

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: K0081039

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	1,070,000	4.5	12800	1,390,000	4.8	1310	1,020,000	3.3
1700	283,000	5.7	3200	256,000	3.4	328	261,000	2.5
426	68,100	7.4	800	44,200	4.2	81.9	47,600	3.8
106	16,500	7.2	200	8,980	4.1	20.5	9,080	5.1
26.6	4,550	8.7	50.0	2,510	2.3	5.12	2,290	3.4
6.65	1,440	6.3	12.5	899	3.5	1.28	881	6.2
1.66	673	5.4	3.13	495	5.1	0.320	507	4.8
0.00	403	4.9	0.00	368	7.0	0.00	382	9.5

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	1,510,000	4.4	14600	151,000	7.4	3360	733,000	9.4
2630	469,000	4.4	3650	33,300	4.8	840	365,000	7.0
656	80,500	3.9	913	7,940	2.2	210	84,600	4.1
164	9,370	5.1	228	2,060	3.6	52.5	19,500	5.4
41.0	1,300	3.0	57.0	773	4.1	13.1	5,590	3.0
10.3	446	6.4	14.3	380	5.6	3.28	2,200	2.8
2.56	334	7.6	3.56	287	6.4	0.820	1,370	6.1
0.00	293	7.8	0.00	240	6.0	0.00	1,180	7.1

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	837,000	3.0	1780	1,330,000	2.2	1360	990,000	3.4
6250	234,000	5.0	445	262,000	2.9	340	201,000	4.7
1560	59,200	2.9	111	40,400	1.6	85.0	38,900	4.2
391	15,400	2.7	27.8	7,260	2.2	21.3	8,730	3.7
97.7	4,230	3.7	6.95	1,860	2.0	5.31	2,680	5.2
24.4	1,440	5.6	1.74	666	5.7	1.33	1,070	6.6
6.10	723	5.6	0.435	363	5.1	0.332	666	10.0
0.00	489	10.0	0.00	286	12.0	0.00	479	7.6

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 2 (rat) Plate	Z0046859	2-8°C	31 Dec 2020
Anti-rat IFN- γ Antibody	D0081103	2-8°C	31 Dec 2021
Anti-rat IL-1 β Antibody	D0081105	2-8°C	31 Dec 2021
Anti-rat IL-4 Antibody	D0081104	2-8°C	31 Dec 2021
Anti-rat IL-5 Antibody	D0081106	2-8°C	31 Dec 2021
Anti-rat IL-6 Antibody	D0081107	2-8°C	31 Dec 2021
Anti-rat KC/GRO Antibody	D0081108	2-8°C	31 Jan 2022
Anti-rat IL-10 Antibody	D0081109	2-8°C	31 Dec 2021
Anti-rat IL-13 Antibody	D0081110	2-8°C	31 Dec 2021
Anti-rat TNF- α Antibody	D0081111	2-8°C	31 Dec 2021
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	
Plate Seals	Not Kit Specific
Wash Buffer (20X), 100mL	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		12 SEP 2018