

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, K152QT-Series, K152QU-Series, K152QS-Series

Kit Lot Number: K0081287

Expiration Date: 31 Oct 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	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%

Spot	Name	LLOQ			ULOQ		
		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	1,230,000	4.6
237	398,000	1.9
59.3	105,000	2.3
14.8	26,500	1.5
3.71	6,630	1.5
0.927	1,770	2.9
0.232	527	6.3
0.00	107	20.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1480	632,000	4.6
370	186,000	3.5
92.5	49,900	5.2
23.1	12,200	3.7
5.78	3,290	5.6
1.45	963	3.6
0.361	384	7.3
0.00	184	10.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2450	795,000	4.1
613	230,000	3.0
153	54,800	6.0
38.3	13,700	3.9
9.57	3,520	6.3
2.39	1,110	5.5
0.598	456	7.5
0.00	255	11.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1570	871,000	4.8
393	262,000	1.9
98.1	70,800	2.3
24.5	18,600	2.3
6.13	4,800	3.4
1.53	1,480	3.9
0.383	566	6.3
0.00	293	19.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
892	1,120,000	2.4
223	264,000	2.1
55.8	61,400	3.6
13.9	15,000	3.8
3.48	3,860	3.2
0.871	1,140	3.6
0.218	440	4.1
0.00	212	9.1

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
4660	375,000	3.4
1170	82,600	3.7
291	19,700	3.3
72.8	5,000	3.4
18.2	1,500	3.5
4.55	573	5.0
1.14	342	6.6
0.00	267	8.1

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2160	1,390,000	4.1
540	331,000	2.8
135	68,400	4.3
33.8	14,800	3.1
8.44	3,700	4.6
2.11	1,020	3.9
0.527	358	5.7
0.00	154	16.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
2510	525,000	7.7
628	128,000	4.4
157	31,000	6.3
39.2	8,480	4.3
9.80	2,730	7.3
2.45	1,390	6.5
0.613	1,100	11.0
0.00	967	13.0

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
31900	523,000	3.1
7980	96,900	3.2
1990	16,400	2.9
498	3,260	4.4
125	886	6.0
31.2	339	12.0
7.79	197	26.0
0.00	167	32.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
577	486,000	1.6
144	110,000	2.2
36.1	26,000	2.2
9.02	6,360	4.3
2.25	1,820	3.4
0.563	658	6.6
0.141	356	11.0
0.00	284	19.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047140	2-8°C	31 Jan 2022
Anti-ms IFN- γ Antibody	D0081378	2-8°C	31 Mar 2023
Anti-ms IL-1 β Antibody	D0081358	2-8°C	31 Mar 2023
Anti-ms IL-2 Antibody	D0081345	2-8°C	28 Feb 2023
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	D0081291	2-8°C	31 Mar 2023
Anti-ms IL-12p70 Antibody	D0081154	2-8°C	30 Apr 2022
Anti-ms TNF- α Antibody	D0081292	2-8°C	30 Sep 2022
Proinflammatory Panel 1 (mouse) Calibrator Blend	A0080197	2-8°C	31 Dec 2023
Diluent 41	M0410028	\leq -10°C	31 Oct 2021
Diluent 45	M0450028	\leq -10°C	30 Nov 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 (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	Karen Hamilla	Quality		24 OCT 2019