

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: K0081266

Expiration Date: 28 Feb 2021

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	IL-17A Gen.B	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-21	80% - 120%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%	75% - 125%	< 20%
5	IL-31	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-27	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-23	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-22	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	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	IL-17A Gen.B	5.86	80% - 120%	< 20%	1950	80% - 120%	< 20%
4	IL-21	1.65	80% - 120%	< 20%	650	80% - 120%	< 20%
5	IL-31	4.22	80% - 120%	< 20%	650	80% - 120%	< 20%
6	IL-27	38.7	80% - 120%	< 20%	13000	80% - 120%	< 20%
7	IL-23	4.60	80% - 120%	< 20%	3250	80% - 120%	< 20%
8	IL-22	2.78	80% - 120%	< 20%	325	80% - 120%	< 20%
10	MIP-3α	0.588	80% - 120%	< 20%	325	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

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

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Stock Concentration of Material Tested:

Spot	Name	Item	Conc	Units
1	IL-17A Gen.B	Calibrator	2640	pg/mL
		TH17 Panel 1 (human) Control 1	2080	pg/mL
		TH17 Panel 1 (human) Control 2	308	pg/mL
		TH17 Panel 1 (human) Control 3	49.4	pg/mL
4	IL-21	Calibrator	1200	pg/mL
		TH17 Panel 1 (human) Control 1	987	pg/mL
		TH17 Panel 1 (human) Control 2	169	pg/mL
		TH17 Panel 1 (human) Control 3	26.8	pg/mL
5	IL-31	Calibrator	1060	pg/mL
		TH17 Panel 1 (human) Control 1	1140	pg/mL
		TH17 Panel 1 (human) Control 2	179	pg/mL
		TH17 Panel 1 (human) Control 3	26.4	pg/mL
6	IL-27	Calibrator	19300	pg/mL
		TH17 Panel 1 (human) Control 1	32100	pg/mL
		TH17 Panel 1 (human) Control 2	6870	pg/mL
		TH17 Panel 1 (human) Control 3	1570	pg/mL
7	IL-23	Calibrator	5220	pg/mL
		TH17 Panel 1 (human) Control 1	5730	pg/mL
		TH17 Panel 1 (human) Control 2	632	pg/mL
		TH17 Panel 1 (human) Control 3	71	pg/mL
8	IL-22	Calibrator	545	pg/mL
		TH17 Panel 1 (human) Control 1	525	pg/mL
		TH17 Panel 1 (human) Control 2	84.7	pg/mL
		TH17 Panel 1 (human) Control 3	17.6	pg/mL
10	MIP-3 α	Calibrator	393	pg/mL
		TH17 Panel 1 (human) Control 1	503	pg/mL
		TH17 Panel 1 (human) Control 2	205	pg/mL
		TH17 Panel 1 (human) Control 3	73.9	pg/mL

Controls tested may not be the same lot as shipped.

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Standard Curve Data:

IL-17A Gen B. - Spot 1		
Conc. pg/mL	ECL Signal	%CV
2640	543,000	3.2
660	129,000	3.3
165	30,500	3.4
41.3	7,710	2.9
10.3	2,080	3.9
2.58	766	6.1
0.645	445	7.8
0.00	318	8.4

IL-21 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1200	402,000	5.0
300	88,000	6.3
75.0	20,500	6.6
18.8	5,260	5.0
4.69	1,460	5.5
1.17	606	5.0
0.293	392	7.0
0.00	308	9.7

IL-31 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
1060	502,000	2.6
265	150,000	3.1
66.3	39,500	2.3
16.6	10,300	2.0
4.14	2,550	3.4
1.04	739	3.1
0.259	273	8.0
0.00	122	16.0

IL-27 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
19300	129,000	3.1
4830	30,800	2.8
1210	7,570	3.7
302	1,990	3.3
75.4	739	4.6
18.8	400	5.2
4.71	314	4.4
0.00	281	6.6

IL-23 - Spot 7		
Conc. pg/mL	ECL Signal	%CV
5220	445,000	2.3
1310	122,000	2.1
326	31,400	2.7
81.6	7,850	3.6
20.4	2,110	3.1
5.10	661	5.2
1.27	313	8.8
0.00	202	15.0

IL-22 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
545	411,000	5.0
136	116,000	4.2
34.1	29,700	4.1
8.52	7,570	5.4
2.13	2,140	5.9
0.532	831	7.5
0.133	532	17.0
0.00	491	17.0

MIP-3α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
393	287,000	5.0
98.3	61,700	4.9
24.6	13,900	6.5
6.14	3,460	6.0
1.54	1,100	8.0
0.384	507	8.9
0.0959	345	8.1
0.00	346	20.0

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
TH17 Panel 1 (human) Plate	Z0046899	2-8°C	28 Feb 2021
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-3α Antibody	D0081141	2-8°C	30 Apr 2022
TH17 Panel 1 (human) Calibrator Blend	A0080219	2-8°C	30 Apr 2024
Diluent 43	M0430032	≤ -10°C	30 Sep 2021
Diluent 3	M0030089	≤ -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), 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	Karen Hamilla	Quality		19 JUN 2019