

CERTIFICATE OF ANALYSIS

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Product Description: V-Plex® and V-Plex Plus Proinflammatory Panel 1 (human) Kit
Kit Catalog Numbers: K15348-Series, K15346-Series, K15349-Series, K15056-Series, K151OD-Series, K15053-Series, K15345-Series, K151QR-Series, K15052-Series, K15049-Series
Kit Lot Number: K0081481
Expiration Date: 30 Jun 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	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	622	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	1410	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	227	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	684	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	633	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	334	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	468	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	497	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	371	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
1560	399,000	1.8
390	107,000	1.7
97.5	27,700	2.2
24.4	7,280	2.3
6.09	2,150	2.7
1.52	837	8.2
0.381	478	11.0
0.00	346	13.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
622	1,810,000	2.3
156	501,000	2.0
38.9	132,000	2.1
9.72	34,700	2.3
2.43	10,200	2.6
0.607	3,900	3.1
0.152	2,200	4.5
0.00	1,610	4.1

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1410	1,280,000	1.7
353	361,000	1.7
88.1	101,000	3.8
22.0	26,400	2.8
5.51	7,390	2.5
1.38	2,250	3.0
0.344	944	4.7
0.00	452	7.3

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
227	956,000	3.9
56.8	289,000	3.2
14.2	80,800	3.8
3.55	20,700	4.2
0.887	5,640	3.8
0.222	1,610	5.6
0.0554	582	8.4
0.00	206	20.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
684	996,000	3.1
171	221,000	2.2
42.8	48,900	3.6
10.7	11,600	3.0
2.67	3,180	3.3
0.668	976	4.9
0.167	440	9.8
0.00	209	12.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
633	954,000	3.9
158	242,000	2.4
39.6	61,900	4.9
9.89	15,800	2.6
2.47	4,330	3.6
0.618	1,270	3.5
0.155	503	10.0
0.00	185	14.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
334	728,000	2.1
83.5	212,000	1.3
20.9	56,300	3.3
5.22	14,700	3.1
1.30	4,010	2.1
0.326	1,250	2.8
0.0815	528	6.5
0.00	253	14.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
468	364,000	3.9
117	111,000	2.9
29.3	30,400	2.6
7.31	8,130	2.8
1.83	2,390	4.9
0.457	907	6.4
0.114	553	12.0
0.00	329	19.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
497	803,000	3.1
124	130,000	2.4
31.1	16,700	4.9
7.77	2,500	3.8
1.94	781	4.4
0.485	338	8.2
0.121	229	7.4
0.00	188	13.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
371	391,000	3.1
92.8	95,300	2.6
23.2	24,800	5.4
5.80	6,310	2.9
1.45	1,910	3.6
0.362	673	4.2
0.0906	367	6.5
0.00	246	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047321	2-8°C	30 Sep 2022
Anti-hu IFN- γ Antibody	D0081474	2-8°C	30 Nov 2023
Anti-hu IL-1 β Antibody	D0081380	2-8°C	31 Mar 2023
Anti-hu IL-2 Antibody	D0081338	2-8°C	31 Jan 2023
Anti-hu IL-4 Antibody	D0081183	2-8°C	30 Jun 2022
Anti-hu IL-6 Antibody	D0081420	2-8°C	30 Apr 2023
Anti-hu IL-8 Antibody	D0081453	2-8°C	31 Jul 2023
Anti-hu IL-10 Antibody	D0081437	2-8°C	30 Jun 2023
Anti-hu IL-12p70 Antibody	D0081339	2-8°C	31 Jan 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	M0020112	\leq -10°C	31 Jul 2022
Diluent 3	M0030097	\leq -10°C	31 Aug 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), 100 mL	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		21 JUL 2020