

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: K0080859

Expiration Date: 31 May 2019

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	7.47	80% - 120%	< 20%	938	80% - 120%	< 20%
2	hu IL-1 β	2.14	80% - 120%	< 20%	375	80% - 120%	< 20%
3	hu IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	hu IL-4	0.450	80% - 120%	< 20%	158	80% - 120%	< 20%
5	hu IL-6	1.58	80% - 120%	< 20%	488	80% - 120%	< 20%
6	hu IL-8	1.13	80% - 120%	< 20%	375	80% - 120%	< 20%
7	hu IL-10	0.680	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	1360	pg/mL
		Proinflammatory Panel 1 (human) Control 1	682	pg/mL
		Proinflammatory Panel 1 (human) Control 2	183	pg/mL
		Proinflammatory Panel 1 (human) Control 3	52.3	pg/mL
2	hu IL-1 β	Calibrator	561	pg/mL
		Proinflammatory Panel 1 (human) Control 1	215	pg/mL
		Proinflammatory Panel 1 (human) Control 2	52	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11	pg/mL
3	hu IL-2	Calibrator	1430	pg/mL
		Proinflammatory Panel 1 (human) Control 1	431	pg/mL
		Proinflammatory Panel 1 (human) Control 2	42.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.83	pg/mL
4	hu IL-4	Calibrator	244	pg/mL
		Proinflammatory Panel 1 (human) Control 1	101	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.88	pg/mL
5	hu IL-6	Calibrator	697	pg/mL
		Proinflammatory Panel 1 (human) Control 1	275	pg/mL
		Proinflammatory Panel 1 (human) Control 2	50.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	9.03	pg/mL
6	hu IL-8	Calibrator	576	pg/mL
		Proinflammatory Panel 1 (human) Control 1	223	pg/mL
		Proinflammatory Panel 1 (human) Control 2	40.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.91	pg/mL
7	hu IL-10	Calibrator	359	pg/mL
		Proinflammatory Panel 1 (human) Control 1	133	pg/mL
		Proinflammatory Panel 1 (human) Control 2	27.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.61	pg/mL
8	hu IL-12p70	Calibrator	482	pg/mL
		Proinflammatory Panel 1 (human) Control 1	168	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.12	pg/mL
9	hu IL-13	Calibrator	478	pg/mL
		Proinflammatory Panel 1 (human) Control 1	150	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.3	pg/mL
10	hu TNF- α	Calibrator	364	pg/mL
		Proinflammatory Panel 1 (human) Control 1	89.6	pg/mL
		Proinflammatory Panel 1 (human) Control 2	18	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.72	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
1360	213,000	1.9
340	55,600	1.6
85.0	13,800	2.8
21.3	3,560	3.5
5.31	1,060	2.5
1.33	481	3.5
0.332	327	7.2
0.00	277	8.1

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
561	1,570,000	2.0
140	412,000	2.4
35.1	103,000	2.9
8.77	25,700	1.9
2.19	7,510	1.9
0.548	3,040	3.1
0.137	1,900	3.7
0.00	1,570	5.3

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1430	1,170,000	2.5
358	333,000	2.4
89.4	89,800	2.6
22.3	22,200	2.8
5.59	6,050	2.1
1.40	1,750	2.4
0.349	718	3.4
0.00	387	8.0

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
244	891,000	2.9
61.0	267,000	4.3
15.3	73,100	6.1
3.81	18,500	5.8
0.953	4,760	2.3
0.238	1,280	4.1
0.0596	435	5.6
0.00	132	15.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
697	1,290,000	3.6
174	299,000	2.6
43.6	64,500	3.4
10.9	15,000	3.8
2.72	3,740	3.0
0.681	1,010	3.0
0.170	366	5.1
0.00	139	13.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
576	616,000	2.5
144	158,000	2.5
36.0	39,900	1.4
9.00	9,590	2.8
2.25	2,680	3.6
0.563	772	3.3
0.141	349	4.8
0.00	251	22.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
359	656,000	2.2
89.8	189,000	2.2
22.4	48,200	2.3
5.61	11,900	2.2
1.40	3,250	2.5
0.351	995	3.6
0.0876	428	6.9
0.00	350	20.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
482	433,000	3.0
121	129,000	2.1
30.1	32,800	4.3
7.53	8,530	3.0
1.88	2,280	3.5
0.471	735	4.3
0.118	349	7.6
0.00	255	19.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
478	681,000	3.5
120	119,000	2.5
29.9	15,800	2.9
7.47	2,320	4.7
1.87	642	4.5
0.467	243	6.3
0.117	170	14.0
0.00	204	26.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
364	343,000	2.6
91.0	83,700	3.4
22.8	20,900	2.7
5.69	5,060	4.8
1.42	1,660	4.0
0.355	614	5.3
0.0889	467	24.0
0.00	527	21.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046591	2-8°C	31 Jan 2020
Anti-hu IFN- γ Antibody	D0081003	2-8°C	30 Nov 2019
Anti-hu IL-1 β Antibody	D0081004	2-8°C	30 Nov 2019
Anti-hu IL-2 Antibody	D0081011	2-8°C	31 Dec 2019
Anti-hu IL-4 Antibody	D0080917	2-8°C	31 Jul 2019
Anti-hu IL-6 Antibody	D0081006	2-8°C	30 Nov 2019
Anti-hu IL-8 Antibody	D0081012	2-8°C	31 Dec 2019
Anti-hu IL-10 Antibody	D0080869	2-8°C	31 May 2019
Anti-hu IL-12p70 Antibody	D0080921	2-8°C	31 Jul 2019
Anti-hu IL-13 Antibody	D0081009	2-8°C	30 Nov 2019
Anti-hu TNF- α Antibody	D0081002	2-8°C	31 Oct 2019
Proinflammatory Panel 1 (human) Calibrator Blend	A0080145	2-8°C	31 Aug 2022
Diluent 2	M0020096	\leq -10°C	30 Nov 2019
Diluent 3	M0030078	\leq -10°C	31 Jan 2020
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	Dawn Stollar	Quality Assurance	<i>Dawn Stollar</i>	17 OCT 2017