

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, K153QO-Series, K153QR-Series, K153QS-Series, K153QT-Series, K153OD-Series

Kit Lot Number: K0081291

Expiration Date: 30 Nov 2020

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	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%
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-13	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	39.7	75% - 125%	< 25%	3750	75% - 125%	< 25%
2	IL-1 β	102	75% - 125%	< 25%	8100	75% - 125%	< 25%
4	IL-4	8.00	75% - 125%	< 25%	723	75% - 125%	< 25%
5	IL-5	82.0	75% - 125%	< 25%	3000	75% - 125%	< 25%
6	IL-6	96.9	75% - 125%	< 25%	8550	75% - 125%	< 25%
7	KC/GRO	21.7	75% - 125%	< 25%	728	75% - 125%	< 25%
8	IL-10	163	75% - 125%	< 25%	15700	75% - 125%	< 25%
9	IL-13	12.5	75% - 125%	< 25%	1080	75% - 125%	< 25%
10	TNF- α	9.10	75% - 125%	< 25%	793	75% - 125%	< 25%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	IFN- γ	< 1.0%
2	IL-1 β	< 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-13	< 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	5790	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	IL-1 β	Calibrator	13300	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	IL-4	Calibrator	1100	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	IL-5	Calibrator	9230	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	IL-6	Calibrator	13200	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	KC/GRO	Calibrator	2770	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	IL-10	Calibrator	27700	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	IL-13	Calibrator	1610	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	TNF- α	Calibrator	1200	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:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
5790	928,000	3.9
1450	255,000	4.4
362	59,300	4.1
90.5	15,300	3.5
22.6	4,250	4.6
5.65	1,630	4.3
1.41	931	5.4
0.00	732	6.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
13300	1,660,000	2.7
3330	326,000	2.5
831	56,000	4.1
208	12,000	2.4
52.0	3,290	2.1
13.0	1,160	2.4
3.25	661	5.2
0.00	481	6.3

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1100	1,050,000	2.1
275	277,000	1.5
68.8	50,700	3.6
17.2	10,700	4.5
4.30	2,740	3.2
1.07	1,110	5.1
0.269	599	4.8
0.00	492	16.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
9230	1,970,000	4.1
2310	616,000	3.4
577	105,000	5.2
144	13,100	6.9
36.1	1,660	4.4
9.01	481	4.1
2.25	327	4.4
0.00	284	9.1

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
13200	379,000	2.3
3300	74,800	2.6
825	16,200	3.3
206	3,940	3.1
51.6	1,250	3.2
12.9	563	2.8
3.22	403	2.9
0.00	337	5.7

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2770	1,540,000	4.4
693	664,000	4.4
173	162,000	2.9
43.3	37,700	2.7
10.8	9,910	2.8
2.71	2,880	2.4
0.676	1,110	3.7
0.00	518	6.7

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
27700	1,540,000	3.2
6930	415,000	2.1
1730	98,800	2.7
433	25,000	2.8
108	6,520	3.4
27.1	2,100	4.4
6.76	960	10.0
0.00	615	22.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
1610	1,440,000	2.3
403	271,000	2.0
101	42,400	1.8
25.2	7,980	2.2
6.29	2,120	2.4
1.57	758	3.3
0.393	428	5.8
0.00	328	6.0

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
1200	873,000	1.6
300	180,000	2.1
75.0	36,400	2.0
18.8	8,430	2.9
4.69	2,600	2.0
1.17	1,040	3.2
0.293	675	3.5
0.00	554	4.4

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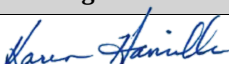
Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 2 (rat) Plate	Z0046953	2-8°C	31 Mar 2021
Anti-rat IFN- γ Antibody	D0081245	2-8°C	31 Aug 2022
Anti-rat IL-1 β Antibody	D0081198	2-8°C	31 May 2022
Anti-rat IL-4 Antibody	D0081246	2-8°C	30 Jun 2022
Anti-rat IL-5 Antibody	D0081248	2-8°C	31 Oct 2022
Anti-rat IL-6 Antibody	D0081200	2-8°C	31 May 2022
Anti-rat KC/GRO Antibody	D0081201	2-8°C	31 Aug 2022
Anti-rat IL-10 Antibody	D0081202	2-8°C	31 Jul 2022
Anti-rat IL-13 Antibody	D0081203	2-8°C	31 Jul 2022
Anti-rat TNF- α Antibody	D0081204	2-8°C	31 May 2022
Proinflammatory Panel 1 (rat) Calibrator Blend	A0080177	2-8°C	31 Dec 2023
Blocker H	R0100016	Room Temperature	30 Nov 2020
Diluent 42	M0420012	$\leq -10^{\circ}\text{C}$	30 Sep 2021
Diluent 40	M0400014	$\leq -10^{\circ}\text{C}$	31 Aug 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 (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	Karen Hamilla	Quality		27 AUG 2019