

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, K151QR-Series, K151OD-Series, K151056- Series

Kit Lot Number: K0081244

Expiration Date: 30 Jun 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	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:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1600	377,000	1.7
400	103,000	1.6
100	26,100	2.3
25.0	6,710	1.9
6.25	1,910	3.0
1.56	739	3.4
0.391	431	5.3
0.00	325	5.5

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
552	1,310,000	2.3
138	355,000	1.5
34.5	88,800	2.1
8.63	23,000	1.6
2.16	6,340	3.6
0.539	2,360	10.0
0.135	1,110	3.4
0.00	787	5.3

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1460	1,310,000	5.5
365	369,000	1.7
91.3	100,000	2.8
22.8	25,500	2.3
5.70	6,950	4.9
1.43	2,040	3.9
0.356	823	3.7
0.00	405	6.6

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
260	1,000,000	2.3
65.0	305,000	2.5
16.3	82,400	2.5
4.06	21,200	3.2
1.02	5,360	2.3
0.254	1,490	3.5
0.0635	508	8.5
0.00	176	11.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
743	1,420,000	2.0
186	332,000	2.0
46.4	70,000	1.7
11.6	16,200	2.4
2.90	4,130	2.5
0.726	1,160	3.5
0.181	437	6.8
0.00	195	7.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
554	817,000	2.7
139	209,000	2.1
34.6	51,700	1.6
8.66	13,000	2.6
2.16	3,530	3.6
0.541	1,050	2.3
0.135	427	4.3
0.00	221	9.8

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
365	740,000	2.2
91.3	220,000	1.2
22.8	58,100	1.0
5.70	14,800	1.9
1.43	4,030	2.8
0.356	1,250	2.8
0.0891	556	2.3
0.00	328	8.2

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
552	461,000	2.2
138	140,000	2.3
34.5	37,300	2.7
8.63	9,700	4.0
2.16	2,660	3.1
0.539	885	3.7
0.135	453	10.0
0.00	306	20.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
472	1,250,000	0.9
118	222,000	1.0
29.5	30,100	1.3
7.38	4,790	3.5
1.84	1,220	3.2
0.461	445	7.2
0.115	249	12.0
0.00	196	13.0

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
332	336,000	2.2
83.0	82,900	2.2
20.8	20,800	1.8
5.19	5,290	3.7
1.30	1,630	3.6
0.324	672	4.5
0.0811	404	6.5
0.00	324	10.0

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047091	2-8°C	30 Sep 2021
Anti-hu IFN- γ Antibody	D0081254	2-8°C	31 Jul 2022
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081167	2-8°C	28 Feb 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	D0081134	2-8°C	31 Mar 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	D0081170	2-8°C	28 Feb 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080208	2-8°C	30 Apr 2024
Diluent 2	M0020104	$\leq -10^{\circ}\text{C}$	30 Jun 2021
Diluent 3	M0030089	$\leq -10^{\circ}\text{C}$	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		27 JUN 2019