

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: K0081387
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	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	326,000	1.6
345	87,600	1.4
86.3	22,200	1.5
21.6	5,960	2.7
5.39	1,830	5.9
1.35	799	10.0
0.337	601	20.0
0.00	536	19.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
566	1,340,000	1.6
142	371,000	1.6
35.4	96,200	2.5
8.84	25,100	2.3
2.21	6,970	3.3
0.553	2,290	2.9
0.138	1,210	10.0
0.00	971	14.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,180,000	3.4
373	345,000	2.3
93.1	92,600	2.8
23.3	24,000	3.4
5.82	6,480	2.6
1.46	1,950	3.7
0.364	751	6.2
0.00	532	18.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
234	864,000	2.6
58.5	254,000	3.4
14.6	68,900	3.0
3.66	18,200	2.4
0.914	4,690	4.3
0.229	1,470	6.1
0.0571	566	9.6
0.00	316	30.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
767	1,050,000	2.5
192	252,000	2.2
47.9	52,800	1.6
12.0	12,800	1.9
3.00	3,240	2.9
0.749	1,020	3.6
0.187	481	17.0
0.00	295	21.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
555	870,000	1.7
139	225,000	2.8
34.7	57,000	2.0
8.67	14,700	2.2
2.17	3,970	2.4
0.542	1,230	3.6
0.135	558	14.0
0.00	415	26.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
372	681,000	1.7
93.0	202,000	1.8
23.3	54,500	2.0
5.81	14,100	1.0
1.45	3,850	1.9
0.363	1,300	3.6
0.0908	577	8.0
0.00	397	9.6

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
515	359,000	3.6
129	108,000	2.5
32.2	29,500	3.3
8.05	7,720	3.1
2.01	2,100	3.9
0.503	728	4.8
0.126	341	8.4
0.00	225	15.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
460	1,060,000	2.8
115	177,000	1.9
28.8	21,100	1.9
7.19	3,200	2.4
1.80	840	1.9
0.449	318	6.4
0.112	196	15.0
0.00	154	17.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
390	360,000	1.8
97.5	89,000	2.4
24.4	21,600	3.2
6.09	5,540	3.3
1.52	1,650	2.1
0.381	642	4.1
0.0952	407	8.6
0.00	314	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047154	2-8°C	31 Jan 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	D0081305	2-8°C	31 Oct 2022
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-hu IL-6 Antibody	D0081333	2-8°C	31 Jan 2023
Anti-hu IL-8 Antibody	D0081321	2-8°C	31 Dec 2022
Anti-hu IL-10 Antibody	D0081306	2-8°C	31 Oct 2022
Anti-hu IL-12p70 Antibody	D0081307	2-8°C	31 Oct 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 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	M0030090	\leq -10°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		12 DEC 2019