

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; K151KW-Series; K152QT-Series; K152QU-Series; K152QS-Series
Kit Lot Number: K0081204
Expiration Date: 30 Jun 2021

Acceptance Data/ Percent Recovery Specifications:

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

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

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-5	< 1.0%
6	IL-6	< 1.0%
7	KC/GRO	< 1.0%
8	IL-10	< 1.0%
9	IL-12p70	< 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	949	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	IL-1 β	Calibrator	1480	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	IL-2	Calibrator	2450	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	IL-4	Calibrator	1570	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	IL-5	Calibrator	892	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	IL-6	Calibrator	4660	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	KC/GRO	Calibrator	2160	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	IL-10	Calibrator	2510	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	IL-12p70	Calibrator	31900	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	TNF- α	Calibrator	577	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:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
949	817,000	3.3
237	229,000	2.3
59.3	54,200	2.8
14.8	13,200	2.7
3.71	3,410	3.7
0.927	944	3.4
0.232	319	7.0
0.00	107	32.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1480	387,000	4.1
370	115,000	4.1
92.5	30,000	3.7
23.1	7,630	4.2
5.78	2,070	4.8
1.45	671	3.9
0.361	328	6.4
0.00	185	20.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2450	729,000	5.4
613	198,000	6.0
153	44,700	4.7
38.3	10,400	4.4
9.57	2,800	5.6
2.39	911	3.4
0.598	440	7.0
0.00	259	18.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1570	1,100,000	2.0
393	327,000	3.0
98.1	88,000	2.2
24.5	22,400	2.3
6.13	5,720	3.5
1.53	1,620	4.4
0.383	570	5.6
0.00	222	18.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
892	1,440,000	1.4
223	325,000	2.0
55.8	74,000	2.2
13.9	17,800	2.4
3.48	4,740	1.9
0.871	1,320	3.2
0.218	470	3.2
0.00	190	17.0

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
4660	415,000	2.1
1170	90,300	4.1
291	21,400	2.2
72.8	5,330	2.4
18.2	1,640	2.8
4.55	620	4.3
1.14	362	4.6
0.00	269	18.0

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2160	1,530,000	3.4
540	348,000	3.2
135	71,300	2.8
33.8	15,600	2.6
8.44	4,010	3.6
2.11	1,090	4.1
0.527	383	6.5
0.00	132	49.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
2510	603,000	2.9
628	144,000	3.2
157	35,700	2.8
39.2	9,400	3.7
9.80	3,280	3.3
2.45	1,750	4.1
0.613	1,340	6.4
0.00	1,260	10.0

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
31900	647,000	2.9
7980	121,000	5.0
1990	19,900	3.4
498	3,730	5.2
125	1,020	2.6
31.2	350	7.1
7.79	195	11.0
0.00	138	33.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
577	628,000	2.1
144	143,000	2.0
36.1	33,500	2.1
9.02	8,300	3.5
2.25	2,370	3.5
0.563	798	5.8
0.141	414	7.4
0.00	289	53.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047042	2-8°C	31 Aug 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	D0081224	2-8°C	31 May 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	A0080197	2-8°C	31 Dec 2023
Diluent 41	M0410026	$\leq -10^{\circ}\text{C}$	30 Jun 2021
Diluent 45	M0450026	$\leq -10^{\circ}\text{C}$	30 Jun 2021
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
MSD Wash Buffer (20X), 100mL	Not Kit Specific
Plate Seals	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		31 MAY 2019