

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: K0081484

Expiration Date: 31 Jul 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	396,000	1.6
390	107,000	2.2
97.5	27,300	2.5
24.4	7,070	3.3
6.09	2,100	2.4
1.52	769	4.0
0.381	430	8.8
0.00	339	5.4

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
622	1,760,000	1.5
156	487,000	1.4
38.9	125,000	1.9
9.72	32,000	2.0
2.43	9,680	2.3
0.607	3,390	3.1
0.152	1,860	3.2
0.00	1,370	3.7

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1410	1,180,000	1.4
353	333,000	1.7
88.1	89,900	2.0
22.0	23,000	1.8
5.51	6,630	2.2
1.38	1,950	2.4
0.344	768	3.8
0.00	390	6.5

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
227	926,000	1.9
56.8	273,000	2.3
14.2	73,100	2.2
3.55	18,600	2.6
0.887	5,100	2.5
0.222	1,470	3.4
0.0554	549	5.5
0.00	233	14.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
684	934,000	2.3
171	207,000	2.0
42.8	44,800	2.4
10.7	10,600	2.8
2.67	2,950	2.1
0.668	917	4.2
0.167	382	5.2
0.00	218	11.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
633	1,000,000	2.4
158	261,000	1.3
39.6	64,900	2.0
9.89	16,600	2.4
2.47	4,580	2.5
0.618	1,330	2.4
0.155	501	4.9
0.00	247	9.4

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
334	655,000	1.0
83.5	191,000	1.2
20.9	49,600	1.5
5.22	12,600	1.8
1.30	3,630	1.0
0.326	1,130	2.7
0.0815	497	4.1
0.00	317	7.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
468	363,000	4.1
117	111,000	2.4
29.3	29,600	3.4
7.31	7,810	2.8
1.83	2,330	3.9
0.457	807	5.9
0.114	396	14.0
0.00	255	6.5

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
497	865,000	3.5
124	143,000	2.4
31.1	19,100	2.7
7.77	3,090	4.5
1.94	944	4.1
0.485	385	6.3
0.121	246	8.7
0.00	206	9.5

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
371	409,000	2.4
92.8	101,000	2.8
23.2	25,300	2.7
5.80	6,410	3.2
1.45	2,010	2.5
0.362	745	3.6
0.0906	433	4.0
0.00	343	6.3

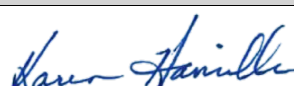
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047323	2-8°C	31 Oct 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	D0081338	2-8°C	31 Jan 2023
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 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	D0081496	2-8°C	31 Oct 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), 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		28 AUG 2020