

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (human) Kit

Kit Catalog Numbers: K151QR-Series, K151OD-Series, K15049-Series, K15052-Series, K15053-Series, K15056-Series

Kit Lot Number: K0081386

Expiration Date: 31 Dec 2021

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (human) Control 1		Proinflammatory Panel 1 (human) Control 2		Proinflammatory Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	IFN- γ	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	IL-1 β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-4	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	IL-13	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	TNF- α	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	IFN- γ	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	IL-1 β	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
4	IL-4	0.218	80% - 120%	< 20%	158	80% - 120%	< 20%
5	IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	IL-10	0.298	80% - 120%	< 20%	233	80% - 120%	< 20%
8	IL-12p70	1.22	80% - 120%	< 20%	315	80% - 120%	< 20%
9	IL-13	4.21	80% - 120%	< 20%	353	80% - 120%	< 20%
10	TNF- α	0.690	80% - 120%	< 20%	248	80% - 120%	< 20%

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-6	< 1.0%
6	IL-8	< 1.0%
7	IL-10	< 1.0%
8	IL-12p70	< 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	1460	pg/mL
		Proinflammatory Panel 1 (human) Control 1	530	pg/mL
		Proinflammatory Panel 1 (human) Control 2	145	pg/mL
		Proinflammatory Panel 1 (human) Control 3	35.3	pg/mL
2	IL-1 β	Calibrator	586	pg/mL
		Proinflammatory Panel 1 (human) Control 1	209	pg/mL
		Proinflammatory Panel 1 (human) Control 2	49.9	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.9	pg/mL
3	IL-2	Calibrator	1500	pg/mL
		Proinflammatory Panel 1 (human) Control 1	409	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.49	pg/mL
4	IL-4	Calibrator	263	pg/mL
		Proinflammatory Panel 1 (human) Control 1	104	pg/mL
		Proinflammatory Panel 1 (human) Control 2	20.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.01	pg/mL
5	IL-6	Calibrator	732	pg/mL
		Proinflammatory Panel 1 (human) Control 1	267	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.49	pg/mL
6	IL-8	Calibrator	575	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.08	pg/mL
7	IL-10	Calibrator	383	pg/mL
		Proinflammatory Panel 1 (human) Control 1	132	pg/mL
		Proinflammatory Panel 1 (human) Control 2	24.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.62	pg/mL
8	IL-12p70	Calibrator	464	pg/mL
		Proinflammatory Panel 1 (human) Control 1	197	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.11	pg/mL
9	IL-13	Calibrator	482	pg/mL
		Proinflammatory Panel 1 (human) Control 1	167	pg/mL
		Proinflammatory Panel 1 (human) Control 2	45.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.8	pg/mL
10	TNF- α	Calibrator	362	pg/mL
		Proinflammatory Panel 1 (human) Control 1	87.8	pg/mL
		Proinflammatory Panel 1 (human) Control 2	15.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.02	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
1460	317,000	2.1
365	88,200	1.6
91.3	22,800	2.2
22.8	6,130	2.8
5.70	1,930	3.0
1.43	857	3.7
0.356	561	6.1
0.00	486	9.6

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
586	1,230,000	2.3
147	353,000	3.1
36.6	90,900	2.7
9.16	24,800	3.3
2.29	6,800	3.5
0.572	2,590	6.1
0.143	1,370	4.2
0.00	1,020	13.0

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1500	980,000	2.9
375	292,000	1.2
93.8	77,800	1.8
23.4	20,800	2.8
5.86	5,700	3.5
1.46	1,830	4.2
0.366	845	5.4
0.00	502	7.8

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
263	917,000	4.7
65.8	284,000	2.7
16.4	79,400	3.7
4.11	21,000	5.4
1.03	5,510	2.5
0.257	1,600	3.2
0.0642	625	12.0
0.00	236	19.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
732	802,000	3.7
183	194,000	2.5
45.8	41,700	2.9
11.4	10,200	3.9
2.86	2,680	3.6
0.715	883	4.7
0.179	397	9.2
0.00	237	8.5

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
575	701,000	2.8
144	191,000	3.1
35.9	48,900	2.5
8.98	13,200	3.1
2.25	3,490	2.7
0.562	1,160	3.5
0.140	513	3.6
0.00	303	7.6

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
383	664,000	1.9
95.8	208,000	1.3
23.9	55,700	1.6
5.98	15,000	1.2
1.50	3,990	2.0
0.374	1,340	3.5
0.0935	645	7.1
0.00	421	8.1

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
464	305,000	4.4
116	93,600	5.5
29.0	24,800	3.7
7.25	6,800	4.8
1.81	2,150	6.5
0.453	848	9.4
0.113	546	14.0
0.00	449	25.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
482	1,000,000	3.4
121	192,000	2.1
30.1	26,600	2.2
7.53	4,490	2.4
1.88	1,210	3.9
0.471	462	4.2
0.118	296	8.8
0.00	224	11.0

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
362	331,000	3.3
90.5	86,300	3.6
22.6	21,800	4.1
5.66	5,770	2.6
1.41	1,760	2.6
0.354	725	4.9
0.0884	461	4.5
0.00	350	7.7

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047132	2-8°C	31 Dec 2021
Anti-hu IFN- γ Antibody	D0081304	2-8°C	31 Oct 2022
Anti-hu IL-1 β Antibody	D0081319	2-8°C	31 Dec 2022
Anti-hu IL-2 Antibody	D0081305	2-8°C	31 Oct 2022
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-hu IL-6 Antibody	D0081311	2-8°C	30 Nov 2022
Anti-hu IL-8 Antibody	D0081255	2-8°C	31 Jul 2022
Anti-hu IL-10 Antibody	D0081306	2-8°C	31 Oct 2022
Anti-hu IL-12p70 Antibody	D0081307	2-8°C	31 Oct 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081308	2-8°C	31 Oct 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080225	2-8°C	31 Aug 2024
Diluent 2	M0020108	$\leq -10^{\circ}\text{C}$	28 Feb 2022
Diluent 3	M0030090	$\leq -10^{\circ}\text{C}$	31 Dec 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 (human) Control 1	Not Kit Specific
Proinflammatory Panel 1 (human) Control 2	Not Kit Specific
Proinflammatory Panel 1 (human) 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 JAN 2020