

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: K0081349
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	1800	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	IL-1 β	Calibrator	625	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1540	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
4	IL-4	Calibrator	252	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	21.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.4	pg/mL
5	IL-6	Calibrator	774	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	IL-8	Calibrator	635	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	IL-10	Calibrator	414	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	pg/mL
8	IL-12p70	Calibrator	527	pg/mL
		Proinflammatory Panel 1 (human) Control 1	195	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.56	pg/mL
9	IL-13	Calibrator	624	pg/mL
		Proinflammatory Panel 1 (human) Control 1	172	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.6	pg/mL
10	TNF- α	Calibrator	361	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92.5	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.13	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
1800	429,000	1.1
450	117,000	1.9
113	30,100	1.5
28.1	7,860	2.3
7.03	2,210	1.7
1.76	919	4.6
0.439	477	6.0
0.00	452	18.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
625	1,590,000	1.5
156	434,000	1.3
39.1	113,000	1.6
9.77	29,200	1.6
2.44	8,260	1.8
0.610	3,040	2.2
0.153	1,560	4.4
0.00	1,180	6.2

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1540	1,250,000	2.5
385	354,000	1.2
96.3	94,700	2.2
24.1	25,300	2.6
6.02	7,100	2.2
1.50	2,520	3.9
0.376	1,210	4.5
0.00	914	9.5

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
252	942,000	3.9
63.0	284,000	4.0
15.8	78,400	3.4
3.94	20,400	3.4
0.984	5,370	3.5
0.246	1,600	4.8
0.0615	520	6.5
0.00	331	32.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
774	1,100,000	2.7
194	253,000	3.5
48.4	52,900	2.9
12.1	12,200	2.3
3.02	3,160	2.0
0.756	971	4.0
0.189	378	6.1
0.00	235	21.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
635	961,000	1.5
159	241,000	2.1
39.7	61,900	1.5
9.92	15,400	3.0
2.48	4,160	1.3
0.620	1,250	3.5
0.155	493	5.2
0.00	285	18.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
414	803,000	1.5
104	235,000	1.1
25.9	63,500	1.8
6.47	16,200	2.3
1.62	4,440	1.6
0.404	1,420	3.4
0.101	590	6.0
0.00	354	14.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
527	384,000	4.2
132	116,000	2.8
32.9	31,700	2.0
8.23	8,260	3.2
2.06	2,330	3.9
0.515	816	3.5
0.129	405	6.8
0.00	278	8.3

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
624	1,100,000	3.4
156	202,000	2.3
39.0	23,700	2.3
9.75	3,120	2.6
2.44	786	4.1
0.609	309	8.5
0.152	200	11.0
0.00	168	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
361	341,000	2.5
90.3	83,300	1.9
22.6	20,500	2.3
5.64	5,210	3.7
1.41	1,560	3.2
0.353	611	4.8
0.0881	346	7.1
0.00	273	10.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047202	2-8°C	31 Mar 2022
Anti-hu IFN- γ Antibody	D0081318	2-8°C	31 Mar 2023
Anti-hu IL-1 β Antibody	D0081319	2-8°C	31 Dec 2022
Anti-hu IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-hu IL-4 Antibody	D0081133	2-8°C	28 Feb 2022
Anti-hu IL-6 Antibody	D0081333	2-8°C	31 Jan 2023
Anti-hu IL-8 Antibody	D0081255	2-8°C	31 Jul 2022
Anti-hu IL-10 Antibody	D0081343	2-8°C	31 Jan 2023
Anti-hu 12p70 Antibody	D0081339	2-8°C	31 Jan 2023
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	A0080239	2-8°C	31 Oct 2024
Diluent 2	M0020109	\leq -10°C	28 Feb 2022
Diluent 3	M0030092	\leq -10°C	31 Mar 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		26 FEB 2020