

CERTIFICATE OF ANALYSIS

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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: K0081346

Expiration Date: 31 Jan 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%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	1380	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	566	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	1490	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	234	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	767	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	555	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	372	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	515	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	460	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	390	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
1380	350,000	1.5
345	95,800	2.8
86.3	24,500	2.9
21.6	6,300	3.7
5.39	1,880	3.2
1.35	762	5.5
0.337	461	9.0
0.00	378	17.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
566	1,540,000	2.3
142	423,000	1.4
35.4	110,000	1.2
8.84	27,100	2.7
2.21	7,540	1.7
0.553	2,490	2.2
0.138	1,190	3.2
0.00	737	4.9

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,190,000	1.6
373	344,000	1.9
93.1	92,000	1.7
23.3	23,000	5.5
5.82	6,360	2.8
1.46	2,160	6.3
0.364	969	3.0
0.00	573	4.3

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
234	925,000	3.5
58.5	278,000	3.9
14.6	77,400	2.8
3.66	19,500	3.4
0.914	5,080	5.8
0.229	1,610	8.2
0.0571	612	11.0
0.00	316	22.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
767	1,270,000	3.5
192	292,000	2.5
47.9	63,800	2.4
12.0	14,500	3.0
3.00	3,730	2.5
0.749	1,130	3.5
0.187	452	5.9
0.00	231	8.9

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
555	951,000	1.4
139	239,000	4.0
34.7	61,800	1.3
8.67	14,700	5.0
2.17	4,050	2.1
0.542	1,190	3.4
0.135	480	4.4
0.00	221	10.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
372	693,000	2.5
93.0	207,000	1.5
23.3	55,500	1.7
5.81	13,200	6.6
1.45	3,770	1.6
0.363	1,190	4.1
0.0908	503	4.7
0.00	272	9.8

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
515	447,000	6.1
129	136,000	3.0
32.2	36,700	3.1
8.05	9,290	4.3
2.01	2,590	9.7
0.503	1,100	27.0
0.126	698	24.0
0.00	586	43.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
460	1,200,000	4.6
115	207,000	2.1
28.8	26,700	2.8
7.19	4,150	4.7
1.80	1,130	4.1
0.449	422	5.9
0.112	243	9.6
0.00	194	11.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
390	370,000	2.2
97.5	92,900	2.2
24.4	22,900	2.6
6.09	5,610	6.4
1.52	1,690	2.7
0.381	653	3.2
0.0952	368	8.1
0.00	278	10.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047200	2-8°C	31 Mar 2022
Anti-hu IFN- γ Antibody	D0081318	2-8°C	31 Mar 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	D0081183	2-8°C	30 Jun 2022
Anti-hu IL-6 Antibody	D0081210	2-8°C	30 Apr 2022
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	D0081212	2-8°C	31 May 2022
Anti-hu IL-13 Antibody	D0081120	2-8°C	31 Jan 2022
Anti-hu TNF- α Antibody	D0081324	2-8°C	31 Dec 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080222	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		21 NOV 2019