

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: K0081462
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	1550	pg/mL
		Proinflammatory Panel 1 (human) Control 1	546	pg/mL
		Proinflammatory Panel 1 (human) Control 2	167	pg/mL
		Proinflammatory Panel 1 (human) Control 3	32.2	pg/mL
2	IL-1 β	Calibrator	598	pg/mL
		Proinflammatory Panel 1 (human) Control 1	209	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10	pg/mL
3	IL-2	Calibrator	1420	pg/mL
		Proinflammatory Panel 1 (human) Control 1	384	pg/mL
		Proinflammatory Panel 1 (human) Control 2	37.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.96	pg/mL
4	IL-4	Calibrator	256	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.11	pg/mL
5	IL-6	Calibrator	728	pg/mL
		Proinflammatory Panel 1 (human) Control 1	289	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.89	pg/mL
6	IL-8	Calibrator	571	pg/mL
		Proinflammatory Panel 1 (human) Control 1	220	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.42	pg/mL
7	IL-10	Calibrator	374	pg/mL
		Proinflammatory Panel 1 (human) Control 1	135	pg/mL
		Proinflammatory Panel 1 (human) Control 2	24.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.62	pg/mL
8	IL-12p70	Calibrator	493	pg/mL
		Proinflammatory Panel 1 (human) Control 1	158	pg/mL
		Proinflammatory Panel 1 (human) Control 2	31.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.92	pg/mL
9	IL-13	Calibrator	496	pg/mL
		Proinflammatory Panel 1 (human) Control 1	121	pg/mL
		Proinflammatory Panel 1 (human) Control 2	40.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	13.2	pg/mL
10	TNF- α	Calibrator	392	pg/mL
		Proinflammatory Panel 1 (human) Control 1	110	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.37	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
1550	383,000	1.5
388	103,000	1.9
96.9	27,100	2.0
24.2	7,100	1.6
6.05	2,020	2.3
1.51	844	6.2
0.378	518	19.0
0.00	417	22.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
598	1,560,000	1.7
150	436,000	1.9
37.4	117,000	2.0
9.34	30,500	2.5
2.34	8,720	5.9
0.584	3,290	5.3
0.146	1,960	7.5
0.00	1,480	9.5

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1420	1,110,000	2.7
355	313,000	1.7
88.8	86,200	2.4
22.2	22,100	2.7
5.55	6,290	2.0
1.39	2,080	2.8
0.347	1,030	5.7
0.00	622	14.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
256	1,010,000	3.7
64.0	316,000	4.8
16.0	87,600	3.5
4.00	23,000	3.0
1.00	5,830	6.7
0.250	1,730	5.4
0.0625	592	7.5
0.00	238	25.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
728	981,000	2.8
182	234,000	3.4
45.5	50,400	3.4
11.4	11,600	3.2
2.84	3,000	5.2
0.711	972	6.6
0.178	438	12.0
0.00	218	11.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
571	831,000	2.6
143	207,000	2.2
35.7	52,200	2.7
8.92	13,400	1.9
2.23	3,560	3.8
0.558	1,090	3.8
0.139	440	10.0
0.00	213	10.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
374	752,000	1.5
93.5	221,000	1.3
23.4	59,300	2.5
5.84	15,200	2.5
1.46	4,170	1.6
0.365	1,310	2.6
0.0913	581	10.0
0.00	303	8.9

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
493	427,000	5.1
123	130,000	2.5
30.8	35,400	2.9
7.70	9,000	2.8
1.93	2,470	4.1
0.481	809	3.8
0.120	378	5.4
0.00	237	12.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
496	903,000	3.7
124	158,000	2.7
31.0	18,700	4.7
7.75	2,600	4.6
1.94	662	3.5
0.484	268	10.0
0.121	175	10.0
0.00	148	14.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
392	444,000	2.9
98.0	109,000	2.4
24.5	27,600	2.3
6.13	6,860	3.2
1.53	1,990	3.1
0.383	720	4.9
0.0957	375	7.9
0.00	262	7.1


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047248	2-8°C	30 Jun 2022
Anti-hu IFN- γ Antibody	D0081379	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	D0081183	2-8°C	30 Jun 2022
Anti-hu IL-6 Antibody	D0081311	2-8°C	30 Nov 2022
Anti-hu IL-8 Antibody	D0081399	2-8°C	30 Jun 2023
Anti-hu IL-10 Antibody	D0081211	2-8°C	31 May 2022
Anti-hu IL-12p70 Antibody	D0081127	2-8°C	31 Jan 2022
Anti-hu IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
Anti-hu TNF- α Antibody	D0081438	2-8°C	30 Jun 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080231	2-8°C	31 Dec 2024
Diluent 2	M0020109	\leq -10°C	28 Feb 2022
Diluent 3	M0030094	\leq -10°C	31 May 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		27 MAR 2020