

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, K152QR-Series, K152QS-Series, K152QT-Series, K152QU-Series, K152QV-Series

Kit Lot Number: K0081381

Expiration Date: 30 Sep 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	764	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	1510	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	2430	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	1660	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	945	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	5120	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	2150	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	2630	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	29800	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	572	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
764	782,000	3.8
191	210,000	2.7
47.8	51,000	3.1
11.9	12,900	2.9
2.98	3,220	2.3
0.746	933	2.1
0.187	316	6.8
0.00	124	12.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1510	557,000	6.0
378	162,000	2.7
94.4	43,100	3.5
23.6	11,100	2.7
5.90	2,930	4.8
1.47	896	4.3
0.369	372	4.4
0.00	211	15.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2430	1,140,000	4.7
608	310,000	2.8
152	79,100	3.0
38.0	18,900	3.8
9.49	5,010	4.3
2.37	1,350	3.8
0.593	468	7.6
0.00	157	29.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1660	1,160,000	3.9
415	337,000	2.9
104	94,700	2.7
25.9	24,000	4.3
6.48	6,360	2.3
1.62	1,790	3.8
0.405	666	7.5
0.00	252	14.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
945	1,280,000	1.9
236	306,000	1.9
59.1	70,700	3.3
14.8	17,300	5.1
3.69	4,510	2.8
0.923	1,250	2.9
0.231	466	16.0
0.00	170	26.0

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
5120	526,000	2.2
1280	113,000	1.8
320	25,900	3.3
80.0	6,390	3.9
20.0	1,880	2.8
5.00	651	2.9
1.25	342	6.6
0.00	298	39.0

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2150	1,920,000	3.1
538	431,000	3.4
134	92,800	2.6
33.6	19,600	3.1
8.40	5,130	4.1
2.10	1,350	3.6
0.525	451	5.9
0.00	158	20.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
2630	879,000	2.7
658	208,000	2.4
164	51,500	2.7
41.1	13,100	3.2
10.3	3,670	3.0
2.57	1,360	4.0
0.642	820	15.0
0.00	691	27.0

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
29800	656,000	2.2
7450	117,000	3.9
1860	18,900	2.6
466	3,490	4.5
116	989	3.8
29.1	348	6.9
7.28	276	33.0
0.00	412	76.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
572	472,000	1.6
143	120,000	2.5
35.8	30,700	1.9
8.94	7,680	4.9
2.23	2,300	4.1
0.559	825	7.1
0.140	444	17.0
0.00	533	39.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047231	2-8°C	31 May 2022
Anti-ms IFN- γ Antibody	D0081086	2-8°C	30 Sep 2021
Anti-ms IL-1 β Antibody	D0081384	2-8°C	31 May 2023
Anti-ms IL-2 Antibody	D0081345	2-8°C	28 Feb 2023
Anti-ms IL-4 Antibody	D0081270	2-8°C	31 Oct 2022
Anti-ms IL-5 Antibody	D0081224	2-8°C	31 May 2022
Anti-ms IL-6 Antibody	D0081322	2-8°C	31 Dec 2022
Anti-ms KC/GRO Antibody	D0081323	2-8°C	28 Feb 2023
Anti-ms IL-10 Antibody	D0081291	2-8°C	31 Mar 2023
Anti-ms IL-12p70 Antibody	D0081272	2-8°C	31 Oct 2022
Anti-ms TNF- α Antibody	D0081359	2-8°C	30 Apr 2023
Proinflammatory Panel 1 (mouse) Calibrator Blend	A0080250	2-8°C	28 Feb 2025
Diluent 41	M0410030	$\leq$ -10°C	31 Mar 2022
Diluent 45	M0450031	$\leq$ -10°C	31 Mar 2022
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		09 MAR 2020