

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: K0081021
Expiration Date: 31 Jan 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 Gen.B	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 Gen.B	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 Gen.B	< 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-3α	< 1.0%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IL-17A Gen.B	Calibrator	2730	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	1040	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	881	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	17100	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	4900	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	560	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	449	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 Gen.B - Spot 1		
Conc. pg/mL	ECL Signal	%CV
2730	499,000	2.9
683	117,000	2.2
171	28,200	3.7
42.7	7,320	3.2
10.7	2,120	2.8
2.67	896	4.0
0.667	560	3.7
0.00	444	6.8

hu IL-21 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1040	465,000	3.0
260	125,000	1.4
65.0	27,900	2.9
16.3	7,210	3.2
4.06	2,040	2.7
1.02	862	4.9
0.254	515	6.0
0.00	408	7.5

hu IL-31 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
881	464,000	2.4
220	147,000	1.6
55.1	39,600	2.6
13.8	10,400	3.1
3.44	2,560	2.5
0.860	767	3.7
0.215	280	7.7
0.00	118	18.0

hu IL-27 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
17100	213,000	2.9
4280	44,300	1.9
1070	10,400	3.7
267	2,700	3.5
66.8	900	3.7
16.7	430	4.8
4.17	308	6.8
0.00	266	7.5

hu IL-23 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
4900	435,000	3.7
1230	135,000	4.6
306	35,600	4.0
76.6	8,820	2.6
19.1	2,420	3.8
4.79	759	3.7
1.20	351	6.6
0.00	215	10.0

hu IL-22 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
560	446,000	2.3
140	126,000	3.0
35.0	32,500	2.1
8.75	8,630	3.3
2.19	2,690	2.6
0.547	1,250	2.9
0.137	866	4.7
0.00	757	5.5

hu MIP-3α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
449	589,000	1.6
112	130,000	2.9
28.1	24,800	4.5
7.02	5,830	4.4
1.75	1,860	2.7
0.438	902	2.7
0.110	663	4.4
0.00	562	5.9

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
TH17 Panel 1 (human) Plate	Z0046290	2-8°C	30 Apr 2019
Anti-hu IL-17A Antibody	D0080754	2-8°C	31 Jan 2019
Anti-hu IL-21 Antibody	D0080757	2-8°C	31 Jan 2019
Anti-hu IL-31 Antibody	D0080761	2-8°C	31 Jan 2019
Anti-hu IL-27 Antibody	D0080896	2-8°C	31 Jul 2019
Anti-hu IL-23 Antibody	D0080759	2-8°C	31 Jan 2019
Anti-hu IL-22 Antibody	D0080758	2-8°C	28 Feb 2019
Anti-hu MIP-3 α Antibody	D0080763	2-8°C	31 Jan 2019
TH17 Panel 1 (human) Calibrator Blend	A0080101	2-8°C	30 Sep 2021
Diluent 43	M0430027	$\leq -10^{\circ}\text{C}$	31 Dec 2020
Diluent 3	M0030082	$\leq -10^{\circ}\text{C}$	31 Oct 2020
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
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		12 OCT 2018