

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus TH17 Panel 1 (human) Kit

Kit Catalog Numbers: K15085-Series

Kit Lot Number: K0081113

Expiration Date: 30 Jun 2019

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		TH17 Panel 1 (human) Control 1		TH17 Panel 1 (human) Control 2		TH17 Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	hu IL-17A	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	hu IL-21	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
5	hu IL-31	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	hu IL-27	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	hu IL-23	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	hu IL-22	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	hu MIP-3α	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	hu IL-17A	5.86	80% - 120%	< 20%	1950	80% - 120%	< 20%
4	hu IL-21	1.65	80% - 120%	< 20%	650	80% - 120%	< 20%
5	hu IL-31	4.22	80% - 120%	< 20%	650	80% - 120%	< 20%
6	hu IL-27	38.7	80% - 120%	< 20%	13000	80% - 120%	< 20%
7	hu IL-23	4.60	80% - 120%	< 20%	3250	80% - 120%	< 20%
8	hu IL-22	2.78	80% - 120%	< 20%	325	80% - 120%	< 20%
10	hu MIP-3α	0.588	80% - 120%	< 20%	325	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	hu IL-17A	< 1.0%
4	hu IL-21	< 1.0%
5	hu IL-31	< 1.0%
6	hu IL-27	< 1.0%
7	hu IL-23	< 1.0%
8	hu IL-22	< 1.0%
10	hu MIP-3a	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IL-17A	Calibrator	2600	pg/mL
		TH17 Panel 1 (human) Control 1	2690	pg/mL
		TH17 Panel 1 (human) Control 2	429	pg/mL
		TH17 Panel 1 (human) Control 3	61.4	pg/mL
4	hu IL-21	Calibrator	913	pg/mL
		TH17 Panel 1 (human) Control 1	929	pg/mL
		TH17 Panel 1 (human) Control 2	145	pg/mL
		TH17 Panel 1 (human) Control 3	25	pg/mL
5	hu IL-31	Calibrator	895	pg/mL
		TH17 Panel 1 (human) Control 1	931	pg/mL
		TH17 Panel 1 (human) Control 2	145	pg/mL
		TH17 Panel 1 (human) Control 3	21.9	pg/mL
6	hu IL-27	Calibrator	15100	pg/mL
		TH17 Panel 1 (human) Control 1	18400	pg/mL
		TH17 Panel 1 (human) Control 2	3450	pg/mL
		TH17 Panel 1 (human) Control 3	790	pg/mL
7	hu IL-23	Calibrator	4350	pg/mL
		TH17 Panel 1 (human) Control 1	4190	pg/mL
		TH17 Panel 1 (human) Control 2	487	pg/mL
		TH17 Panel 1 (human) Control 3	58.2	pg/mL
8	hu IL-22	Calibrator	523	pg/mL
		TH17 Panel 1 (human) Control 1	547	pg/mL
		TH17 Panel 1 (human) Control 2	103	pg/mL
		TH17 Panel 1 (human) Control 3	17.7	pg/mL
10	hu MIP-3 α	Calibrator	443	pg/mL
		TH17 Panel 1 (human) Control 1	531	pg/mL
		TH17 Panel 1 (human) Control 2	214	pg/mL
		TH17 Panel 1 (human) Control 3	82.3	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

hu IL-17A - Spot 1		
Conc. pg/mL	ECL Signal	%CV
2600	507,000	2.6
650	124,000	2.7
163	30,000	4.2
40.6	7,780	3.3
10.2	2,280	3.9
2.54	998	3.9
0.635	666	3.9
0.00	561	6.0

hu IL-21 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
913	327,000	3.0
228	93,800	3.1
57.1	22,900	3.3
14.3	6,270	4.3
3.57	1,910	3.8
0.892	879	4.2
0.223	575	4.3
0.00	522	5.5

hu IL-31 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
895	498,000	1.8
224	153,000	1.8
55.9	40,900	1.9
14.0	10,500	2.0
3.50	2,750	2.2
0.874	815	2.8
0.219	331	6.6
0.00	166	12.0

hu IL-27 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
15100	242,000	3.1
3780	49,000	3.5
944	11,500	2.8
236	3,080	3.7
59.0	1,110	3.1
14.7	598	3.3
3.69	467	3.7
0.00	417	4.0

hu IL-23 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
4350	340,000	5.3
1090	111,000	3.3
272	29,000	3.8
68.0	7,370	3.5
17.0	2,190	2.7
4.25	862	3.5
1.06	531	6.4
0.00	423	6.9

hu IL-22 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
523	384,000	4.3
131	108,000	4.2
32.7	27,500	5.0
8.17	7,520	3.7
2.04	2,530	3.3
0.511	1,400	4.0
0.128	1,050	3.3
0.00	952	4.5

hu MIP-3α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
443	449,000	2.9
111	111,000	4.2
27.7	21,400	4.6
6.92	5,050	5.6
1.73	1,580	4.7
0.433	731	5.5
0.108	528	6.3
0.00	463	5.9

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
TH17 Panel 1 (human) Plate	Z0046334	2-8°C	30 Jun 2019
Anti-hu IL-17A Antibody	D0081135	2-8°C	30 Apr 2022
Anti-hu IL-21 Antibody	D0081136	2-8°C	31 Mar 2022
Anti-hu IL-31 Antibody	D0081140	2-8°C	28 Feb 2022
Anti-hu IL-27 Antibody	D0081139	2-8°C	28 Feb 2022
Anti-hu IL-23 Antibody	D0081138	2-8°C	31 Mar 2022
Anti-hu IL-22 Antibody	D0081137	2-8°C	28 Feb 2022
Anti-hu MIP-3a Antibody	D0081141	2-8°C	30 Apr 2022
TH17 Panel 1 (human) Calibrator Blend	A0080111	2-8°C	30 Nov 2021
Diluent 43	M0430028	≤ -10°C	31 Jan 2021
Diluent 3	M0030085	≤ -10°C	28 Feb 2021
Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
MSD Wash Buffer (20x) 100mL	Not Kit Specific
Plate Seals	Not Kit Specific
TH17 Panel 1 (human) Control 1	Not Kit Specific
TH17 Panel 1 (human) Control 2	Not Kit Specific
TH17 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	Dawn Stollar	Quality Assurance		17 DEC 2018