

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: K0081499
Expiration Date: 31 Oct 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	1560	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	583	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	1250	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	213	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	663	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	575	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	346	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	447	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	466	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	338	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
1560	377,000	1.7
390	104,000	2.5
97.5	26,400	2.1
24.4	6,640	3.1
6.09	1,860	2.3
1.52	652	6.8
0.381	350	7.5
0.00	302	12.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
583	1,760,000	1.8
146	477,000	1.3
36.4	123,000	1.4
9.11	31,500	1.8
2.28	8,970	2.3
0.569	3,370	2.2
0.142	1,930	2.4
0.00	1,500	5.4

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1250	1,140,000	1.8
313	322,000	2.1
78.1	85,500	2.1
19.5	21,700	3.1
4.88	5,750	2.6
1.22	1,700	2.1
0.305	697	6.6
0.00	345	12.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
213	852,000	3.6
53.3	267,000	3.2
13.3	70,600	3.3
3.33	18,100	4.4
0.832	4,680	3.6
0.208	1,390	4.3
0.0520	566	11.0
0.00	265	19.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
663	1,160,000	2.5
166	271,000	2.1
41.4	54,900	4.0
10.4	12,600	4.1
2.59	3,260	5.3
0.647	968	4.8
0.162	389	7.5
0.00	209	21.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
575	1,000,000	2.0
144	253,000	1.4
35.9	61,700	2.0
8.98	15,300	3.0
2.25	4,140	1.8
0.562	1,280	2.0
0.140	558	5.7
0.00	316	9.3

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
346	694,000	2.3
86.5	206,000	1.5
21.6	53,400	1.9
5.41	13,400	1.7
1.35	3,560	2.1
0.338	1,050	3.4
0.0845	452	9.6
0.00	215	15.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
447	399,000	4.9
112	119,000	2.9
27.9	31,300	2.8
6.98	7,850	4.6
1.75	2,170	2.9
0.437	690	4.0
0.109	324	10.0
0.00	214	14.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
466	772,000	3.1
117	127,000	2.2
29.1	14,600	2.7
7.28	1,860	3.1
1.82	525	5.1
0.455	230	9.6
0.114	169	12.0
0.00	153	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
338	406,000	2.1
84.5	100,000	2.3
21.1	24,400	1.7
5.28	5,980	2.2
1.32	1,730	2.5
0.330	618	3.0
0.0825	343	7.5
0.00	246	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047343	2-8°C	30 Nov 2022
Anti-hu IFN- γ Antibody	D0081474	2-8°C	30 Nov 2023
Anti-hu IL-1 β Antibody	D0081495	2-8°C	31 Oct 2023
Anti-hu IL-2 Antibody	D0081510	2-8°C	30 Sep 2023
Anti-hu IL-4 Antibody	D0081513	2-8°C	31 Dec 2023
Anti-hu IL-6 Antibody	D0081514	2-8°C	31 Oct 2023
Anti-hu IL-8 Antibody	D0081511	2-8°C	30 Sep 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	D0081424	2-8°C	31 Jul 2023
Anti-hu TNF- α Antibody	D0081515	2-8°C	31 Oct 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080262	2-8°C	30 Jun 2025
Diluent 2	M0020113	\leq -10°C	30 Nov 2022
Diluent 3	M0030100	\leq -10°C	31 Oct 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		11 AUG 2020