

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: K0081431

Expiration Date: 28 Feb 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	1500	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	610	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	1360	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	211	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	690	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	612	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	356	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	464	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	509	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	367	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
1500	438,000	1.7
375	120,000	1.8
93.8	30,800	2.1
23.4	7,880	2.8
5.86	2,330	3.6
1.46	923	6.9
0.366	598	15.0
0.00	531	22.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
610	1,720,000	2.8
153	479,000	2.3
38.1	124,000	3.3
9.53	31,800	3.4
2.38	9,010	4.2
0.596	3,220	6.4
0.149	1,630	10.0
0.00	1,160	10.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1360	1,210,000	3.6
340	347,000	2.1
85.0	95,300	2.8
21.3	24,300	3.0
5.31	6,920	3.1
1.33	2,320	3.3
0.332	1,160	6.5
0.00	769	12.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
211	913,000	3.1
52.8	280,000	3.1
13.2	73,600	3.5
3.30	19,000	2.8
0.824	4,990	3.7
0.206	1,600	5.9
0.0515	691	19.0
0.00	432	30.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
690	1,010,000	1.9
173	227,000	3.6
43.1	47,500	3.8
10.8	10,600	5.2
2.70	2,910	3.5
0.674	938	6.5
0.168	424	12.0
0.00	284	19.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
612	999,000	3.0
153	249,000	2.4
38.3	62,600	2.9
9.56	15,300	2.6
2.39	4,170	3.0
0.598	1,210	3.6
0.149	495	11.0
0.00	281	15.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
356	817,000	1.2
89.0	242,000	1.4
22.3	65,000	1.7
5.56	16,300	2.0
1.39	4,520	2.1
0.348	1,430	4.7
0.0869	615	10.0
0.00	368	19.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
464	394,000	3.9
116	119,000	3.6
29.0	31,800	4.1
7.25	7,980	4.3
1.81	2,300	5.4
0.453	892	7.6
0.113	490	17.0
0.00	375	19.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
509	1,100,000	3.0
127	194,000	2.5
31.8	24,000	3.0
7.95	3,430	3.6
1.99	947	3.8
0.497	386	10.0
0.124	243	7.5
0.00	207	11.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
367	405,000	3.1
91.8	101,000	3.3
22.9	25,200	3.0
5.73	6,310	3.2
1.43	1,930	3.2
0.358	746	4.5
0.0896	434	8.6
0.00	366	15.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047271	2-8°C	31 Jul 2022
Anti-hu IFN- γ Antibody	D0081426	2-8°C	30 Jun 2023
Anti-hu IL-1 β Antibody	D0081274	2-8°C	31 Aug 2022
Anti-hu IL-2 Antibody	D0081338	2-8°C	31 Jan 2023
Anti-hu IL-4 Antibody	D0081342	2-8°C	31 May 2023
Anti-hu IL-6 Antibody	D0081398	2-8°C	30 Apr 2023
Anti-hu IL-8 Antibody	D0081399	2-8°C	30 Jun 2023
Anti-hu IL-10 Antibody	D0081437	2-8°C	30 Jun 2023
Anti-hu 12p70 Antibody	D0081307	2-8°C	31 Oct 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	A0080242	2-8°C	31 Mar 2025
Diluent 2	M0020109	$\leq$ -10°C	28 Feb 2022
Diluent 3	M0030096	$\leq$ -10°C	30 Jun 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 APR 2020