

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: K0081488
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	622	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	1410	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	227	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	684	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	633	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	334	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	468	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	497	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	371	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	456,000	1.5
390	121,000	1.7
97.5	30,800	1.8
24.4	7,770	1.7
6.09	2,180	1.5
1.52	798	3.3
0.381	447	6.6
0.00	317	5.6

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
622	1,820,000	2.4
156	472,000	2.2
38.9	120,000	2.1
9.72	30,500	2.1
2.43	8,580	1.8
0.607	2,960	1.9
0.152	1,570	3.4
0.00	1,050	6.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1410	1,300,000	1.3
353	369,000	2.0
88.1	98,800	2.4
22.0	25,200	2.7
5.51	6,830	1.0
1.38	1,990	1.8
0.344	786	4.3
0.00	364	6.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
227	1,050,000	4.8
56.8	325,000	3.5
14.2	88,600	2.2
3.55	22,000	2.2
0.887	5,650	2.7
0.222	1,570	2.5
0.0554	517	5.6
0.00	161	18.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
684	1,250,000	1.7
171	288,000	2.6
42.8	63,400	2.9
10.7	14,700	3.1
2.67	3,810	3.0
0.668	1,120	3.7
0.167	438	6.6
0.00	224	8.2

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
633	1,020,000	2.3
158	263,000	2.7
39.6	64,000	2.2
9.89	16,200	3.2
2.47	4,360	2.0
0.618	1,380	2.9
0.155	620	4.6
0.00	371	6.7

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
334	715,000	1.1
83.5	205,000	0.9
20.9	53,300	2.0
5.22	13,100	1.7
1.30	3,580	2.0
0.326	1,080	3.1
0.0815	468	5.3
0.00	249	7.2

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
468	482,000	3.3
117	143,000	3.6
29.3	37,700	2.6
7.31	9,660	2.7
1.83	2,700	5.7
0.457	965	5.9
0.114	515	12.0
0.00	376	10.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
497	958,000	1.8
124	165,000	1.2
31.1	22,400	1.4
7.77	3,470	3.2
1.94	937	2.5
0.485	354	4.1
0.121	212	9.1
0.00	176	7.9

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
371	439,000	2.3
92.8	108,000	3.5
23.2	27,000	4.5
5.80	6,760	3.7
1.45	2,030	2.1
0.362	785	5.9
0.0906	463	8.6
0.00	361	11.0

Components:


Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047328	2-8°C	31 Oct 2022
Anti-hu IFN- γ Antibody	D0081379	2-8°C	31 Mar 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	D0081342	2-8°C	31 May 2023
Anti-hu IL-6 Antibody	D0081333	2-8°C	31 Jan 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	D0081486	2-8°C	30 Sep 2023
Proinflammatory Panel 1 (human) Calibrator Blend	A0080255	2-8°C	31 May 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

MSD Wash Buffer (20X), 100mL	Not Kit Specific
Plate Seals	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		29 JUL 2020