

CERTIFICATE OF ANALYSIS

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Product Description: V-Plex® and V-Plex Plus Cytokine Panel 2 (human) Kit

Kit Catalog Numbers: K15084-Series

Kit Lot Number: K0081180

Expiration Date: 30 Jun 2020

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Cytokine Panel 2 (human) Control 1		Cytokine Panel 2 (human) Control 2		Cytokine Panel 2 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	hu IL-17 A/F	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	hu IL-17B	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
3	hu IL-17C	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
4	hu IL-17D	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
6	hu IL-IRA	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	hu IL-3	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	hu IL-9	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	hu TSLP	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	hu IL-17 A/F	7.57	80% - 120%	< 20%	3900	80% - 120%	< 20%
2	hu IL-17B	1.12	75% - 125%	< 20%	1040	75% - 125%	< 20%
3	hu IL-17C	3.84	75% - 125%	< 20%	1620	75% - 125%	< 20%
4	hu IL-17D	11.2	75% - 125%	< 20%	5200	75% - 125%	< 20%
6	hu IL-IRA	9.19	75% - 125%	< 25%	650	80% - 120%	< 20%
7	hu IL-3	12.6	75% - 125%	< 20%	1950	80% - 120%	< 20%
8	hu IL-9	2.23	80% - 120%	< 25%	975	80% - 120%	< 20%
10	hu TSLP	0.460	75% - 125%	< 20%	325	75% - 125%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	hu IL-17 A/F	< 1.0%
2	hu IL-17B	< 1.0%
3	hu IL-17C	< 1.0%
4	hu IL-17D	< 1.0%
6	hu IL-IRA	< 1.0%
7	hu IL-3	< 1.0%
8	hu IL-9	< 1.0%
10	hu TSLP	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IL-17 A/F	Calibrator	5900	pg/mL
		Cytokine Panel 2 (human) Control 1	5913	pg/mL
		Cytokine Panel 2 (human) Control 2	796	pg/mL
		Cytokine Panel 2 (human) Control 3	74	pg/mL
2	hu IL-17B	Calibrator	1210	pg/mL
		Cytokine Panel 2 (human) Control 1	487	pg/mL
		Cytokine Panel 2 (human) Control 2	71	pg/mL
		Cytokine Panel 2 (human) Control 3	133	pg/mL
3	hu IL-17C	Calibrator	2790	pg/mL
		Cytokine Panel 2 (human) Control 1	2360	pg/mL
		Cytokine Panel 2 (human) Control 2	295	pg/mL
		Cytokine Panel 2 (human) Control 3	77	pg/mL
4	hu IL-17D	Calibrator	8780	pg/mL
		Cytokine Panel 2 (human) Control 1	5479	pg/mL
		Cytokine Panel 2 (human) Control 2	559	pg/mL
		Cytokine Panel 2 (human) Control 3	146	pg/mL
6	hu IL-IRA	Calibrator	905	pg/mL
		Cytokine Panel 2 (human) Control 1	670	pg/mL
		Cytokine Panel 2 (human) Control 2	143	pg/mL
		Cytokine Panel 2 (human) Control 3	50	pg/mL
7	hu IL-3	Calibrator	2590	pg/mL
		Cytokine Panel 2 (human) Control 1	3173	pg/mL
		Cytokine Panel 2 (human) Control 2	703	pg/mL
		Cytokine Panel 2 (human) Control 3	240	pg/mL
8	hu IL-9	Calibrator	1620	pg/mL
		Cytokine Panel 2 (human) Control 1	1272	pg/mL
		Cytokine Panel 2 (human) Control 2	345	pg/mL
		Cytokine Panel 2 (human) Control 3	66	pg/mL
10	hu TSLP	Calibrator	494	pg/mL
		Cytokine Panel 2 (human) Control 1	581	pg/mL
		Cytokine Panel 2 (human) Control 2	87	pg/mL
		Cytokine Panel 2 (human) Control 3	12	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

hu IL-17 A/F - Spot 1		
Conc. pg/mL	ECL Signal	%CV
5900	757,000	2.7
1480	197,000	3.0
369	46,100	2.6
92.2	11,600	3.1
23.0	2,940	1.5
5.76	929	4.2
1.44	374	4.8
0.00	215	13.0

hu IL-17B - Spot 2		
Conc. pg/mL	ECL Signal	%CV
1210	357,000	3.5
303	78,000	3.8
75.6	18,200	3.3
18.9	4,450	2.4
4.73	1,250	3.5
1.18	431	4.6
0.295	236	14.0
0.00	162	13.0

hu IL-17C - Spot 3		
Conc. pg/mL	ECL Signal	%CV
2790	295,000	11.0
698	75,500	10.0
174	19,500	11.0
43.6	5,010	9.6
10.9	1,440	9.9
2.72	516	9.2
0.681	292	11.0
0.00	229	14.0

hu IL-17D - Spot 4		
Conc. pg/mL	ECL Signal	%CV
8780	305,000	5.7
2200	88,400	3.5
549	22,000	5.2
137	6,090	3.5
34.3	1,700	5.7
8.57	794	4.6
2.14	494	11.0
0.00	441	6.1

hu IL-IRA - Spot 6		
Conc. pg/mL	ECL Signal	%CV
905	615,000	4.5
226	114,000	6.2
56.6	20,400	6.7
14.1	4,170	7.8
3.54	1,370	20.0
0.884	549	9.6
0.221	423	17.0
0.00	385	17.0

hu IL-3 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2590	915,000	2.8
648	163,000	5.0
162	21,500	4.1
40.5	3,440	5.1
10.1	877	5.0
2.53	380	7.6
0.632	263	9.5
0.00	230	13.0

hu IL-9 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
1620	1,330,000	8.4
405	381,000	4.3
101	97,000	5.4
25.3	25,700	6.0
6.33	6,400	7.3
1.58	1,930	7.3
0.396	606	6.0
0.00	263	15.0

hu TSLP - Spot 10		
Conc. pg/mL	ECL Signal	%CV
494	519,000	3.8
124	129,000	3.6
30.9	31,200	4.9
7.72	7,930	4.6
1.93	2,170	2.8
0.482	725	4.5
0.121	360	9.6
0.00	257	26.0

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Components:


Description	Lot Number	Storage Temperature	Expiration Date
Cytokine Panel 2 (human) Plate	Z0047011	2-8°C	30 Jun 2021
Anti-hu IL-17A/F Antibody	D0081238	2-8°C	31 Jul 2022
Anti-hu IL-17B Antibody	D0081239	2-8°C	30 Jun 2022
Anti-hu IL-17C Antibody	D0081015	2-8°C	30 Jun 2020
Anti-hu IL-17D Antibody	D0081240	2-8°C	31 Jul 2022
Anti-hu IL-1RA Antibody	D0081241	2-8°C	31 Aug 2022
Anti-hu IL-3 Antibody	D0081242	2-8°C	30 Jun 2022
Anti-hu IL-9 Antibody	D0081243	2-8°C	31 Jul 2022
Anti-hu TSLP Antibody	D0081244	2-8°C	30 Jun 2022
Cytokine Panel 2 (human) Calibrator Blend	A0080193	2-8°C	29 Feb 2024
Diluent 43	M0430030	≤ -10°C	30 Jun 2021
Diluent 3	M0030087	≤ -10°C	30 Jun 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), 100 mL	Not Kit Specific
Cytokine Panel 2 (human) Control 1	Not Kit Specific
Cytokine Panel 2 (human) Control 2	Not Kit Specific
Cytokine Panel 2 (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	Dawn Stollar	Quality Assurance		22 MAR 2019