

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: K0081022
Expiration Date: 31 Jan 2020

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	1430	pg/mL
		Proinflammatory Panel 1 (human) Control 1	574	pg/mL
		Proinflammatory Panel 1 (human) Control 2	155	pg/mL
		Proinflammatory Panel 1 (human) Control 3	41.8	pg/mL
2	hu IL-1 β	Calibrator	561	pg/mL
		Proinflammatory Panel 1 (human) Control 1	202	pg/mL
		Proinflammatory Panel 1 (human) Control 2	50.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.7	pg/mL
3	hu IL-2	Calibrator	1430	pg/mL
		Proinflammatory Panel 1 (human) Control 1	400	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.48	pg/mL
4	hu IL-4	Calibrator	227	pg/mL
		Proinflammatory Panel 1 (human) Control 1	100	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.97	pg/mL
5	hu IL-6	Calibrator	750	pg/mL
		Proinflammatory Panel 1 (human) Control 1	264	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.24	pg/mL
6	hu IL-8	Calibrator	616	pg/mL
		Proinflammatory Panel 1 (human) Control 1	233	pg/mL
		Proinflammatory Panel 1 (human) Control 2	36.9	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.93	pg/mL
7	hu IL-10	Calibrator	337	pg/mL
		Proinflammatory Panel 1 (human) Control 1	125	pg/mL
		Proinflammatory Panel 1 (human) Control 2	23.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.47	pg/mL
8	hu IL-12p70	Calibrator	550	pg/mL
		Proinflammatory Panel 1 (human) Control 1	182	pg/mL
		Proinflammatory Panel 1 (human) Control 2	34	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.95	pg/mL
9	hu IL-13	Calibrator	513	pg/mL
		Proinflammatory Panel 1 (human) Control 1	164	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.9	pg/mL
10	hu TNF- α	Calibrator	346	pg/mL
		Proinflammatory Panel 1 (human) Control 1	86.7	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.06	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
1430	250,000	2.1
358	65,500	1.5
89.4	16,400	1.9
22.3	4,130	1.7
5.59	1,340	3.3
1.40	620	4.8
0.349	433	5.8
0.00	360	6.4

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
561	1,180,000	3.3
140	320,000	3.4
35.1	79,600	2.3
8.77	19,700	2.7
2.19	5,530	4.5
0.548	1,880	4.3
0.137	954	7.7
0.00	617	5.6

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1430	1,300,000	2.9
358	365,000	2.2
89.4	98,200	1.7
22.3	24,000	2.1
5.59	6,610	3.3
1.40	1,910	2.4
0.349	823	3.3
0.00	415	5.4

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
227	707,000	2.4
56.8	211,000	2.3
14.2	56,900	2.7
3.55	14,000	3.7
0.887	3,710	3.1
0.222	1,100	4.5
0.0554	442	5.2
0.00	219	9.7

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
750	1,300,000	2.3
188	298,000	2.5
46.9	62,100	2.1
11.7	13,700	1.6
2.93	3,520	2.7
0.732	990	2.7
0.183	358	4.7
0.00	155	10.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
616	1,020,000	3.2
154	249,000	3.7
38.5	58,300	3.2
9.63	14,100	2.5
2.41	3,970	2.9
0.602	1,240	3.0
0.150	566	3.2
0.00	324	7.5

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
337	631,000	2.6
84.3	183,000	2.0
21.1	48,300	2.0
5.27	12,000	2.2
1.32	3,360	1.7
0.329	1,170	2.9
0.0823	631	4.5
0.00	431	7.3

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
550	494,000	1.7
138	145,000	1.6
34.4	38,700	1.7
8.59	9,550	2.6
2.15	2,630	2.8
0.537	875	4.6
0.134	447	9.1
0.00	348	19.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
513	1,410,000	1.2
128	251,000	2.0
32.1	33,900	1.6
8.02	5,130	2.1
2.00	1,310	2.3
0.501	444	5.2
0.125	232	7.9
0.00	166	11.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
346	337,000	3.1
86.5	84,200	2.5
21.6	20,700	2.7
5.41	5,160	2.8
1.35	1,790	3.1
0.338	862	4.1
0.0845	614	4.4
0.00	527	4.9

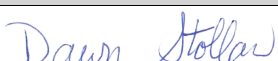
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046843	2-8°C	30 Nov 2020
Anti-hu IFN- γ Antibody	D0081074	2-8°C	31 Aug 2021
Anti-hu IL-1 β Antibody	D0081082	2-8°C	30 Sep 2021
Anti-hu IL-2 Antibody	D0081096	2-8°C	30 Nov 2021
Anti-hu IL-4 Antibody	D0081017	2-8°C	31 Jan 2020
Anti-hu IL-6 Antibody	D0081078	2-8°C	31 Oct 2021
Anti-hu IL-8 Antibody	D0081037	2-8°C	29 Feb 2020
Anti-hu IL-10 Antibody	D0081024	2-8°C	31 Jan 2020
Anti-hu IL-12p70 Antibody	D0081019	2-8°C	31 Jan 2020
Anti-hu IL-13 Antibody	D0081092	2-8°C	31 Oct 2021
Anti-hu TNF- α Antibody	D0081065	2-8°C	30 Jun 2020
Proinflammatory Panel 1 (human) Calibrator Blend	A0080172	2-8°C	30 Jun 2023
Diluent 2	M0020099	\leq -10°C	31 Mar 2020
Diluent 3	M0030082	\leq -10°C	31 Oct 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), 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 AUG 2018