

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: K0081341
Expiration Date: 31 Jan 2022

Acceptance Data/ Percent Recovery Specifications:

		Calibrator		Proinflammatory Panel 1 (human) Control 1		Proinflammatory Panel 1 (human) Control 2		Proinflammatory Panel 1 (human) Control 3	
Spot	Name	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%

		LLOQ			ULOQ		
Spot	Name	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	348,000	1.5
345	92,900	2.3
86.3	24,300	1.9
21.6	6,320	2.6
5.39	1,830	2.6
1.35	711	3.9
0.337	429	7.5
0.00	335	8.5

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
566	1,480,000	1.5
142	403,000	1.1
35.4	107,000	1.8
8.84	28,000	2.2
2.21	8,040	2.5
0.553	3,060	3.8
0.138	1,810	4.1
0.00	1,430	4.7

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,230,000	2.4
373	352,000	2.0
93.1	97,700	2.4
23.3	25,500	2.1
5.82	7,240	3.1
1.46	2,510	3.1
0.364	1,320	4.2
0.00	891	3.8

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
234	817,000	3.3
58.5	241,000	3.8
14.6	66,300	3.4
3.66	17,100	3.7
0.914	4,470	4.6
0.229	1,280	5.4
0.0571	463	7.4
0.00	235	21.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
767	1,060,000	3.6
192	245,000	2.2
47.9	53,600	2.2
12.0	12,700	2.2
3.00	3,250	3.1
0.749	994	4.5
0.187	411	6.2
0.00	243	13.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
555	681,000	2.9
139	176,000	3.0
34.7	45,300	2.3
8.67	11,400	3.1
2.17	3,100	2.7
0.542	963	4.3
0.135	428	6.1
0.00	256	12.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
372	689,000	2.8
93.0	201,000	1.1
23.3	54,200	1.9
5.81	14,000	1.7
1.45	3,740	2.4
0.363	1,200	3.4
0.0908	541	7.5
0.00	319	13.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
515	438,000	5.1
129	131,000	3.2
32.2	35,300	2.3
8.05	9,310	3.8
2.01	2,680	3.4
0.503	956	6.4
0.126	533	9.7
0.00	428	18.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
460	734,000	4.0
115	118,000	2.2
28.8	14,900	2.8
7.19	2,250	7.2
1.80	702	13.0
0.449	305	7.8
0.112	220	8.7
0.00	233	16.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
390	357,000	3.8
97.5	88,200	2.5
24.4	22,700	2.6
6.09	5,750	3.7
1.52	1,730	4.0
0.381	649	6.0
0.0952	382	7.8
0.00	325	14.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047194	2-8°C	28 Feb 2022
Anti-hu IFN- γ Antibody	D0081318	2-8°C	31 Mar 2023
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	D0081126	2-8°C	31 Jan 2022
Anti-hu IL-6 Antibody	D0081311	2-8°C	30 Nov 2022
Anti-hu IL-8 Antibody	D0081142	2-8°C	28 Feb 2022
Anti-hu IL-10 Antibody	D0081211	2-8°C	31 May 2022
Anti-hu IL-12p70 Antibody	D0081161	2-8°C	31 Mar 2022
Anti-hu IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
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	$\leq -10^{\circ}\text{C}$	28 Feb 2022
Diluent 3	M0030092	$\leq -10^{\circ}\text{C}$	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:

	Name	Function	Signature	Date
Review/Approval	Karen Hamilla	Quality		28 JAN 2020