

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: K0080815
Expiration Date: 30 Sep 2018

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	1460	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	573	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	1490	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	260	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	743	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	577	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	366	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	475	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	499	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	368	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
1460	348,000	1.7
365	98,900	2.2
91.3	26,200	1.9
22.8	6,740	1.3
5.70	2,030	3.5
1.43	785	5.4
0.356	469	5.1
0.00	388	16.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
573	1,290,000	2.5
143	348,000	2.5
35.8	90,400	2.1
8.95	22,300	2.0
2.24	6,170	1.9
0.560	1,930	2.6
0.140	866	3.1
0.00	503	8.4

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,180,000	3.1
373	351,000	1.8
93.1	96,200	1.6
23.3	24,100	2.3
5.82	6,470	2.1
1.46	1,840	2.3
0.364	703	4.1
0.00	301	7.7

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
260	843,000	2.1
65.0	263,000	3.1
16.3	74,000	2.2
4.06	18,800	3.3
1.02	4,950	3.2
0.254	1,420	4.1
0.0635	514	6.6
0.00	213	22.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
743	1,420,000	3.0
186	346,000	2.7
46.4	77,300	2.6
11.6	17,200	3.1
2.90	4,440	1.8
0.726	1,240	4.0
0.181	435	6.4
0.00	173	15.0

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
577	664,000	2.2
144	178,000	1.9
36.1	45,200	2.0
9.02	11,100	2.2
2.25	2,970	1.8
0.563	911	3.5
0.141	404	5.7
0.00	235	12.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
366	686,000	1.8
91.5	211,000	1.9
22.9	56,500	1.7
5.72	14,300	1.7
1.43	3,830	1.2
0.357	1,170	2.5
0.0894	499	6.9
0.00	271	14.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
475	397,000	2.9
119	123,000	2.3
29.7	33,400	1.6
7.42	8,730	2.6
1.86	2,570	5.5
0.464	1,010	10.0
0.116	664	19.0
0.00	650	17.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
499	786,000	2.3
125	152,000	2.2
31.2	21,000	3.1
7.80	3,010	3.0
1.95	774	3.9
0.487	308	9.5
0.122	207	14.0
0.00	164	14.0

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
368	375,000	3.7
92.0	94,700	3.8
23.0	24,100	4.0
5.75	5,820	3.1
1.44	1,790	2.0
0.359	748	5.3
0.0898	497	6.8
0.00	398	7.8

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046519	2-8°C	31 Oct 2019
Anti-hu IFN- γ Antibody	D0080914	2-8°C	31 Jul 2019
Anti-hu IL-1 β Antibody	D0080915	2-8°C	31 Jul 2019
Anti-hu IL-2 Antibody	D0080982	2-8°C	31 Oct 2019
Anti-hu IL-4 Antibody	D0080734	2-8°C	31 Oct 2018
Anti-hu IL-6 Antibody	D0080918	2-8°C	31 Jul 2019
Anti-hu IL-8 Antibody	D0080919	2-8°C	31 Jul 2019
Anti-hu IL-10 Antibody	D0080920	2-8°C	31 Jul 2019
Anti-hu IL-12p70 Antibody	D0080721	2-8°C	30 Sep 2018
Anti-hu IL-13 Antibody	D0080922	2-8°C	30 Sep 2019
Anti-hu TNF- α Antibody	D0080923	2-8°C	31 Jul 2019
Proinflammatory Panel 1 (human) Calibrator Blend	A0080133	2-8°C	30 Apr 2022
Diluent 2	M0020095	$\leq$ -10°C	30 Sep 2019
Diluent 3	M0030076	$\leq$ -10°C	30 Sep 2019
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	Vanessa Castleberry	Quality Assurance	<i>Vanessa Castleberry</i>	28JUL2017

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