

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: K0081160

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	208,000	1.1
320	52,900	1.7
80.0	13,300	2.5
20.0	3,420	2.5
5.00	1,040	3.6
1.25	454	5.2
0.313	293	4.7
0.00	246	10.0

hu IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
554	1,440,000	1.8
139	393,000	0.9
34.6	99,700	2.7
8.66	25,500	2.2
2.16	6,830	4.9
0.541	2,210	5.0
0.135	996	3.9
0.00	622	3.5

hu IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1440	1,170,000	13.0
360	345,000	5.5
90.0	94,600	4.6
22.5	23,300	10.0
5.63	6,320	3.1
1.41	1,640	6.5
0.352	566	5.6
0.00	197	15.0

hu IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
218	815,000	3.0
54.5	242,000	2.5
13.6	64,600	1.7
3.41	16,200	2.7
0.852	4,230	3.1
0.213	1,170	3.7
0.0532	399	5.5
0.00	143	18.0

hu IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
742	1,360,000	0.9
186	321,000	1.7
46.4	70,400	2.2
11.6	16,500	3.0
2.90	4,130	1.9
0.725	1,130	1.9
0.181	391	4.3
0.00	151	9.1

hu IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
545	830,000	2.1
136	215,000	1.1
34.1	53,600	2.0
8.52	13,500	1.9
2.13	3,490	2.5
0.532	990	2.5
0.133	376	3.5
0.00	158	13.0

hu IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
378	737,000	1.6
94.5	214,000	2.0
23.6	56,300	1.9
5.91	14,000	3.1
1.48	3,770	2.2
0.369	1,090	3.2
0.0923	436	7.2
0.00	228	12.0

hu IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
549	454,000	1.6
137	136,000	1.8
34.3	36,400	2.0
8.58	9,390	2.5
2.14	2,500	3.0
0.536	786	5.3
0.134	338	10.0
0.00	221	13.0

hu IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
529	1,180,000	1.5
132	208,000	1.6
33.1	28,900	2.4
8.27	4,590	3.5
2.07	1,150	2.8
0.517	366	7.0
0.129	191	7.4
0.00	133	9.9

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hu TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
349	305,000	3.3
87.3	77,400	3.1
21.8	19,000	5.1
5.45	4,740	3.9
1.36	1,400	3.1
0.341	554	7.5
0.0852	324	8.8
0.00	239	10.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046987	2-8°C	30 Apr 2021
Anti-hu IFN- γ Antibody	D0081180	2-8°C	31 Mar 2022
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081167	2-8°C	28 Feb 2022
Anti-hu IL-4 Antibody	D0081133	2-8°C	28 Feb 2022
Anti-hu IL-6 Antibody	D0081160	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081168	2-8°C	30 Apr 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), 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		07 FEB 2019