

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Angiogenesis Panel 1 (human) Kit
Kit Catalog Numbers: K15190-Series
Kit Lot Number: K0080963
Expiration Date: 31 Mar 2019

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Angiogenesis Panel 1 (human) Control 1		Angiogenesis Panel 1 (human) Control 2		Angiogenesis Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	hu VEGF	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
2	hu VEGF-C	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
3	hu VEGF-D	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
4	hu Tie-2	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
5	hu Flt-1	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
6	hu PIGF	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
7	hu bFGF	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	hu VEGF	5.00	80% - 120%	< 20%	1510	80% - 120%	< 20%
2	hu VEGF-C	146	80% - 120%	< 20%	17500	80% - 120%	< 20%
3	hu VEGF-D	67.1	80% - 120%	< 20%	18800	80% - 120%	< 20%
4	hu Tie-2	396	80% - 120%	< 20%	63400	80% - 120%	< 20%
5	hu Flt-1	10.0	80% - 120%	< 25%	6410	80% - 120%	< 20%
6	hu PIGF	1.50	80% - 120%	< 25%	800	80% - 120%	< 25%
7	hu bFGF	2.60	80% - 120%	< 25%	1780	80% - 120%	< 20%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	hu VEGF	hu VEGF-C	hu VEGF-D	hu Tie-2	hu Flt-1
1	hu VEGF	NA	< 0.5%	< 0.5%	< 0.5%	< 10.0%
2	hu VEGF-C	< 0.5%	NA	< 0.5%	< 0.5%	< 0.5%
3	hu VEGF-D	< 0.5%	< 5.0%	NA	< 0.5%	< 0.5%
4	hu Tie-2	< 0.5%	< 0.5%	< 0.5%	NA	< 0.5%
5	hu Flt-1	< 10.0%	< 5.0%	< 0.5%	< 0.5%	NA
6	hu PIGF	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%
7	hu bFGF	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%

Spot	Name	hu PIGF	hu bFGF
1	hu VEGF	< 0.5%	< 0.5%
2	hu VEGF-C	< 0.5%	< 0.5%
3	hu VEGF-D	< 0.5%	< 0.5%
4	hu Tie-2	< 0.5%	< 0.5%
5	hu Flt-1	< 0.5%	< 0.5%
6	hu PIGF	NA	< 0.5%
7	hu bFGF	< 0.5%	NA

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Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	hu VEGF	20X Calibrator	43000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	507	pg/mL
		Angiogenesis Panel 1 (human) Control 2	108	pg/mL
		Angiogenesis Panel 1 (human) Control 3	20.6	pg/mL
2	hu VEGF-C	20X Calibrator	414000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	5520	pg/mL
		Angiogenesis Panel 1 (human) Control 2	1550	pg/mL
		Angiogenesis Panel 1 (human) Control 3	457	pg/mL
3	hu VEGF-D	20X Calibrator	476000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	5090	pg/mL
		Angiogenesis Panel 1 (human) Control 2	1210	pg/mL
		Angiogenesis Panel 1 (human) Control 3	234	pg/mL
4	hu Tie-2	20X Calibrator	1414000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	15790	pg/mL
		Angiogenesis Panel 1 (human) Control 2	7520	pg/mL
		Angiogenesis Panel 1 (human) Control 3	1380	pg/mL
5	hu Flt-1	20X Calibrator	162800	pg/mL
		Angiogenesis Panel 1 (human) Control 1	2330	pg/mL
		Angiogenesis Panel 1 (human) Control 2	274	pg/mL
		Angiogenesis Panel 1 (human) Control 3	29.9	pg/mL
6	hu PIGF	20X Calibrator	24000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	239	pg/mL
		Angiogenesis Panel 1 (human) Control 2	48.6	pg/mL
		Angiogenesis Panel 1 (human) Control 3	15.8	pg/mL
7	hu bFGF	20X Calibrator	37000	pg/mL
		Angiogenesis Panel 1 (human) Control 1	544	pg/mL
		Angiogenesis Panel 1 (human) Control 2	62.6	pg/mL
		Angiogenesis Panel 1 (human) Control 3	7.37	pg/mL

Controls tested may not be the same lot as shipped.

Concentrations provided in this table refer to the stock concentration of the calibrators. For top of the standard curve concentrations, please refer to the Standard Curve Data

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Standard Curve Data:

hu VEGF - Spot 1		
Conc. pg/mL	ECL Signal	%CV
2150	655,000	3.8
538	116,000	2.7
134	21,200	2.5
33.6	4,570	2.7
8.40	1,260	3.1
2.10	435	3.5
0.525	238	4.8
0.00	177	5.8

hu VEGF-C - Spot 2		
Conc. pg/mL	ECL Signal	%CV
20700	465,000	4.2
5180	77,200	5.8
1290	13,400	11.0
323	3,130	7.4
80.9	944	7.1
20.2	395	6.0
5.05	274	4.7
0.00	223	5.3

hu VEGF-D - Spot 3		
Conc. pg/mL	ECL Signal	%CV
23800	464,000	3.4
5950	128,000	7.6
1490	26,200	6.6
372	5,380	5.1
93.0	1,320	4.2
23.2	449	5.0
5.81	232	4.8
0.00	168	14.0

hu Tie-2 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
70700	152,000	2.4
17700	35,600	4.6
4420	8,850	4.5
1100	2,360	4.1
276	772	3.5
69.0	383	4.5
17.3	277	5.4
0.00	252	6.8

hu Flt-1 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
8140	442,000	2.5
2040	113,000	3.1
509	28,900	1.9
127	7,190	1.5
31.8	1,940	3.5
7.95	599	3.4
1.99	258	6.0
0.00	150	6.1

hu PIGF - Spot 6		
Conc. pg/mL	ECL Signal	%CV
1200	701,000	2.4
300	171,000	3.0
75.0	38,800	2.6
18.8	9,430	2.0
4.69	2,620	2.8
1.17	936	3.1
0.293	494	4.4
0.00	372	11.0

hu bFGF - Spot 7		
Conc. pg/mL	ECL Signal	%CV
1850	710,000	3.0
463	182,000	3.4
116	44,400	4.4
28.9	11,100	4.1
7.23	2,960	6.0
1.81	864	5.5
0.452	328	5.3
0.00	148	6.9

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Angiogenesis Panel 1 (human) Plate	Z0056168	2-8°C	31 Jul 2020
Anti-hu VEGF Antibody	D0080782	2-8°C	31 Mar 2019
Anti-hu VEGF-C Antibody	D0081073	2-8°C	30 Sep 2021
Anti-hu VEGF-D Antibody	D0081069	2-8°C	30 Sep 2021
Anti-hu Tie-2 Antibody	D0081070	2-8°C	30 Sep 2021
Anti-hu Flt-1 Antibody	D0081071	2-8°C	31 Jul 2020
Anti-hu PIGF Antibody	D0081041	2-8°C	30 Apr 2020
Anti-hu bFGF Antibody	D0081072	2-8°C	31 Jul 2020
Angiogenesis Panel 1 (human) Calibrator Blend	A0080104	≤ -70°C	31 Mar 2019
MSD Blocker A	Not Kit Specific	Not Kit Specific	N/A
Diluent 7	M0070052	≤ -10°C	31 Jul 2019
Diluent 11	M0110034	≤ -10°C	29 Feb 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
Angiogenesis Panel 1 (human) Control 1	Not Kit Specific
Angiogenesis Panel 1 (human) Control 2	Not Kit Specific
Angiogenesis 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	<i>Dawn Stollar</i>	24 MAY 2018