

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: K0081070

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	1430	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	576	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	1470	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	243	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	764	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	621	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	340	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	542	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	525	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	369	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
1430	224,000	2.1
358	57,800	2.3
89.4	14,800	3.2
22.3	3,990	4.4
5.59	1,380	2.8
1.40	751	4.5
0.349	591	5.2
0.00	531	6.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
576	1,420,000	2.1
144	374,000	1.7
36.0	95,300	1.9
9.00	24,200	2.2
2.25	6,900	5.3
0.563	2,460	2.5
0.141	1,400	5.4
0.00	1,060	4.6

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1470	1,240,000	2.1
368	353,000	2.0
91.9	96,300	2.5
23.0	24,800	2.8
5.74	6,700	3.3
1.44	2,140	2.4
0.359	1,040	3.2
0.00	668	4.1

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
243	897,000	3.2
60.8	268,000	3.4
15.2	72,900	2.4
3.80	18,800	2.8
0.949	4,690	3.4
0.237	1,360	3.2
0.0593	491	4.5
0.00	207	12.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
764	1,360,000	2.1
191	322,000	2.3
47.8	70,400	2.2
11.9	16,500	2.9
2.98	4,120	2.2
0.746	1,160	2.2
0.187	433	4.7
0.00	196	7.7

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
621	743,000	2.6
155	193,000	2.0
38.8	48,800	1.6
9.70	12,400	2.3
2.43	3,430	5.1
0.606	1,090	2.9
0.152	523	4.4
0.00	355	9.9

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
340	677,000	1.7
85.0	200,000	2.2
21.3	52,400	2.9
5.31	13,300	3.2
1.33	3,580	2.5
0.332	1,140	3.0
0.0830	520	5.0
0.00	324	7.3

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
542	474,000	2.9
136	144,000	3.2
33.9	38,500	2.3
8.47	10,100	3.1
2.12	2,720	2.9
0.529	934	4.1
0.132	472	4.7
0.00	337	9.6

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
525	1,160,000	2.1
131	206,000	2.5
32.8	28,800	2.4
8.20	4,680	4.1
2.05	1,210	1.9
0.513	430	3.5
0.128	246	5.4
0.00	190	7.8

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
369	349,000	2.8
92.3	84,900	3.5
23.1	21,400	2.8
5.77	5,370	3.9
1.44	1,670	2.5
0.360	711	4.8
0.0901	467	6.0
0.00	389	6.3


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046911	2-8°C	28 Feb 2021
Anti-hu IFN- γ Antibody	D0081132	2-8°C	28 Feb 2022
Anti-hu IL-1 β Antibody	D0081128	2-8°C	31 Jan 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	D0081098	2-8°C	31 Jan 2022
Anti-hu IL-12p70 Antibody	D0081127	2-8°C	31 Jan 2022
Anti-hu IL-13 Antibody	D0081092	2-8°C	31 Oct 2021
Anti-hu TNF- α Antibody	D0081131	2-8°C	31 Jan 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080178	2-8°C	31 Aug 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		30 OCT 2018