

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: K0081303

Expiration Date: 31 Aug 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	567,000	5.0
237	167,000	2.9
59.3	42,100	2.1
14.8	10,200	3.2
3.71	2,660	2.5
0.927	767	4.4
0.232	299	8.6
0.00	145	19.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1480	437,000	8.5
370	120,000	5.7
92.5	31,800	6.4
23.1	7,840	7.1
5.78	2,150	7.4
1.45	657	5.6
0.361	295	8.9
0.00	162	15.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2450	745,000	5.3
613	204,000	4.7
153	52,100	5.4
38.3	12,400	4.5
9.57	3,350	8.3
2.39	1,010	7.9
0.598	443	8.5
0.00	257	10.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1570	940,000	2.6
393	269,000	2.8
98.1	71,300	2.8
24.5	18,600	4.0
6.13	4,740	2.6
1.53	1,450	2.7
0.383	582	6.9
0.00	311	20.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
892	1,220,000	2.4
223	276,000	2.2
55.8	65,300	2.2
13.9	15,900	3.4
3.48	4,120	2.8
0.871	1,200	3.0
0.218	474	5.1
0.00	229	8.6

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
4660	384,000	2.3
1170	85,300	1.7
291	20,500	1.6
72.8	5,120	3.9
18.2	1,540	2.9
4.55	595	4.3
1.14	369	5.2
0.00	284	9.1

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2160	1,310,000	3.5
540	291,000	2.7
135	60,700	3.2
33.8	13,300	4.4
8.44	3,550	3.6
2.11	998	4.7
0.527	369	11.0
0.00	183	21.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
2510	437,000	6.7
628	107,000	3.7
157	28,300	4.5
39.2	7,530	5.6
9.80	2,700	4.2
2.45	1,490	6.2
0.613	1,180	4.2
0.00	1,150	9.5

IL-12p70 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
31900	400,000	4.8
7980	69,700	5.0
1990	11,800	5.5
498	2,280	7.2
125	696	6.7
31.2	284	10.0
7.79	189	15.0
0.00	171	32.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
577	461,000	2.5
144	101,000	2.1
36.1	24,000	3.4
9.02	5,820	4.7
2.25	1,690	3.8
0.563	605	4.5
0.141	332	9.2
0.00	240	9.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (mouse) Plate	Z0047071	2-8°C	30 Sep 2021
Anti-ms IFN- γ Antibody	D0081222	2-8°C	31 May 2022
Anti-ms IL-1 β Antibody	D0081336	2-8°C	31 Jan 2023
Anti-ms IL-2 Antibody	D0081335	2-8°C	31 Jan 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	D0081225	2-8°C	31 Jul 2022
Anti-ms KC/GRO Antibody	D0081271	2-8°C	31 Oct 2022
Anti-ms IL-10 Antibody	D0081153	2-8°C	28 Feb 2022
Anti-ms IL-12p70 Antibody	D0081272	2-8°C	31 Oct 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	M0410027	\leq -10°C	31 Aug 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		15 AUG 2019