

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (human) Kit
Kit Catalog Numbers: K151QR-Series, K151OD-Series, K15049-Series, K15052-Series, K15053-Series, K15056-Series
Kit Lot Number: K0081195
Expiration Date: 31 Mar 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	IFN- γ	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	IL-1 β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	IL-13	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	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	IFN- γ	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	IL-1 β	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	IL-4	0.218	80% - 120%	< 20%	158	80% - 120%	< 20%
5	IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	IL-10	0.298	80% - 120%	< 20%	233	80% - 120%	< 20%
8	IL-12p70	1.22	80% - 120%	< 20%	315	80% - 120%	< 20%
9	IL-13	4.21	80% - 120%	< 20%	353	80% - 120%	< 20%
10	TNF- α	0.690	80% - 120%	< 20%	248	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	IFN- γ	< 1.0%
2	IL-1 β	< 1.0%
3	IL-2	< 1.0%
4	IL-4	< 1.0%
5	IL-6	< 1.0%
6	IL-8	< 1.0%
7	IL-10	< 1.0%
8	IL-12p70	< 1.0%
9	IL-13	< 1.0%
10	TNF- α	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	1230	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	IL-1 β	Calibrator	576	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1470	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
4	IL-4	Calibrator	208	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	21.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.4	pg/mL
5	IL-6	Calibrator	765	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	IL-8	Calibrator	569	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	IL-10	Calibrator	367	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	pg/mL
8	IL-12p70	Calibrator	528	pg/mL
		Proinflammatory Panel 1 (human) Control 1	195	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.56	pg/mL
9	IL-13	Calibrator	505	pg/mL
		Proinflammatory Panel 1 (human) Control 1	172	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.6	pg/mL
10	TNF- α	Calibrator	347	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92.5	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.13	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
1230	200,000	1.3
308	52,100	2.3
76.9	12,800	4.5
19.2	3,360	4.6
4.80	1,110	4.6
1.20	523	5.6
0.300	347	6.5
0.00	337	12.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
576	1,630,000	2.7
144	447,000	2.7
36.0	114,000	3.0
9.00	29,000	3.6
2.25	7,800	3.0
0.563	2,540	2.5
0.141	1,150	5.0
0.00	744	6.5

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1470	1,280,000	5.5
368	359,000	2.5
91.9	97,100	2.3
23.0	24,500	2.8
5.74	6,550	4.1
1.44	1,760	5.1
0.359	653	5.8
0.00	272	9.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
208	816,000	2.0
52.0	240,000	1.8
13.0	63,900	4.1
3.25	16,400	3.2
0.813	4,110	3.1
0.203	1,140	3.3
0.0508	375	7.2
0.00	152	21.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
765	1,380,000	2.7
191	317,000	3.7
47.8	67,600	3.1
12.0	15,700	5.4
2.99	3,910	2.3
0.747	1,070	1.9
0.187	367	5.6
0.00	151	9.4

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
569	733,000	2.5
142	184,000	3.4
35.6	45,500	1.8
8.89	11,500	3.3
2.22	3,080	3.8
0.556	890	4.0
0.139	358	6.1
0.00	183	9.1

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
367	750,000	1.8
91.8	219,000	1.4
22.9	57,600	1.3
5.73	14,600	1.9
1.43	3,840	1.9
0.358	1,110	3.0
0.0896	454	6.5
0.00	221	11.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
528	449,000	3.5
132	133,000	1.9
33.0	35,500	2.5
8.25	9,160	2.5
2.06	2,420	3.5
0.516	790	6.7
0.129	384	9.7
0.00	287	44.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
505	1,250,000	1.8
126	214,000	2.1
31.6	27,500	2.2
7.89	4,110	3.6
1.97	1,040	3.1
0.493	355	4.6
0.123	193	7.4
0.00	148	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
347	356,000	3.4
86.8	85,800	2.9
21.7	21,300	2.2
5.42	5,250	3.7
1.36	1,500	3.2
0.339	507	4.7
0.0847	267	7.4
0.00	195	9.5


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047045	2-8°C	31 Aug 2021
Anti-hu IFN- γ Antibody	D0081180	2-8°C	31 Mar 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	D0081133	2-8°C	28 Feb 2022
Anti-hu IL-6 Antibody	D0081160	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081142	2-8°C	28 Feb 2022
Anti-hu IL-10 Antibody	D0081134	2-8°C	31 Mar 2022
Anti-hu IL-12p70 Antibody	D0081127	2-8°C	31 Jan 2022
Anti-hu IL-13 Antibody	D0081120	2-8°C	31 Jan 2022
Anti-hu TNF- α Antibody	D0081170	2-8°C	28 Feb 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080187	2-8°C	31 Dec 2023
Diluent 2	M0020103	\leq -10°C	31 Mar 2021
Diluent 3	M0030087	\leq -10°C	30 Jun 2021
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
Wash Buffer (20X), 100 mL	Not Kit Specific
Plate Seals	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		19 APR 2019