

CERTIFICATE OF ANALYSIS

Page 1 of 4

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: K0081524

Expiration Date: 31 Dec 2022

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	1.50	75% - 125%	< 25%	877	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%

CERTIFICATE OF ANALYSIS

Page 2 of 4

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	764	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	469	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	32	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	2.12	pg/mL
2	IL-1 β	Calibrator	1530	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	722	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	52	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	4.32	pg/mL
3	IL-2	Calibrator	2530	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	908	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	54.5	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	5.57	pg/mL
4	IL-4	Calibrator	1790	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	479	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	62.1	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	14.5	pg/mL
5	IL-5	Calibrator	994	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	356	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	54.2	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	8.3	pg/mL
6	IL-6	Calibrator	5240	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	990	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	152	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	28.9	pg/mL
7	KC/GRO	Calibrator	2020	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	709	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	119	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	17.3	pg/mL
8	IL-10	Calibrator	3540	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	1100	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	331	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	124	pg/mL
9	IL-12p70	Calibrator	32500	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	14400	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	3710	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	822	pg/mL
10	TNF- α	Calibrator	639	pg/mL
		Proinflammatory Panel 1 (mouse) Control 1	158	pg/mL
		Proinflammatory Panel 1 (mouse) Control 2	28.1	pg/mL
		Proinflammatory Panel 1 (mouse) Control 3	4.46	pg/mL

Controls tested may not be the same lot as shipped.

CERTIFICATE OF ANALYSIS

Page 3 of 4

Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
764	1,270,000	3.1
191	378,000	3.6
47.8	94,700	2.8
11.9	23,500	3.0
2.98	6,350	2.9
0.746	1,790	4.8
0.187	603	8.1
0.00	211	29.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1530	509,000	5.0
383	148,000	7.7
95.6	39,100	8.1
23.9	9,930	9.6
5.98	2,900	11.0
1.49	1,060	9.2
0.374	568	12.0
0.00	388	16.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2530	944,000	4.9
633	254,000	6.5
158	60,500	8.6
39.5	14,400	7.9
9.88	3,910	8.7
2.47	1,130	7.8
0.618	457	9.4
0.00	186	19.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1790	1,050,000	2.8
448	318,000	2.8
112	83,700	2.5
28.0	21,800	2.9
6.99	6,060	2.0
1.75	1,940	4.5
0.437	835	8.3
0.00	438	18.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
994	1,200,000	2.5
249	279,000	3.0
62.1	62,900	2.6
15.5	15,000	2.8
3.88	4,220	2.4
0.971	1,280	3.5
0.243	522	5.2
0.00	268	14.0

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
5240	652,000	1.7
1310	155,000	2.2
328	37,800	2.2
81.9	9,370	1.7
20.5	2,690	2.5
5.12	888	3.4
1.28	433	5.9
0.00	267	13.0

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2020	1,910,000	2.7
505	439,000	2.5
126	93,200	2.6
31.6	20,500	3.0
7.89	5,280	3.3
1.97	1,430	4.5
0.493	483	6.5
0.00	153	24.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
3540	686,000	4.2
885	166,000	3.7
221	39,700	4.5
55.3	10,100	4.0
13.8	3,260	3.9
3.46	1,390	5.6
0.864	918	7.3
0.00	684	12.0

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
32500	1,230,000	1.8
8130	291,000	2.4
2030	53,600	2.2
508	10,200	2.2
127	2,670	2.3
31.7	840	4.5
7.93	405	8.2
0.00	235	13.0

CERTIFICATE OF ANALYSIS

Page 4 of 4

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
639	454,000	2.1
160	117,000	3.7
39.9	29,600	2.7
9.98	7,270	3.7
2.50	2,070	2.9
0.624	683	4.3
0.156	337	8.4
0.00	202	14.0

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047367	2-8°C	31 Jan 2023
Anti-ms IFN- γ Antibody	D0081487	2-8°C	31 Oct 2023
Anti-ms IL-1 β Antibody	D0081439	2-8°C	30 Jun 2023
Anti-ms IL-2 Antibody	D0081518	2-8°C	31 Oct 2023
Anti-ms IL-4 Antibody	D0081441	2-8°C	30 Jun 2023
Anti-ms IL-5 Antibody	D0081488	2-8°C	31 Jan 2024
Anti-ms IL-6 Antibody	D0081443	2-8°C	31 Jul 2023
Anti-ms KC/GRO Antibody	D0081444	2-8°C	30 Jun 2023
Anti-ms IL-10 Antibody	D0081445	2-8°C	31 Jan 2024
Anti-ms IL-12p70 Antibody	D0081446	2-8°C	31 Aug 2023
Anti-ms TNF- α Antibody	D0081489	2-8°C	30 Sep 2023
Proinflammatory Panel 1 (mouse) Calibrator Blend	A0080264	2-8°C	31 Jul 2025
Diluent 41	M0410034	$\leq$ -10°C	31 Dec 2022
Diluent 45	M0450035	$\leq$ -10°C	31 Jan 2023
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		20 OCT 2020