

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: K0081249
Expiration Date: 31 Jan 2020

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	INF- 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	INF- 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%

Spot	Name	NSB Spec
1	INF- 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	INF- γ	Calibrator	1600	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	552	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	1460	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	260	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	743	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	554	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	365	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	552	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	472	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	332	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:

INF- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1600	378,000	1.6
400	99,800	2.1
100	25,300	2.6
25.0	6,450	3.3
6.25	1,790	2.4
1.56	653	5.8
0.391	360	8.5
0.00	279	17.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
552	1,500,000	1.4
138	394,000	1.6
34.5	99,700	1.1
8.63	24,700	1.5
2.16	6,590	1.4
0.539	2,050	2.4
0.135	928	2.9
0.00	572	5.8

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1460	1,280,000	2.0
365	360,000	1.0
91.3	96,700	1.8
22.8	24,200	1.9
5.70	6,510	4.5
1.43	1,720	2.3
0.356	599	4.7
0.00	233	11.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
260	784,000	5.5
65.0	241,000	3.2
16.3	63,200	4.2
4.06	16,400	5.2
1.02	4,110	5.4
0.254	1,160	4.8
0.0635	375	5.8
0.00	135	27.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
743	1,400,000	3.3
186	332,000	1.4
46.4	72,500	1.9
11.6	16,700	2.1
2.90	4,180	2.1
0.726	1,190	2.2
0.181	441	5.0
0.00	209	15.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
554	798,000	2.3
139	201,000	2.1
34.6	49,900	1.8
8.66	12,600	2.8
2.16	3,240	1.9
0.541	936	2.1
0.135	363	4.8
0.00	184	12.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
365	681,000	2.3
91.3	197,000	1.6
22.8	51,500	1.9
5.70	13,000	1.9
1.43	3,470	3.2
0.356	1,040	2.0
0.0891	421	6.6
0.00	237	12.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
552	484,000	5.9
138	143,000	3.3
34.5	37,200	4.8
8.63	9,500	5.0
2.16	2,490	5.9
0.539	800	5.9
0.135	383	8.2
0.00	295	27.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
472	1,070,000	4.0
118	175,000	2.2
29.5	21,700	2.2
7.38	3,210	4.4
1.84	812	4.9
0.461	298	6.7
0.115	178	12.0
0.00	142	15.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
332	299,000	3.0
83.0	71,900	2.2
20.8	17,900	3.0
5.19	4,440	4.0
1.30	1,330	4.0
0.324	517	3.9
0.0811	315	10.0
0.00	244	7.6


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047096	2-8°C	31 Oct 2021
Anti-hu IFN- γ Antibody	D0081254	2-8°C	31 Jul 2022
Anti-hu IL-1 β Antibody	D0081274	2-8°C	31 Aug 2022
Anti-hu IL-2 Antibody	D0081209	2-8°C	31 May 2022
Anti-hu IL-4 Antibody	D0081017	2-8°C	31 Jan 2020
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	D0081211	2-8°C	31 May 2022
Anti-hu IL-12p70 Antibody	D0081019	2-8°C	31 Jan 2020
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081228	2-8°C	31 May 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080208	2-8°C	30 Apr 2024
Diluent 2	M0020104	\leq -10°C	30 Jun 2021
Diluent 3	M0030089	\leq -10°C	30 Sep 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), 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		24 JUN 2019