

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: K0081236
Expiration Date: 30 Jun 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	1190	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	IL-1 β	Calibrator	564	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	IL-2	Calibrator	1510	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
4	IL-4	Calibrator	189	pg/mL
		Proinflammatory Panel 1 (human) Control 1	109	pg/mL
		Proinflammatory Panel 1 (human) Control 2	21.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.4	pg/mL
5	IL-6	Calibrator	767	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	IL-8	Calibrator	584	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	IL-10	Calibrator	355	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	pg/mL
8	IL-12p70	Calibrator	545	pg/mL
		Proinflammatory Panel 1 (human) Control 1	195	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	7.56	pg/mL
9	IL-13	Calibrator	518	pg/mL
		Proinflammatory Panel 1 (human) Control 1	172	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	12.6	pg/mL
10	TNF- α	Calibrator	340	pg/mL
		Proinflammatory Panel 1 (human) Control 1	92.5	pg/mL
		Proinflammatory Panel 1 (human) Control 2	16.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	2.13	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
1190	304,000	2.1
298	81,500	2.5
74.4	20,400	3.2
18.6	5,250	3.0
4.65	1,490	2.5
1.16	571	4.2
0.291	323	6.6
0.00	247	9.8

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
564	1,330,000	1.7
141	370,000	1.4
35.3	92,300	2.0
8.81	24,300	2.4
2.20	6,480	1.8
0.551	2,180	2.7
0.138	1,040	3.8
0.00	701	3.9

IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV
1510	1,300,000	2.7
378	368,000	3.7
94.4	101,000	2.8
23.6	26,000	4.3
5.90	6,850	3.3
1.47	1,910	3.0
0.369	760	4.6
0.00	357	9.1

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
189	837,000	3.3
47.3	255,000	1.8
11.8	68,200	3.9
2.95	17,200	5.3
0.738	4,400	5.0
0.185	1,250	2.4
0.0461	409	4.7
0.00	132	15.0

IL-6 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
767	1,450,000	2.9
192	341,000	2.6
47.9	73,400	3.1
12.0	17,500	3.6
3.00	4,370	2.1
0.749	1,200	3.5
0.187	420	4.5
0.00	163	11.0

IL-8 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
584	727,000	3.0
146	186,000	2.8
36.5	47,100	2.3
9.13	11,600	1.8
2.28	3,190	2.4
0.570	897	3.3
0.143	362	5.3
0.00	186	8.9

IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
355	686,000	1.3
88.8	203,000	1.2
22.2	53,700	1.9
5.55	13,600	1.9
1.39	3,650	1.8
0.347	1,120	2.6
0.0867	470	3.6
0.00	274	9.8

IL-12p70 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
545	459,000	3.2
136	136,000	1.5
34.1	35,900	4.6
8.52	9,330	5.5
2.13	2,510	4.8
0.532	846	6.7
0.133	394	11.0
0.00	293	17.0

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
518	1,290,000	1.7
130	234,000	1.8
32.4	32,200	1.9
8.09	5,040	4.0
2.02	1,250	2.6
0.506	391	4.3
0.126	195	12.0
0.00	135	15.0

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TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
340	343,000	3.8
85.0	83,200	3.2
21.3	21,200	2.9
5.31	5,190	3.3
1.33	1,640	3.7
0.332	614	5.9
0.0830	358	7.3
0.00	287	8.5


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047077	2-8°C	30 Sep 2021
Anti-hu IFN- γ Antibody	D0081254	2-8°C	31 Jul 2022
Anti-hu IL-1 β Antibody	D0081182	2-8°C	30 Apr 2022
Anti-hu IL-2 Antibody	D0081209	2-8°C	31 May 2022
Anti-hu IL-4 Antibody	D0081183	2-8°C	30 Jun 2022
Anti-hu IL-6 Antibody	D0081160	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081097	2-8°C	30 Nov 2021
Anti-hu IL-10 Antibody	D0081211	2-8°C	31 May 2022
Anti-hu IL-12p70 Antibody	D0081212	2-8°C	31 May 2022
Anti-hu IL-13 Antibody	D0081169	2-8°C	30 Apr 2022
Anti-hu TNF- α Antibody	D0081131	2-8°C	31 Jan 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080205	2-8°C	31 Mar 2024
Diluent 2	M0020104	\leq -10°C	30 Jun 2021
Diluent 3	M0030089	\leq -10°C	30 Sep 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		18 JUL 2019