

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1(human) Kit

Kit Catalog Numbers: K15049D-Series, K0015052-Series, K0015053-Series

Kit Lot Number: K0081072

Expiration Date: 31 Jan 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	hu IFN- γ	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	hu IL-1 β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	hu IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	hu IL-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	hu IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	hu IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	hu IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	hu IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	hu IL-13	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	hu 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	hu IFN- γ	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	hu IL-1 β	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	hu IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	hu IL-4	0.218	80% - 120%	< 20%	158	80% - 120%	< 20%
5	hu IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	hu IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	hu IL-10	0.298	80% - 120%	< 20%	233	80% - 120%	< 20%
8	hu IL-12p70	1.22	80% - 120%	< 20%	315	80% - 120%	< 20%
9	hu IL-13	4.21	80% - 120%	< 20%	353	80% - 120%	< 20%
10	hu TNF- α	0.690	80% - 120%	< 20%	248	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	hu IFN- γ	< 1.0%
2	hu IL-1 β	< 1.0%
3	hu IL-2	< 1.0%
4	hu IL-4	< 1.0%
5	hu IL-6	< 1.0%
6	hu IL-8	< 1.0%
7	hu IL-10	< 1.0%
8	hu IL-12p70	< 1.0%
9	hu IL-13	< 1.0%
10	hu TNF- α	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IFN- γ	Calibrator	1230	pg/mL
		Proinflammatory Panel 1(human) Control 1	512	pg/mL
		Proinflammatory Panel 1(human) Control 2	132	pg/mL
		Proinflammatory Panel 1(human) Control 3	40.9	pg/mL
2	hu IL-1 β	Calibrator	599	pg/mL
		Proinflammatory Panel 1(human) Control 1	203	pg/mL
		Proinflammatory Panel 1(human) Control 2	47.1	pg/mL
		Proinflammatory Panel 1(human) Control 3	10.9	pg/mL
3	hu IL-2	Calibrator	1450	pg/mL
		Proinflammatory Panel 1(human) Control 1	390	pg/mL
		Proinflammatory Panel 1(human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.34	pg/mL
4	hu IL-4	Calibrator	242	pg/mL
		Proinflammatory Panel 1(human) Control 1	102	pg/mL
		Proinflammatory Panel 1(human) Control 2	20	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.05	pg/mL
5	hu IL-6	Calibrator	768	pg/mL
		Proinflammatory Panel 1(human) Control 1	264	pg/mL
		Proinflammatory Panel 1(human) Control 2	46.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	8.18	pg/mL
6	hu IL-8	Calibrator	628	pg/mL
		Proinflammatory Panel 1(human) Control 1	235	pg/mL
		Proinflammatory Panel 1(human) Control 2	36.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	5.93	pg/mL
7	hu IL-10	Calibrator	356	pg/mL
		Proinflammatory Panel 1(human) Control 1	133	pg/mL
		Proinflammatory Panel 1(human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1(human) Control 3	3.32	pg/mL
8	hu IL-12p70	Calibrator	541	pg/mL
		Proinflammatory Panel 1(human) Control 1	186	pg/mL
		Proinflammatory Panel 1(human) Control 2	35.6	pg/mL
		Proinflammatory Panel 1(human) Control 3	6.99	pg/mL
9	hu IL-13	Calibrator	475	pg/mL
		Proinflammatory Panel 1(human) Control 1	170	pg/mL
		Proinflammatory Panel 1(human) Control 2	43.8	pg/mL
		Proinflammatory Panel 1(human) Control 3	12.7	pg/mL
10	hu TNF- α	Calibrator	382	pg/mL
		Proinflammatory Panel 1(human) Control 1	92	pg/mL
		Proinflammatory Panel 1(human) Control 2	17.2	pg/mL
		Proinflammatory Panel 1(human) Control 3	2.53	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

hu IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1230	193,000	2.2
308	50,700	2.0
76.9	13,200	2.3
19.2	3,540	1.9
4.80	1,300	3.6
1.20	772	4.6
0.300	610	2.9
0.00	562	5.2

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
599	1,570,000	2.4
150	417,000	3.0
37.4	107,000	2.1
9.36	26,700	3.0
2.34	7,640	2.6
0.585	2,810	2.6
0.146	1,610	2.9
0.00	1,190	5.9

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1450	1,310,000	3.2
363	381,000	2.5
90.6	104,000	2.1
22.7	26,100	3.0
5.66	7,320	3.0
1.42	2,360	3.5
0.354	1,140	4.3
0.00	711	6.2

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
242	840,000	3.2
60.5	259,000	4.0
15.1	69,800	2.6
3.78	17,900	3.6
0.945	4,470	3.2
0.236	1,320	3.8
0.0591	482	4.8
0.00	206	11.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
768	1,450,000	2.0
192	350,000	1.9
48.0	77,800	1.5
12.0	18,200	2.6
3.00	4,550	2.1
0.750	1,300	2.7
0.188	502	4.4
0.00	216	8.4

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
628	793,000	3.0
157	205,000	4.3
39.3	51,100	3.4
9.81	12,800	3.5
2.45	3,580	2.8
0.613	1,150	3.2
0.153	541	4.4
0.00	345	5.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
356	737,000	2.5
89.0	217,000	1.9
22.3	57,500	2.4
5.56	14,300	2.4
1.39	3,980	2.5
0.348	1,290	2.1
0.0869	625	4.8
0.00	388	5.2

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
541	475,000	2.4
135	143,000	3.0
33.8	39,200	2.0
8.45	10,100	2.6
2.11	2,730	2.7
0.528	970	3.0
0.132	478	7.0
0.00	360	9.5

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
475	1,130,000	2.5
119	201,000	2.4
29.7	27,700	2.6
7.42	4,540	4.4
1.86	1,210	4.6
0.464	433	4.7
0.116	262	7.0
0.00	194	8.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
382	372,000	3.6
95.5	91,600	4.2
23.9	23,600	4.6
5.97	5,800	2.6
1.49	1,840	2.8
0.373	740	4.6
0.0933	466	5.8
0.00	369	7.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1(human) Plate	Z0046894	2-8°C	31 Jan 2021
Anti-hu IFN- γ Antibody	D0081094	2-8°C	30 Nov 2021
Anti-hu IL-1 β Antibody	D0081095	2-8°C	31 Dec 2021
Anti-hu IL-2 Antibody	D0081096	2-8°C	30 Nov 2021
Anti-hu IL-4 Antibody	D0081126	2-8°C	31 Jan 2022
Anti-hu IL-6 Antibody	D0081130	2-8°C	31 Jan 2022
Anti-hu IL-8 Antibody	D0081097	2-8°C	30 Nov 2021
Anti-hu IL-10 Antibody	D0081098	2-8°C	31 Jan 2022
Anti-hu IL-12p70 Antibody	D0081127	2-8°C	31 Jan 2022
Anti-hu IL-13 Antibody	D0081120	2-8°C	31 Jan 2022
Anti-hu TNF- α Antibody	D0081099	2-8°C	30 Nov 2021
Proinflammatory Panel 1(human) Calibrator Blend	A0080176	2-8°C	31 Jul 2023
Diluent 2	M0020102	\leq -10°C	28 Feb 2021
Diluent 3	M0030084	\leq -10°C	31 Jan 2021
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
Wash Buffer 20X, 100 mL	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	Dawn Stollar	Quality Assurance		08 OCT 2018