

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: K0081127
Expiration Date: 28 Feb 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	1280	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	554	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	1440	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	218	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	742	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	545	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	378	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	549	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	529	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	349	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
1280	214,000	2.1
320	55,400	1.3
80.0	13,900	2.6
20.0	3,730	5.5
5.00	1,200	2.8
1.25	593	4.5
0.313	418	5.4
0.00	376	7.7

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
554	1,550,000	2.3
139	431,000	1.8
34.6	111,000	2.7
8.66	28,800	2.2
2.16	8,360	4.3
0.541	3,200	2.7
0.135	1,880	3.9
0.00	1,460	5.1

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1440	1,140,000	14.0
360	321,000	11.0
90.0	86,700	9.4
22.5	21,900	8.2
5.63	6,140	13.0
1.41	1,810	10.0
0.352	785	12.0
0.00	400	3.7

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
218	824,000	4.3
54.5	244,000	4.1
13.6	66,400	3.1
3.41	16,600	2.3
0.852	4,380	4.9
0.213	1,240	3.5
0.0532	446	5.3
0.00	191	13.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
742	1,310,000	2.1
186	305,000	2.6
46.4	64,900	1.6
11.6	15,100	2.3
2.90	3,910	2.2
0.725	1,110	3.5
0.181	431	5.2
0.00	225	8.9

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
545	715,000	2.4
136	180,000	4.2
34.1	45,100	2.6
8.52	11,200	3.1
2.13	3,090	2.9
0.532	959	6.7
0.133	428	4.5
0.00	244	9.9

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
378	783,000	2.9
94.5	232,000	3.0
23.6	60,800	2.8
5.91	15,700	2.6
1.48	4,210	3.1
0.369	1,350	3.1
0.0923	597	5.2
0.00	375	8.2

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
549	462,000	1.9
137	139,000	2.2
34.3	36,500	2.5
8.58	9,690	3.8
2.14	2,610	3.3
0.536	900	3.3
0.134	433	9.1
0.00	330	15.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
529	1,210,000	2.1
132	215,000	2.9
33.1	29,100	2.4
8.27	4,690	7.1
2.07	1,210	3.4
0.517	458	9.6
0.129	274	7.9
0.00	213	10.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
349	343,000	4.0
87.3	85,600	5.6
21.8	21,700	4.2
5.45	5,610	6.7
1.36	1,660	2.7
0.341	687	6.0
0.0852	438	7.1
0.00	351	11.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046998	2-8°C	30 Jun 2021
Anti-hu IFN- γ Antibody	D0081132	2-8°C	28 Feb 2022
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081129	2-8°C	31 Jan 2022
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	D0081142	2-8°C	28 Feb 2022
Anti-hu IL-10 Antibody	D0081134	2-8°C	31 Mar 2022
Anti-hu IL-12p70 Antibody	D0081161	2-8°C	31 Mar 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081170	2-8°C	28 Feb 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080186	2-8°C	30 Nov 2023
Diluent 2	M0020103	\leq -10°C	31 Mar 2021
Diluent 3	M0030085	\leq -10°C	28 Feb 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		25 FEB 2019