

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; K15348-Series; K15346-Series; K15349-Series; K15345-Series

Kit Lot Number: K0081531

Expiration Date: 31 Aug 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	1740	pg/mL
		Proinflammatory Panel 1(human) Control 1	612	pg/mL
		Proinflammatory Panel 1(human) Control 2	164	pg/mL
		Proinflammatory Panel 1(human) Control 3	44.2	pg/mL
2	IL-1 β	Calibrator	636	pg/mL
		Proinflammatory Panel 1(human) Control 1	235	pg/mL
		Proinflammatory Panel 1(human) Control 2	55.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1510	pg/mL
		Proinflammatory Panel 1(human) Control 1	390	pg/mL
		Proinflammatory Panel 1(human) Control 2	39.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.46	pg/mL
4	IL-4	Calibrator	244	pg/mL
		Proinflammatory Panel 1(human) Control 1	94.3	pg/mL
		Proinflammatory Panel 1(human) Control 2	20	pg/mL
		Proinflammatory Panel 1(human) Control 3	2.8	pg/mL
5	IL-6	Calibrator	723	pg/mL
		Proinflammatory Panel 1(human) Control 1	255	pg/mL
		Proinflammatory Panel 1(human) Control 2	47.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	7.83	pg/mL
6	IL-8	Calibrator	612	pg/mL
		Proinflammatory Panel 1(human) Control 1	233	pg/mL
		Proinflammatory Panel 1(human) Control 2	36.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	6.29	pg/mL
7	IL-10	Calibrator	393	pg/mL
		Proinflammatory Panel 1(human) Control 1	134	pg/mL
		Proinflammatory Panel 1(human) Control 2	25.5	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.93	pg/mL
8	IL-12p70	Calibrator	504	pg/mL
		Proinflammatory Panel 1(human) Control 1	177	pg/mL
		Proinflammatory Panel 1(human) Control 2	31.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	6.39	pg/mL
9	IL-13	Calibrator	513	pg/mL
		Proinflammatory Panel 1(human) Control 1	164	pg/mL
		Proinflammatory Panel 1(human) Control 2	45.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	12.1	pg/mL
10	TNF- α	Calibrator	364	pg/mL
		Proinflammatory Panel 1(human) Control 1	96.2	pg/mL
		Proinflammatory Panel 1(human) Control 2	16.9	pg/mL
		Proinflammatory Panel 1(human) Control 3	2.32	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
1740	354,000	1.4
435	98,700	1.7
109	25,300	2.2
27.2	6,660	3.3
6.80	1,880	3.0
1.70	737	4.7
0.425	441	8.2
0.00	326	6.8

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
636	1,410,000	1.6
159	390,000	1.1
39.8	102,000	1.3
9.94	26,500	2.8
2.48	7,940	2.2
0.621	3,190	1.8
0.155	1,970	3.8
0.00	1,530	3.6

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1510	1,000,000	1.5
378	287,000	1.7
94.4	76,900	1.0
23.6	19,800	2.5
5.90	5,290	1.6
1.47	1,580	2.1
0.369	627	2.4
0.00	305	2.4

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
244	841,000	2.3
61.0	262,000	2.6
15.3	73,000	2.6
3.81	19,100	3.2
0.953	4,870	3.0
0.238	1,390	2.8
0.0596	474	7.2
0.00	186	16.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
723	938,000	2.0
181	212,000	2.6
45.2	46,900	1.6
11.3	11,200	2.4
2.82	2,860	2.8
0.706	883	2.7
0.177	370	4.3
0.00	198	8.6

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
612	769,000	2.1
153	199,000	1.6
38.3	50,300	1.6
9.56	12,900	1.6
2.39	3,480	2.1
0.598	1,130	1.8
0.149	527	2.8
0.00	338	5.5

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
393	600,000	1.3
98.3	179,000	1.4
24.6	47,300	1.7
6.14	12,000	2.0
1.54	3,220	1.8
0.384	969	3.2
0.0959	381	5.3
0.00	190	14.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
504	338,000	4.5
126	103,000	3.1
31.5	27,300	2.8
7.88	7,530	2.9
1.97	2,210	6.8
0.492	994	15.0
0.123	564	21.0
0.00	580	30.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
513	745,000	4.1
128	132,000	2.3
32.1	17,900	2.9
8.02	2,930	5.0
2.00	794	5.1
0.501	317	7.2
0.125	208	10.0
0.00	171	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
364	329,000	2.8
91.0	81,900	1.6
22.8	20,800	2.6
5.69	5,350	3.3
1.42	1,550	3.5
0.355	600	3.2
0.0889	349	8.0
0.00	276	9.5

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047374	2-8°C	31 Jan 2023
Anti-hu IFN- γ Antibody	D0081474	2-8°C	30 Nov 2023
Anti-hu IL-1 β Antibody	D0081274	2-8°C	31 Aug 2022
Anti-hu IL-2 Antibody	D0081305	2-8°C	31 Oct 2022
Anti-hu IL-4 Antibody	D0081342	2-8°C	31 May 2023
Anti-hu IL-6 Antibody	D0081514	2-8°C	31 Oct 2023
Anti-hu IL-8 Antibody	D0081399	2-8°C	30 Jun 2023
Anti-hu IL-10 Antibody	D0081496	2-8°C	31 Oct 2023
Anti-hu IL-12p70 Antibody	D0081512	2-8°C	30 Sep 2023
Anti-hu IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
Anti-hu TNF- α Antibody	D0081515	2-8°C	31 Oct 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080265	2-8°C	31 Jul 2025
Diluent 2	M0020113	$\leq$ -10°C	30 Nov 2022
Diluent 3	M0030101	$\leq$ -10°C	31 Dec 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		20 OCT 2020