

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: K0080985

Expiration Date: 31 Jul 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	7070	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	12900	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	1200	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	9390	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	13300	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	3330	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	25600	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	1280	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
7070	1,040,000	5.0	12900	1,340,000	3.3	1200	1,060,000	3.2
1770	296,000	2.9	3230	239,000	3.3	300	271,000	2.7
442	66,600	6.0	806	41,400	2.2	75.0	50,500	3.9
110	18,100	6.6	202	8,930	2.2	18.8	10,500	3.3
27.6	4,490	6.9	50.4	2,510	3.2	4.69	2,670	3.3
6.90	1,550	6.8	12.6	897	2.9	1.17	1,010	5.4
1.73	657	6.1	3.15	506	7.4	0.293	562	8.7
0.00	399	8.0	0.00	383	6.4	0.00	428	18.0

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
9390	1,670,000	5.1	13300	151,000	3.9	3330	804,000	5.3
2350	519,000	4.2	3330	32,300	5.5	833	371,000	3.7
587	95,000	4.9	831	8,060	2.5	208	98,400	3.6
147	11,900	4.8	208	2,130	3.1	52.0	22,200	3.5
36.7	1,630	4.5	52.0	821	3.1	13.0	6,060	2.7
9.17	465	4.9	13.0	454	5.1	3.25	1,820	3.0
2.29	370	17.0	3.25	359	5.7	0.813	851	4.3
0.00	287	5.7	0.00	325	6.9	0.00	538	7.7

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
25600	676,000	3.4	1780	1,070,000	2.8	1280	801,000	2.9
6400	181,000	2.9	445	194,000	2.4	320	164,000	3.5
1600	46,000	2.8	111	31,200	2.6	80.0	34,900	2.2
400	11,900	2.6	27.8	5,900	2.3	20.0	8,200	2.5
100	3,380	4.0	6.95	1,590	2.3	5.00	2,460	2.7
25.0	1,190	6.0	1.74	565	5.8	1.25	942	4.2
6.25	698	15.0	0.435	329	13.0	0.313	597	6.9
0.00	491	18.0	0.00	245	11.0	0.00	447	6.0

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 2 (rat) Plate	Z0046383	2-8°C	31 Jul 2019
Anti-rat IFN- γ Antibody	D0080925	2-8°C	31 Jul 2019
Anti-rat IL-1 β Antibody	D0080927	2-8°C	31 Jul 2019
Anti-rat IL-4 Antibody	D0080926	2-8°C	31 Jul 2019
Anti-rat IL-5 Antibody	D0080928	2-8°C	31 Jul 2019
Anti-rat IL-6 Antibody	D0081029	2-8°C	29 Feb 2020
Anti-rat KC/GRO Antibody	D0080930	2-8°C	31 Jul 2019
Anti-rat IL-10 Antibody	D0080931	2-8°C	31 Aug 2019
Anti-rat IL-13 Antibody	D0080932	2-8°C	31 Jul 2019
Anti-rat TNF- α Antibody	D0081033	2-8°C	29 Feb 2020
Proinflammatory Panel 1 (rat) Calibrator Blend	A0080100	2-8°C	30 Sep 2021
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	<i>Dawn Stollar</i>	11 SEP 2018