

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 2 (rat) Kit

Kit Catalog Numbers: K15059-Series

Kit Lot Number: K0081094

Expiration Date: 30 Sep 2019

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (rat) Control 1		Proinflammatory Panel 1 (rat) Control 2		Proinflammatory Panel 1 (rat) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	rt IFN- γ	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
2	rt IL-1 β	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
4	rt IL-4	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
5	rt IL-5	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
6	rt IL-6	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
7	rt KC/GRO	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
8	rt IL-10	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
9	rt IL-13	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
10	rt 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	rt IFN- γ	39.7	75% - 125%	< 25%	3750	75% - 125%	< 25%
2	rt IL-1 β	102	75% - 125%	< 25%	8100	75% - 125%	< 25%
4	rt IL-4	8.00	75% - 125%	< 25%	723	75% - 125%	< 25%
5	rt IL-5	82.0	75% - 125%	< 25%	3000	75% - 125%	< 25%
6	rt IL-6	96.9	75% - 125%	< 25%	8550	75% - 125%	< 25%
7	rt KC/GRO	21.7	75% - 125%	< 25%	728	75% - 125%	< 25%
8	rt IL-10	163	75% - 125%	< 25%	15700	75% - 125%	< 25%
9	rt IL-13	12.5	75% - 125%	< 25%	1080	75% - 125%	< 25%
10	rt TNF- α	9.10	75% - 125%	< 25%	793	75% - 125%	< 25%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	rt IFN- γ	< 1.0%
2	rt IL-1 β	< 1.0%
4	rt IL-4	< 1.0%
5	rt IL-5	< 1.0%
6	rt IL-6	< 1.0%
7	rt KC/GRO	< 1.0%
8	rt IL-10	< 1.0%
9	rt IL-13	< 1.0%
10	rt TNF- α	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	rt IFN- γ	Calibrator	6810	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	5130	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	1550	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	454	pg/mL
2	rt IL-1 β	Calibrator	12800	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	12000	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	3180	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	1090	pg/mL
4	rt IL-4	Calibrator	1310	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	977	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	275	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	84.9	pg/mL
5	rt IL-5	Calibrator	10500	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	3640	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	1820	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	927	pg/mL
6	rt IL-6	Calibrator	14600	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	10600	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	3480	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	1130	pg/mL
7	rt KC/GRO	Calibrator	3360	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	1180	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	569	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	289	pg/mL
8	rt IL-10	Calibrator	25000	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	23300	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	7020	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	2120	pg/mL
9	rt IL-13	Calibrator	1780	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	1370	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	400	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	123	pg/mL
10	rt TNF- α	Calibrator	1360	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	868	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	266	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	87.7	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

rt IFN- γ - Spot 1			rt IL-1 β - Spot 2			rt IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
6810	406,000	4.1	12800	1,600,000	2.0	1310	1,130,000	2.2
1700	107,000	4.7	3200	319,000	2.1	328	310,000	3.2
426	26,800	4.2	800	56,500	2.2	81.9	59,900	1.9
106	6,870	5.6	200	11,600	1.9	20.5	12,400	3.7
26.6	2,230	3.6	50.0	3,380	3.6	5.12	3,380	3.1
6.65	1,140	14.0	12.5	1,380	10.0	1.28	1,430	3.9
1.66	737	3.1	3.13	777	3.2	0.320	847	3.6
0.00	616	3.5	0.00	596	4.0	0.00	665	6.4

rt IL-5 - Spot 5			rt IL-6 - Spot 6			rt KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
10500	2,450,000	2.3	14600	160,000	2.5	3360	874,000	3.7
2630	789,000	2.8	3650	35,900	2.9	840	428,000	5.0
656	144,000	3.9	913	8,640	3.1	210	107,000	4.9
164	18,900	3.0	228	2,280	4.3	52.5	24,200	4.2
41.0	2,610	3.2	57.0	991	3.3	13.1	6,570	3.1
10.3	860	11.0	14.3	619	9.0	3.28	2,070	2.1
2.56	569	5.2	3.56	488	4.2	0.820	966	5.4
0.00	480	6.3	0.00	434	5.0	0.00	561	5.1

rt IL-10 - Spot 8			rt IL-13 - Spot 9			rt TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
25000	921,000	2.8	1780	1,340,000	1.3	1360	892,000	3.2
6250	256,000	3.0	445	267,000	2.4	340	185,000	2.8
1560	64,500	2.3	111	43,900	1.4	85.0	39,900	2.7
391	16,700	2.5	27.8	8,560	2.0	21.3	9,310	4.4
97.7	4,780	2.6	6.95	2,460	2.9	5.31	3,010	4.2
24.4	1,810	4.8	1.74	975	14.0	1.33	1,260	7.7
6.10	1,020	9.2	0.435	601	18.0	0.332	898	16.0
0.00	795	19.0	0.00	465	17.0	0.00	729	11.0

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 2 (rat) Plate	Z0046919	2-8°C	28 Feb 2021
Anti-rat IFN- γ Antibody	D0081171	2-8°C	28 Feb 2022
Anti-rat IL-1 β Antibody	D0081173	2-8°C	28 Feb 2022
Anti-rat IL-4 Antibody	D0081172	2-8°C	28 Feb 2022
Anti-rat IL-5 Antibody	D0081174	2-8°C	28 Feb 2022
Anti-rat IL-6 Antibody	D0081175	2-8°C	28 Feb 2022
Anti-rat KC/GRO Antibody	D0081176	2-8°C	28 Feb 2022
Anti-rat IL-10 Antibody	D0081177	2-8°C	28 Feb 2022
Anti-rat IL-13 Antibody	D0081178	2-8°C	28 Feb 2022
Anti-rat TNF- α Antibody	D0081179	2-8°C	28 Feb 2022
Proinflammatory Panel 1 (rat) Calibrator Blend	A0080124	2-8°C	31 Mar 2022
Blocker H	R0100015	Room Temperature	30 Sep 2019
Diluent 42	M0420010	$\leq -10^{\circ}\text{C}$	31 Jul 2020
Diluent 40	M0400011	$\leq -10^{\circ}\text{C}$	31 Aug 2020
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
MSD Wash Buffer (20X), 100 mL	Not Kit Specific
Plate Seals	Not Kit Specific
Proinflammatory Panel 1 (rat) Control 1	Not Kit Specific
Proinflammatory Panel 1 (rat) Control 2	Not Kit Specific
Proinflammatory Panel 1 (rat) 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	Dawn Stollar	Quality Assurance		06 DEC 2018