

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (human) Kit
Kit Catalog Numbers: K15049-Series, K15052-Series, K15053-Series
Kit Lot Number: K0081092
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	1250	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	574	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	1380	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	223	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	726	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	555	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	372	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	540	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	535	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	357	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
1250	200,000	2.2
313	52,100	2.6
78.1	13,300	3.4
19.5	3,660	3.1
4.88	1,350	2.0
1.22	790	4.3
0.305	622	4.2
0.00	586	3.8

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
574	1,260,000	2.4
144	342,000	2.1
35.9	88,400	2.6
8.97	22,700	2.7
2.24	6,630	2.8
0.561	2,520	2.6
0.140	1,510	3.5
0.00	1,180	3.8

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1380	1,220,000	2.9
345	342,000	3.0
86.3	94,700	2.4
21.6	24,300	2.9
5.39	6,740	2.4
1.35	2,150	3.8
0.337	1,130	13.0
0.00	684	3.5

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
223	860,000	2.3
55.8	258,000	3.2
13.9	68,700	2.8
3.48	17,700	3.2
0.871	4,390	3.7
0.218	1,310	3.4
0.0544	484	8.2
0.00	218	14.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
726	1,400,000	2.8
182	332,000	2.0
45.4	73,400	2.4
11.3	17,400	3.4
2.84	4,460	1.7
0.709	1,230	2.3
0.177	443	6.1
0.00	182	11.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
555	648,000	2.5
139	170,000	2.5
34.7	43,100	2.6
8.67	11,000	2.5
2.17	3,080	1.9
0.542	1,050	3.1
0.135	527	4.0
0.00	362	6.6

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
372	753,000	1.4
93.0	222,000	2.1
23.3	58,200	3.1
5.81	14,700	3.0
1.45	4,080	2.2
0.363	1,290	3.6
0.0908	611	6.3
0.00	403	12.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
540	482,000	2.8
135	145,000	2.6
33.8	38,600	3.3
8.44	10,100	4.1
2.11	2,810	4.2
0.527	981	5.2
0.132	514	7.3
0.00	377	11.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
535	1,260,000	1.8
134	222,000	1.7
33.4	31,200	2.1
8.36	5,230	3.3
2.09	1,430	3.6
0.522	527	8.3
0.131	304	9.0
0.00	250	16.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
357	319,000	4.7
89.3	76,700	4.6
22.3	20,400	5.4
5.58	5,120	3.8
1.39	1,680	2.4
0.349	752	4.3
0.0872	537	12.0
0.00	435	8.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046917	2-8°C	28 Feb 2021
Anti-hu IFN- γ Antibody	D0081132	2-8°C	28 Feb 2022
Anti-hu IL-1 β Antibody	D0081091	2-8°C	31 Oct 2021
Anti-hu IL-2 Antibody	D0081129	2-8°C	31 Jan 2022
Anti-hu IL-4 Antibody	D0081133	2-8°C	28 Feb 2022
Anti-hu IL-6 Antibody	D0081130	2-8°C	31 Jan 2022
Anti-hu IL-8 Antibody	D0081142	2-8°C	28 Feb 2022
Anti-hu IL-10 Antibody	D0081098	2-8°C	31 Jan 2022
Anti-hu IL-12p70 Antibody	D0081161	2-8°C	31 Mar 2022
Anti-hu IL-13 Antibody	D0081120	2-8°C	31 Jan 2022
Anti-hu TNF- α Antibody	D0081131	2-8°C	31 Jan 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080180	2-8°C	30 Sep 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	
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	Dawn Stollar	Quality Assurance		07 NOV 2018