

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: K0081397
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	1380	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	566	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	1490	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	234	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	767	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	555	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	372	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	515	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	460	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	390	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
1380	358,000	1.8
345	97,100	2.5
86.3	25,300	2.8
21.6	6,630	3.2
5.39	1,890	1.9
1.35	732	3.3
0.337	420	6.9
0.00	309	9.1

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
566	1,390,000	1.8
142	382,000	1.4
35.4	102,000	1.0
8.84	26,800	2.0
2.21	7,750	3.8
0.553	2,850	2.2
0.138	1,590	3.2
0.00	1,170	5.6

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1490	1,270,000	2.9
373	365,000	2.1
93.1	99,300	2.4
23.3	25,800	3.0
5.82	7,040	3.1
1.46	2,070	2.1
0.364	826	5.3
0.00	378	8.5

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
234	940,000	3.1
58.5	283,000	3.0
14.6	79,100	2.4
3.66	20,600	4.3
0.914	5,310	3.5
0.229	1,550	4.0
0.0571	517	5.0
0.00	184	18.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
767	1,240,000	3.2
192	300,000	2.4
47.9	66,400	3.1
12.0	16,000	3.6
3.00	4,030	2.5
0.749	1,190	3.8
0.187	424	6.4
0.00	199	21.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
555	896,000	2.3
139	232,000	2.4
34.7	59,100	1.6
8.67	15,200	3.0
2.17	4,140	2.4
0.542	1,260	4.6
0.135	518	6.1
0.00	266	14.0

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
372	714,000	1.7
93.0	212,000	1.9
23.3	56,600	2.2
5.81	14,800	2.4
1.45	4,040	2.2
0.363	1,310	2.8
0.0908	573	5.0
0.00	361	15.0

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
515	394,000	5.3
129	119,000	4.4
32.2	33,100	2.5
8.05	8,830	4.0
2.01	2,480	4.1
0.503	928	8.5
0.126	459	8.9
0.00	396	23.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
460	815,000	3.0
115	138,000	2.0
28.8	18,600	1.6
7.19	2,970	4.0
1.80	842	7.6
0.449	431	21.0
0.112	245	22.0
0.00	264	35.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
390	370,000	2.4
97.5	92,500	2.7
24.4	23,400	2.9
6.09	6,060	3.7
1.52	1,860	3.6
0.381	792	8.7
0.0952	501	26.0
0.00	386	20.0


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047170	2-8°C	28 Feb 2022
Anti-hu IFN- γ Antibody	D0081318	2-8°C	31 Mar 2023
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081320	2-8°C	31 Dec 2022
Anti-hu IL-4 Antibody	D0081302	2-8°C	30 Sep 2022
Anti-hu IL-6 Antibody	D0081333	2-8°C	31 Jan 2023
Anti-hu IL-8 Antibody	D0081321	2-8°C	31 Dec 2022
Anti-hu IL-10 Antibody	D0081306	2-8°C	31 Oct 2022
Anti-hu 12p70 Antibody	D0081307	2-8°C	31 Oct 2022
Anti-hu IL-13 Antibody	D0081381	2-8°C	31 Mar 2023
Anti-hu TNF- α Antibody	D0081324	2-8°C	31 Dec 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080222	2-8°C	31 Oct 2024
Diluent 2	M0020109	$\leq -10^{\circ}\text{C}$	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		29 JAN 2020