

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Cytokine Panel 1 (mouse) Kit

Kit Catalog Numbers: K15245-Series, K152XC-Series, K152XB-Series, K152WX-Series, K152QC-Series, K152RD-Series, K152WN-Series, K152WX-Series, K152NQ-Series

Kit Lot Number: K0081474

Expiration Date: 31 Aug 2022

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Cytokine Panel 1 (mouse) Control 1		Cytokine Panel 1 (mouse) Control 2		Cytokine Panel 1 (mouse) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	IL-9	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
2	MCP-1	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
3	IL-33	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
4	IL-27p28/IL-30	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
5	IL-15	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
6	IL-17A/F	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
7	MIP-1 α	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
8	IP-10	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
9	MIP-2	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	IL-9	21.9	75% - 125%	< 20%	2600	75% - 125%	< 20%
2	MCP-1	4.42	75% - 125%	< 20%	325	75% - 125%	< 20%
3	IL-33	1.85	75% - 125%	< 20%	1950	75% - 125%	< 20%
4	IL-27p28/IL-30	5.91	75% - 125%	< 20%	6500	75% - 125%	< 20%
5	IL-15	43.2	75% - 125%	< 20%	26000	75% - 125%	< 20%
6	IL-17A/F	1.39	75% - 125%	< 20%	1620	75% - 125%	< 20%
7	MIP-1 α	0.378	75% - 125%	< 20%	390	75% - 125%	< 20%
8	IP-10	2.15	75% - 125%	< 20%	650	75% - 125%	< 20%
9	MIP-2	0.577	75% - 125%	< 20%	423	75% - 125%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	IL-9	< 1.0%
2	MCP-1	< 1.0%
3	IL-33	< 1.0%
4	IL-27p28/IL-30	< 1.0%
5	IL-15	< 1.0%
6	IL-17A/F	< 1.0%
7	MIP-1 α	< 1.0%
8	IP-10	< 1.0%
9	MIP-2	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IL-9	Calibrator	3720	pg/mL
		Cytokine Panel 1 (mouse) Control 1	3480	pg/mL
		Cytokine Panel 1 (mouse) Control 2	809	pg/mL
		Cytokine Panel 1 (mouse) Control 3	204	pg/mL
2	MCP-1	Calibrator	447	pg/mL
		Cytokine Panel 1 (mouse) Control 1	439	pg/mL
		Cytokine Panel 1 (mouse) Control 2	133	pg/mL
		Cytokine Panel 1 (mouse) Control 3	55.3	pg/mL
3	IL-33	Calibrator	3010	pg/mL
		Cytokine Panel 1 (mouse) Control 1	2350	pg/mL
		Cytokine Panel 1 (mouse) Control 2	274	pg/mL
		Cytokine Panel 1 (mouse) Control 3	35.8	pg/mL
4	IL-27p28/IL-30	Calibrator	8830	pg/mL
		Cytokine Panel 1 (mouse) Control 1	6980	pg/mL
		Cytokine Panel 1 (mouse) Control 2	1030	pg/mL
		Cytokine Panel 1 (mouse) Control 3	141	pg/mL
5	IL-15	Calibrator	39400	pg/mL
		Cytokine Panel 1 (mouse) Control 1	27400	pg/mL
		Cytokine Panel 1 (mouse) Control 2	4210	pg/mL
		Cytokine Panel 1 (mouse) Control 3	724	pg/mL
6	IL-17A/F	Calibrator	2380	pg/mL
		Cytokine Panel 1 (mouse) Control 1	2130	pg/mL
		Cytokine Panel 1 (mouse) Control 2	205	pg/mL
		Cytokine Panel 1 (mouse) Control 3	17.7	pg/mL
7	MIP-1 α	Calibrator	739	pg/mL
		Cytokine Panel 1 (mouse) Control 1	771	pg/mL
		Cytokine Panel 1 (mouse) Control 2	64.2	pg/mL
		Cytokine Panel 1 (mouse) Control 3	5.27	pg/mL
8	IP-10	Calibrator	1100	pg/mL
		Cytokine Panel 1 (mouse) Control 1	857	pg/mL
		Cytokine Panel 1 (mouse) Control 2	228	pg/mL
		Cytokine Panel 1 (mouse) Control 3	69.8	pg/mL
9	MIP-2	Calibrator	559	pg/mL
		Cytokine Panel 1 (mouse) Control 1	549	pg/mL
		Cytokine Panel 1 (mouse) Control 2	65	pg/mL
		Cytokine Panel 1 (mouse) Control 3	8.81	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

IL-9 - Spot 1		
Conc. pg/mL	ECL Signal	%CV
3720	508,000	3.2
930	138,000	1.8
233	30,000	2.8
58.1	7,140	3.7
14.5	2,200	5.3
3.63	944	5.5
0.908	659	8.8
0.00	509	9.3

MCP-1 - Spot 2		
Conc. pg/mL	ECL Signal	%CV
447	644,000	4.1
112	93,900	4.5
27.9	16,200	4.3
6.98	3,400	4.9
1.75	1,250	4.6
0.437	658	5.2
0.109	530	7.5
0.00	440	5.5

IL-33 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
3010	750,000	3.2
753	233,000	3.1
188	61,300	3.5
47.0	15,200	4.1
11.8	4,200	4.3
2.94	1,290	3.3
0.735	565	5.8
0.00	304	8.8

IL-27p28/IL-30 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
8830	577,000	3.8
2210	182,000	2.5
552	47,300	2.7
138	11,900	2.9
34.5	3,290	3.8
8.62	1,110	4.9
2.16	519	7.8
0.00	309	12.0

IL-15 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
39400	213,000	2.9
9850	89,600	2.3
2460	25,500	2.2
616	6,430	3.0
154	2,360	3.0
38.5	1,350	2.5
9.62	1,110	2.8
0.00	990	3.0

IL-17A/F - Spot 6		
Conc. pg/mL	ECL Signal	%CV
2380	888,000	3.2
595	244,000	2.8
149	58,700	3.5
37.2	14,300	3.6
9.30	4,000	3.6
2.32	1,190	3.8
0.581	492	4.6
0.00	240	7.8

MIP-1 α - Spot 7		
Conc. pg/mL	ECL Signal	%CV
739	1,200,000	2.1
185	286,000	2.4
46.2	66,700	3.3
11.5	15,600	4.6
2.89	4,230	3.4
0.722	1,240	3.4
0.180	512	5.8
0.00	254	8.0

IP-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
1100	357,000	4.1
275	93,100	4.0
68.8	23,000	3.4
17.2	5,930	3.5
4.30	1,860	4.9
1.07	811	9.2
0.269	591	16.0
0.00	462	20.0

MIP-2 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
559	818,000	2.3
140	220,000	2.2
34.9	55,800	2.4
8.73	13,700	3.0
2.18	3,750	2.1
0.546	1,130	3.1
0.136	475	5.2
0.00	246	8.7

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Cytokine Panel 1 (mouse) Plate	Z0047315	2-8°C	30 Sep 2022
Anti-ms IL-9 Antibody	D0081497	2-8°C	31 Oct 2023
Anti-ms MCP-1 Antibody	D0081498	2-8°C	30 Nov 2023
Anti-ms IL-33 Antibody	D0081499	2-8°C	30 Nov 2023
Anti-ms IL-27p28/IL-30 Antibody	D0081500	2-8°C	30 Sep 2023
Anti-ms IL-15 Antibody	D0081297	2-8°C	30 Sep 2022
Anti-ms IL-17A/F Antibody	D0081502	2-8°C	31 Oct 2023
Anti-ms MIP-1α Antibody	D0081503	2-8°C	30 Nov 2023
Anti-ms IP-10 Antibody	D0081504	2-8°C	30 Sep 2023
Anti-ms MIP-2 Antibody	D0081505	2-8°C	30 Nov 2023
Cytokine Panel 1 (mouse) Calibrator Blend	A0080218	2-8°C	31 Oct 2024
Diluent 41	M0410032	≤ -10°C	31 Aug 2022
Diluent 45	M0450033	≤ -10°C	31 Aug 2022
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
Cytokine Panel 1 (mouse) Control 1	Not Kit Specific
Cytokine Panel 1 (mouse) Control 2	Not Kit Specific
Cytokine 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		28 SEP 2020