

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: K0080601
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	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%

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%

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%

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu IL-17A	Calibrator	2730	pg/mL
		TH17 Panel 1 (human) Control 1	2725	pg/mL
		TH17 Panel 1 (human) Control 2	413	pg/mL
		TH17 Panel 1 (human) Control 3	57	pg/mL
4	hu IL-21	Calibrator	1040	pg/mL
		TH17 Panel 1 (human) Control 1	886	pg/mL
		TH17 Panel 1 (human) Control 2	172	pg/mL
		TH17 Panel 1 (human) Control 3	26	pg/mL
5	hu IL-31	Calibrator	881	pg/mL
		TH17 Panel 1 (human) Control 1	954	pg/mL
		TH17 Panel 1 (human) Control 2	148	pg/mL
		TH17 Panel 1 (human) Control 3	22	pg/mL
6	hu IL-27	Calibrator	17100	pg/mL
		TH17 Panel 1 (human) Control 1	15017	pg/mL
		TH17 Panel 1 (human) Control 2	3221	pg/mL
		TH17 Panel 1 (human) Control 3	1055	pg/mL
7	hu IL-23	Calibrator	4900	pg/mL
		TH17 Panel 1 (human) Control 1	4173	pg/mL
		TH17 Panel 1 (human) Control 2	464	pg/mL
		TH17 Panel 1 (human) Control 3	53	pg/mL
8	hu IL-22	Calibrator	560	pg/mL
		TH17 Panel 1 (human) Control 1	537	pg/mL
		TH17 Panel 1 (human) Control 2	98	pg/mL
		TH17 Panel 1 (human) Control 3	16	pg/mL

Controls tested may not be the same lot as shipped.

Standard Curve Data:

hu IL-17A - Spot 1			hu IL-21 - Spot 4			hu IL-31 - Spot 5		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
2730	592,000	2.4	1040	465,000	1.9	881	482,000	2.5
683	146,000	4.2	260	137,000	2.2	220	149,000	2.0
171	35,300	3.6	65.0	31,700	3.9	55.1	39,600	1.5
42.7	8,550	2.8	16.3	7,850	4.0	13.8	9,740	1.8
10.7	2,180	2.9	4.06	2,000	4.7	3.44	2,520	2.5
2.67	694	4.9	1.02	622	4.2	0.860	714	3.5
0.667	291	6.5	0.254	264	9.8	0.215	253	4.3
0.00	149	13.0	0.00	159	15.0	0.00	94	13.0

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hu IL-27 - Spot 6			hu IL-23 - Spot 7			hu IL-22 - Spot 8		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
17100	298,000	3.5	4900	530,000	3.0	560	482,000	2.9
4280	63,600	2.8	1230	167,000	2.9	140	138,000	2.9
1070	14,800	2.9	306	44,400	2.5	35.0	35,700	4.7
267	3,520	2.8	76.6	10,800	2.0	8.75	9,280	3.5
66.8	992	4.7	19.1	2,960	3.2	2.19	2,760	3.4
16.7	344	6.2	4.79	872	5.2	0.547	1,210	5.1
4.17	185	7.6	1.20	366	7.8	0.137	825	5.2
0.00	124	15.0	0.00	200	12.0	0.00	729	7.7

Components:

Description	Lot Number	Storage Temperature	Expiration Date
TH17 Panel 1 (human) Plate	Z0046173	2-8°C	31 Jan 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	D0080760	2-8°C	31 Jan 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
TH17 Panel 1 (human) Calibrator Blend	A0080101	2-8°C	30 Sep 2021
Diluent 43	M0430018	≤ -10°C	31 Jan 2019
Diluent 3	M0030073	≤ -10°C	31 Mar 2019
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
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
Wash Buffer (20x), 100mL	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	<i>Dawn Stollar</i>	16 MAY 2017