

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: K0081521

Expiration Date: 28 Feb 2022

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	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	1510	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	2430	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	1660	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	945	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	5120	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	2150	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	2630	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	29800	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	572	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.

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Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
764	857,000	3.2
191	280,000	2.7
47.8	74,200	3.2
11.9	19,100	3.9
2.98	4,980	5.9
0.746	1,400	3.4
0.187	493	7.4
0.00	243	18.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1510	569,000	5.0
378	168,000	5.9
94.4	43,800	4.7
23.6	11,500	4.4
5.90	3,180	6.3
1.47	1,160	5.3
0.369	593	5.0
0.00	404	5.3

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2430	1,090,000	3.2
608	290,000	2.9
152	76,100	5.2
38.0	17,700	4.7
9.49	4,720	4.8
2.37	1,330	4.3
0.593	497	8.9
0.00	197	19.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1660	1,110,000	2.8
415	326,000	1.6
104	86,400	2.3
25.9	23,200	2.7
6.48	6,110	3.1
1.62	1,980	3.7
0.405	895	6.9
0.00	564	9.7

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
945	1,120,000	1.6
236	249,000	1.7
59.1	56,400	2.8
14.8	13,600	3.0
3.69	3,700	3.6
0.923	1,150	3.0
0.231	504	5.1
0.00	313	10.0

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
5120	467,000	2.9
1280	98,800	2.7
320	22,900	1.7
80.0	5,770	3.0
20.0	1,640	2.8
5.00	643	4.1
1.25	354	5.9
0.00	280	7.3

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2150	1,830,000	2.6
538	420,000	2.4
134	91,700	4.1
33.6	19,900	3.2
8.40	5,270	3.7
2.10	1,410	3.7
0.525	466	8.7
0.00	174	13.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
2630	707,000	6.9
658	164,000	4.4
164	41,000	4.7
41.1	10,400	5.0
10.3	3,080	3.1
2.57	1,210	5.4
0.642	729	5.6
0.00	592	7.7

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
29800	696,000	2.9
7450	142,000	3.0
1860	24,300	5.9
466	4,520	3.3
116	1,200	4.4
29.1	430	5.5
7.28	255	14.0
0.00	175	12.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
572	438,000	2.6
143	112,000	2.6
35.8	28,800	1.7
8.94	7,210	3.5
2.23	2,020	2.6
0.559	685	5.9
0.140	354	6.3
0.00	243	13.0

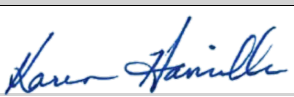
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047263	2-8°C	31 Jul 2022
Anti-ms IFN- γ Antibody	D0081378	2-8°C	31 Mar 2023
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	D0081150	2-8°C	28 Feb 2022
Anti-ms IL-5 Antibody	D0081488	2-8°C	31 Jan 2024
Anti-ms IL-6 Antibody	D0081225	2-8°C	31 Jul 2022
Anti-ms KC/GRO Antibody	D0081323	2-8°C	28 Feb 2023
Anti-ms IL-10 Antibody	D0081445	2-8°C	31 Jan 2024
Anti-ms IL-12p70 Antibody	D0081272	2-8°C	31 Oct 2022
Anti-ms TNF- α Antibody	D0081447	2-8°C	30 Jun 2023
Proinflammatory Panel 1 (mouse) Calibrator Blend	A0080250	2-8°C	28 Feb 2025
Diluent 41	M0410033	$\leq -10^{\circ}\text{C}$	31 Oct 2022
Diluent 45	M0450033	$\leq -10^{\circ}\text{C}$	31 Aug 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	Hamilla, Karen	Quality		16 SEP 2020