

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: K0081305
Expiration Date: 30 Jun 2021

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	1600	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	552	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	1460	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	260	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	743	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	554	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	365	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	552	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	472	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	332	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
1600	349,000	1.4
400	94,600	1.6
100	24,000	3.0
25.0	6,160	2.5
6.25	1,780	3.0
1.56	700	6.9
0.391	410	12.0
0.00	306	7.7

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
552	1,320,000	1.7
138	358,000	1.7
34.5	93,700	3.8
8.63	23,300	1.6
2.16	6,580	6.6
0.539	2,050	3.0
0.135	956	3.7
0.00	597	4.6

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1460	1,200,000	2.2
365	346,000	1.8
91.3	94,900	2.0
22.8	24,200	1.9
5.70	6,560	2.7
1.43	1,790	2.1
0.356	676	4.6
0.00	248	6.5

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
260	909,000	2.5
65.0	282,000	1.2
16.3	77,800	3.1
4.06	20,100	4.0
1.02	5,090	2.5
0.254	1,430	2.5
0.0635	507	5.9
0.00	211	20.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
743	1,270,000	2.0
186	310,000	1.1
46.4	71,100	1.5
11.6	16,700	2.1
2.90	4,360	2.2
0.726	1,220	2.2
0.181	460	4.2
0.00	196	6.1

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
554	750,000	2.4
139	197,000	1.9
34.6	50,100	1.0
8.66	12,700	1.8
2.16	3,440	1.9
0.541	1,010	2.6
0.135	411	3.6
0.00	210	8.7

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
365	637,000	1.6
91.3	186,000	1.5
22.8	49,800	1.5
5.70	12,700	1.4
1.43	3,450	1.2
0.356	1,080	3.2
0.0891	493	4.2
0.00	282	7.6

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
552	366,000	3.3
138	112,000	1.0
34.5	30,400	1.9
8.63	7,910	4.7
2.16	2,240	4.9
0.539	800	7.4
0.135	461	13.0
0.00	409	15.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
472	1,030,000	1.7
118	182,000	1.4
29.5	25,400	1.3
7.38	4,100	1.6
1.84	1,060	2.5
0.461	362	7.2
0.115	198	7.6
0.00	143	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
332	280,000	2.4
83.0	68,500	3.5
20.8	17,500	2.1
5.19	4,370	3.1
1.30	1,370	3.9
0.324	574	4.2
0.0811	364	5.4
0.00	297	9.1


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047096	2-8°C	31 Oct 2021
Anti-hu IFN- γ Antibody	D0081254	2-8°C	31 Jul 2022
Anti-hu IL-1 β Antibody	D0081274	2-8°C	31 Aug 2022
Anti-hu IL-2 Antibody	D0081209	2-8°C	31 May 2022
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-hu IL-6 Antibody	D0081210	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081168	2-8°C	30 Apr 2022
Anti-hu IL-10 Antibody	D0081211	2-8°C	31 May 2022
Anti-hu IL-12p70 Antibody	D0081307	2-8°C	31 Oct 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081228	2-8°C	31 May 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080208	2-8°C	30 Apr 2024
Diluent 2	M0020104	\leq -10°C	30 Jun 2021
Diluent 3	M0030089	\leq -10°C	30 Sep 2021
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		27 SEP 2019