

CERTIFICATE OF ANALYSIS

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

Kit Catalog Numbers: K15049-Series, K15052-Series, K15053-Series, K15056-Series, K151QR-Series, K151OD-Series

Kit Lot Number: K0081365

Expiration Date: 31 Dec 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
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%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	1460	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	IL-1 β	Calibrator	586	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1500	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
4	IL-4	Calibrator	263	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	21.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.4	pg/mL
5	IL-6	Calibrator	732	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	IL-8	Calibrator	575	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	IL-10	Calibrator	383	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	pg/mL
8	IL-12p70	Calibrator	464	pg/mL
		Proinflammatory Panel 1 (human) Control 1	195	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.56	pg/mL
9	IL-13	Calibrator	482	pg/mL
		Proinflammatory Panel 1 (human) Control 1	172	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.6	pg/mL
10	TNF- α	Calibrator	362	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92.5	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.13	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1460	328,000	2.2
365	89,800	1.1
91.3	22,700	1.5
22.8	5,830	2.1
5.70	1,750	3.8
1.43	748	6.9
0.356	482	6.3
0.00	395	8.5

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
586	1,240,000	3.1
147	352,000	2.6
36.6	86,600	2.6
9.16	22,300	2.6
2.29	6,160	5.0
0.572	2,240	3.8
0.143	1,110	4.7
0.00	816	11.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1500	1,120,000	3.3
375	315,000	2.3
93.8	85,700	3.3
23.4	20,800	2.2
5.86	5,840	4.4
1.46	1,690	3.8
0.366	722	3.9
0.00	363	8.2

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
263	947,000	2.8
65.8	302,000	2.4
16.4	80,700	1.7
4.11	20,800	2.7
1.03	5,200	3.1
0.257	1,520	4.0
0.0642	554	8.8
0.00	241	20.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
732	1,060,000	1.8
183	246,000	2.3
45.8	53,300	2.0
11.4	11,800	3.3
2.86	3,160	2.9
0.715	939	3.7
0.179	405	5.0
0.00	216	13.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
575	757,000	2.9
144	197,000	4.4
35.9	48,600	3.8
8.98	12,100	3.1
2.25	3,390	3.2
0.562	1,070	2.8
0.140	469	3.4
0.00	287	5.9

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
383	659,000	2.1
95.8	197,000	2.6
23.9	51,400	1.7
5.98	13,000	3.0
1.50	3,540	3.2
0.374	1,170	3.5
0.0935	544	5.6
0.00	353	9.2

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
464	373,000	3.3
116	113,000	1.8
29.0	29,600	3.8
7.25	7,770	3.9
1.81	2,290	4.1
0.453	921	6.7
0.113	586	14.0
0.00	571	17.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
482	1,130,000	2.3
121	198,000	1.8
30.1	26,300	1.3
7.53	4,060	2.9
1.88	1,080	2.6
0.471	412	5.0
0.118	248	8.3
0.00	206	18.0

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
362	352,000	2.5
90.5	85,700	3.7
22.6	21,200	4.0
5.66	5,190	3.9
1.41	1,640	3.2
0.354	652	6.3
0.0884	411	6.1
0.00	328	10.0

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047131	2-8°C	31 Dec 2021
Anti-hu IFN- γ Antibody	D0081379	2-8°C	31 Mar 2023
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081305	2-8°C	31 Oct 2022
Anti-hu IL-4 Antibody	D0081183	2-8°C	30 Jun 2022
Anti-hu IL-6 Antibody	D0081311	2-8°C	30 Nov 2022
Anti-hu IL-8 Antibody	D0081255	2-8°C	31 Jul 2022
Anti-hu IL-10 Antibody	D0081306	2-8°C	31 Oct 2022
Anti-hu IL-12p70 Antibody	D0081161	2-8°C	31 Mar 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081308	2-8°C	31 Oct 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080225	2-8°C	31 Aug 2024
Diluent 2	M0020108	$\leq -10^{\circ}\text{C}$	28 Feb 2022
Diluent 3	M0030090	$\leq -10^{\circ}\text{C}$	31 Dec 2021
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		03 DEC 2019