

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (mouse) Kit

Kit Catalog Numbers: K15048-Series

Kit Lot Number: K0081175

Expiration Date: 31 May 2021

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (mouse) Control 1		Proinflammatory Panel 1 (mouse) Control 2		Proinflammatory Panel 1 (mouse) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	ms IFN- γ	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
2	ms IL-1 β	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
3	ms IL-2	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
4	ms IL-4	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
5	ms IL-5	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
6	ms IL-6	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
7	ms KC/GRO	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
8	ms IL-10	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
9	ms IL-12p70	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
10	ms TNF- α	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	ms IFN- γ	0.390	75% - 125%	< 25%	570	75% - 125%	< 25%
2	ms IL-1 β	0.720	75% - 125%	< 25%	1030	75% - 125%	< 25%
3	ms IL-2	1.03	75% - 125%	< 25%	1570	75% - 125%	< 25%
4	ms IL-4	0.818	75% - 125%	< 25%	1060	75% - 125%	< 25%
5	ms IL-5	0.302	75% - 125%	< 25%	590	75% - 125%	< 25%
6	ms IL-6	7.61	75% - 125%	< 25%	3140	75% - 125%	< 25%
7	ms KC/GRO	3.29	75% - 125%	< 25%	1230	75% - 125%	< 25%
8	ms IL-10	7.26	75% - 125%	< 25%	2030	75% - 125%	< 25%
9	ms IL-12p70	179	75% - 125%	< 25%	20600	75% - 125%	< 25%
10	ms TNF- α	0.980	75% - 125%	< 25%	403	75% - 125%	< 25%

Acceptance Data/ Non Specific Binding Specifications:

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

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	ms IFN- γ	Calibrator	933	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	467	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	32.2	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	2.15	pg/mL
2	ms IL-1 β	Calibrator	1430	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	741	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	53.8	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	4.48	pg/mL
3	ms IL-2	Calibrator	2420	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	919	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	54.8	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	5.84	pg/mL
4	ms IL-4	Calibrator	1610	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	480	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	62	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	15.9	pg/mL
5	ms IL-5	Calibrator	903	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	368	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	55.5	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	8.58	pg/mL
6	ms IL-6	Calibrator	4730	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	1050	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	167	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	31.5	pg/mL
7	ms KC/GRO	Calibrator	1830	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	695	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	116	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	17.7	pg/mL
8	ms IL-10	Calibrator	3480	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	1160	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	345	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	136	pg/mL
9	ms IL-12p70	Calibrator	32600	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	13500	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	3380	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	806	pg/mL
10	ms TNF- α	Calibrator	629	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	166	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	29.9	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	4.93	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

ms IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
933	560,000	3.7
233	158,000	2.4
58.3	37,700	4.3
14.6	9,640	4.2
3.64	2,480	3.3
0.911	807	5.2
0.228	338	7.0
0.00	148	14.0

ms IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1430	354,000	6.0
358	103,000	4.1
89.4	27,000	5.1
22.3	7,010	5.5
5.59	2,040	4.3
1.40	761	4.6
0.349	426	9.2
0.00	264	8.4

ms IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2420	688,000	7.1
605	176,000	8.8
151	41,900	5.8
37.8	9,350	4.8
9.45	2,730	4.6
2.36	923	6.4
0.591	519	8.4
0.00	258	6.8

ms IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1610	1,050,000	3.2
403	310,000	3.1
101	85,200	2.5
25.2	22,400	2.6
6.29	5,880	1.7
1.57	1,830	4.1
0.393	761	5.2
0.00	286	13.0

ms IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
903	1,220,000	3.1
226	288,000	3.6
56.4	67,500	3.4
14.1	17,000	4.3
3.53	4,390	3.4
0.882	1,310	2.6
0.220	540	4.1
0.00	163	9.9

ms IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
4730	410,000	2.2
1180	90,400	2.3
296	21,400	2.9
73.9	5,420	3.1
18.5	1,600	3.7
4.62	594	3.7
1.15	362	5.0
0.00	219	6.6

ms KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
1830	1,250,000	4.8
458	275,000	3.5
114	57,600	4.0
28.6	13,300	4.5
7.15	3,400	3.6
1.79	987	2.9
0.447	372	7.6
0.00	149	17.0

ms IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
3480	831,000	4.7
870	200,000	3.6
218	48,100	4.0
54.4	12,800	4.4
13.6	3,730	4.5
3.40	1,540	4.7
0.850	943	8.6
0.00	639	8.8

ms IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
32600	670,000	4.1
8150	134,000	3.0
2040	22,500	3.0
509	4,500	4.5
127	1,210	2.9
31.8	418	5.5
7.96	228	10.0
0.00	128	14.0

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ms TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
629	510,000	3.5
157	121,000	2.1
39.3	29,400	2.5
9.83	7,460	4.0
2.46	2,100	2.5
0.614	757	6.9
0.154	398	7.5
0.00	234	9.4


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047001	2-8°C	30 Jun 2021
Anti-ms IFN- γ Antibody	D0081222	2-8°C	31 May 2022
Anti-ms IL-1 β Antibody	D0081223	2-8°C	31 May 2022
Anti-ms IL-2 Antibody	D0081149	2-8°C	28 Feb 2022
Anti-ms IL-4 Antibody	D0081150	2-8°C	28 Feb 2022
Anti-ms IL-5 Antibody	D0081151	2-8°C	30 Apr 2022
Anti-ms IL-6 Antibody	D0081225	2-8°C	31 Jul 2022
Anti-ms KC/GRO Antibody	D0081152	2-8°C	28 Feb 2022
Anti-ms IL-10 Antibody	D0081153	2-8°C	28 Feb 2022
Anti-ms IL-12p70 Antibody	D0081154	2-8°C	30 Apr 2022
Anti-ms TNF- α Antibody	D0081226	2-8°C	31 May 2022
Proinflammatory Panel 1 (mouse) Calibrator Blend	A0080168	2-8°C	31 May 2023
Diluent 41	M0410026	$\leq -10^{\circ}\text{C}$	30 Jun 2021
Diluent 45	M0450025	$\leq -10^{\circ}\text{C}$	31 May 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 (mouse) Control 1	Not Kit Specific
Proinflammatory Panel 1 (mouse) Control 2	Not Kit Specific
Proinflammatory Panel 1 (mouse) 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		29 MAR 2019