 (human) Control 1	530	pg/mL
		Proinflammatory Panel 1 (human) Control 2	145	pg/mL
		Proinflammatory Panel 1 (human) Control 3	35.3	pg/mL
2	IL-1 β	Calibrator	598	pg/mL
		Proinflammatory Panel 1 (human) Control 1	209	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.9	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.9	pg/mL
3	IL-2	Calibrator	1420	pg/mL
		Proinflammatory Panel 1 (human) Control 1	409	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.49	pg/mL
4	IL-4	Calibrator	256	pg/mL
		Proinflammatory Panel 1 (human) Control 1	104	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.01	pg/mL
5	IL-6	Calibrator	728	pg/mL
		Proinflammatory Panel 1 (human) Control 1	267	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.49	pg/mL
6	IL-8	Calibrator	571	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.08	pg/mL
7	IL-10	Calibrator	374	pg/mL
		Proinflammatory Panel 1 (human) Control 1	132	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	493	pg/mL
		Proinflammatory Panel 1 (human) Control 1	197	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.11	pg/mL
9	IL-13	Calibrator	496	pg/mL
		Proinflammatory Panel 1 (human) Control 1	167	pg/mL
		Proinflammatory Panel 1 (human) Control 2	45.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.8	pg/mL
10	TNF- α	Calibrator	392	pg/mL
		Proinflammatory Panel 1 (human) Control 1	87.8	pg/mL
		Proinflammatory Panel 1 (human) Control 2	15.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.02	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
1550	380,000	3.6
388	105,000	1.7
96.9	26,500	2.4
24.2	6,780	2.7
6.05	1,900	2.8
1.51	739	3.4
0.378	422	6.5
0.00	309	9.4

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
598	1,520,000	3.1
150	413,000	1.8
37.4	107,000	1.8
9.34	26,900	2.4
2.34	7,680	3.8
0.584	2,890	2.7
0.146	1,690	4.4
0.00	1,260	5.7

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1420	1,150,000	4.2
355	328,000	1.9
88.8	86,000	2.0
22.2	21,300	3.5
5.55	5,940	2.7
1.39	1,880	2.2
0.347	911	4.0
0.00	557	7.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
256	1,050,000	4.7
64.0	319,000	3.3
16.0	88,400	3.0
4.00	22,300	4.3
1.00	5,770	3.6
0.250	1,580	4.1
0.0625	548	4.6
0.00	206	16.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
728	1,030,000	2.4
182	243,000	2.7
45.5	52,700	3.3
11.4	12,200	4.6
2.84	3,130	3.1
0.711	964	2.8
0.178	402	4.1
0.00	214	9.1

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
571	824,000	3.2
143	214,000	2.6
35.7	52,800	2.8
8.92	12,900	3.3
2.23	3,550	3.0
0.558	1,080	2.5
0.139	479	7.5
0.00	261	7.7

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
374	754,000	2.8
93.5	220,000	2.4
23.4	57,000	2.6
5.84	14,100	4.0
1.46	3,850	1.4
0.365	1,230	2.9
0.0913	570	7.2
0.00	342	7.5

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
493	368,000	4.7
123	112,000	4.5
30.8	29,700	3.2
7.70	7,780	4.7
1.93	2,130	4.0
0.481	792	6.8
0.120	466	13.0
0.00	368	15.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
496	987,000	2.0
124	175,000	1.8
31.0	23,200	2.6
7.75	3,540	4.1
1.94	935	2.8
0.484	354	4.8
0.121	226	14.0
0.00	165	14.0

CERTIFICATE OF ANALYSIS

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
392	458,000	3.1
98.0	113,000	3.0
24.5	27,800	2.9
6.13	6,930	4.3
1.53	2,140	4.0
0.383	831	6.4
0.0957	610	24.0
0.00	423	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047213	2-8°C	30 Apr 2022
Anti-human IFN- γ Antibody	D0081379	2-8°C	31 Mar 2023
Anti-human IL-1 β Antibody	D0081380	2-8°C	31 Mar 2023
Anti-human IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-human IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-human IL-6 Antibody	D0081333	2-8°C	31 Jan 2023
Anti-human IL-8 Antibody	D0081255	2-8°C	31 Jul 2022
Anti-human IL-10 Antibody	D0081343	2-8°C	31 Jan 2023
Anti-human IL-12p70 Antibody	D0081307	2-8°C	31 Oct 2022
Anti-human IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
Anti-human TNF- α Antibody	D0081382	2-8°C	31 Mar 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080231	2-8°C	31 Dec 2024
Diluent 2	M0020109	\leq -10°C	28 Feb 2022
Diluent 3	M0030094	\leq -10°C	31 May 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		30 JAN 2020