

CERTIFICATE OF ANALYSIS

Page 1 of 4

Product Description: V-PLEX® and V-PLEX Plus Proinflammatory Panel 2 (rat) Kit
Kit Catalog Numbers: K15059-Series; K153QX-Series; K153QU-Series; K153OD-Series; K153QO-Series; K153QR-Series; K153QS-Series; K153QT-Series; K153QP-Series
Kit Lot Number: K0081433
Expiration Date: 30 Sep 2021

Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (rat) Control 1		Proinflammatory Panel 1 (rat) Control 2		Proinflammatory Panel 1 (rat) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	IFN- γ	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
2	IL-1 β	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
4	IL-4	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
5	IL-5	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
6	IL-6	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
7	KC/GRO	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
8	IL-10	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
9	IL-13	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%
10	TNF- α	80% - 120%	< 20%	75% - 125%	< 25%	75% - 125%	< 25%	75% - 125%	< 25%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	IFN- γ	39.7	75% - 125%	< 25%	3750	75% - 125%	< 25%
2	IL-1 β	102	75% - 125%	< 25%	8100	75% - 125%	< 25%
4	IL-4	8.00	75% - 125%	< 25%	723	75% - 125%	< 25%
5	IL-5	82.0	75% - 125%	< 25%	3000	75% - 125%	< 25%
6	IL-6	96.9	75% - 125%	< 25%	8550	75% - 125%	< 25%
7	KC/GRO	21.7	75% - 125%	< 25%	728	75% - 125%	< 25%
8	IL-10	163	75% - 125%	< 25%	15700	75% - 125%	< 25%
9	IL-13	12.5	75% - 125%	< 25%	1080	75% - 125%	< 25%
10	TNF- α	9.10	75% - 125%	< 25%	793	75% - 125%	< 25%

Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	IFN- γ	< 1.0%
2	IL-1 β	< 1.0%
4	IL-4	< 1.0%
5	IL-5	< 1.0%
6	IL-6	< 1.0%
7	KC/GRO	< 1.0%
8	IL-10	< 1.0%
9	IL-13	< 1.0%
10	TNF- α	< 1.0%

CERTIFICATE OF ANALYSIS

Page 2 of 4

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	IFN- γ	Calibrator	5800	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	4580	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	1450	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	470	pg/mL
2	IL-1 β	Calibrator	13500	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	13200	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	4150	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	1420	pg/mL
4	IL-4	Calibrator	1100	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	926	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	262	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	80.9	pg/mL
5	IL-5	Calibrator	10800	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	3550	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	1740	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	889	pg/mL
6	IL-6	Calibrator	12600	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	9830	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	3150	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	1100	pg/mL
7	KC/GRO	Calibrator	2650	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	882	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	403	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	211	pg/mL
8	IL-10	Calibrator	23300	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	25000	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	7380	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	1910	pg/mL
9	IL-13	Calibrator	1750	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	1430	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	413	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	132	pg/mL
10	TNF- α	Calibrator	1320	pg/mL
		Proinflammatory Panel 1 (rat) Control 1	948	pg/mL
		Proinflammatory Panel 1 (rat) Control 2	293	pg/mL
		Proinflammatory Panel 1 (rat) Control 3	113	pg/mL

Controls tested may not be the same lot as shipped.

CERTIFICATE OF ANALYSIS

Page 3 of 4

Standard Curve Data:

IFN- γ - Spot 1		
Conc. pg/mL	ECL Signal	%CV
5800	715,000	3.5
1450	173,000	3.3
363	40,400	4.6
90.6	10,500	6.1
22.7	3,400	4.0
5.66	1,630	6.3
1.42	1,190	9.2
0.00	1,070	14.0

IL-1 β - Spot 2		
Conc. pg/mL	ECL Signal	%CV
13500	2,050,000	3.3
3380	426,000	2.3
844	72,900	2.4
211	13,900	2.7
52.7	3,690	3.4
13.2	1,260	4.7
3.30	760	16.0
0.00	632	18.0

IL-4 - Spot 4		
Conc. pg/mL	ECL Signal	%CV
1100	1,030,000	1.6
275	273,000	1.9
68.8	54,400	2.6
17.2	11,300	3.7
4.30	3,430	6.2
1.07	1,700	13.0
0.269	1,090	14.0
0.00	960	14.0

IL-5 - Spot 5		
Conc. pg/mL	ECL Signal	%CV
10800	3,470,000	3.0
2700	926,000	1.0
675	162,000	1.2
169	21,100	1.7
42.2	3,060	2.2
10.5	1,020	4.0
2.64	768	9.1
0.00	727	9.6

IL-6 - Spot 6		
Conc. pg/mL	ECL Signal	%CV
12600	205,000	2.3
3150	49,200	1.9
788	11,800	2.9
197	3,090	3.1
49.2	1,310	4.5
12.3	807	4.2
3.08	690	11.0
0.00	648	8.1

KC/GRO - Spot 7		
Conc. pg/mL	ECL Signal	%CV
2650	1,260,000	6.2
663	529,000	4.3
166	137,000	5.4
41.4	32,200	4.4
10.4	9,310	4.8
2.59	3,390	3.3
0.647	1,960	4.4
0.00	1,440	4.0

IL-10 - Spot 8		
Conc. pg/mL	ECL Signal	%CV
23300	1,130,000	1.7
5830	302,000	2.4
1460	76,100	3.3
364	19,700	2.6
91.0	5,570	3.5
22.8	1,980	2.6
5.69	1,040	4.5
0.00	745	7.8

IL-13 - Spot 9		
Conc. pg/mL	ECL Signal	%CV
1750	1,630,000	3.1
438	334,000	1.2
109	54,200	1.1
27.3	9,940	1.6
6.84	2,700	1.5
1.71	1,050	2.6
0.427	663	5.6
0.00	521	8.6

TNF- α - Spot 10		
Conc. pg/mL	ECL Signal	%CV
1320	802,000	3.0
330	193,000	2.7
82.5	45,900	2.3
20.6	11,200	3.3
5.16	3,300	2.4
1.29	1,180	4.4
0.322	666	5.3
0.00	505	7.1

CERTIFICATE OF ANALYSIS

Page 4 of 4


Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 2 (rat) Plate	Z0047322	2-8°C	31 Oct 2022
Anti-rat IFN- γ Antibody	D0081454	2-8°C	31 Dec 2023
Anti-rat IL-1 β Antibody	D0081456	2-8°C	31 Jul 2023
Anti-rat IL-4 Antibody	D0081455	2-8°C	31 Aug 2023
Anti-rat IL-5 Antibody	D0081457	2-8°C	30 Sep 2023
Anti-rat IL-6 Antibody	D0081458	2-8°C	31 Oct 2023
Anti-rat KC/GRO Antibody	D0081459	2-8°C	31 Jul 2023
Anti-rat IL-10 Antibody	D0081460	2-8°C	31 Jul 2023
Anti-rat IL-13 Antibody	D0081461	2-8°C	30 Sep 2023
Anti-rat TNF- α Antibody	D0081462	2-8°C	31 Jul 2023
Proinflammatory Panel 1 (rat) Calibrator Blend	A0080256	2-8°C	31 May 2025
Blocker H	R0100018	Room Temperature	31 Mar 2022
Diluent 42	M0420012	$\leq -10^{\circ}\text{C}$	30 Sep 2021
Diluent 40	M0400016	$\leq -10^{\circ}\text{C}$	30 Nov 2022
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), 100mL	Not Kit Specific
Proinflammatory Panel 1 (rat) Control 1	Not Kit Specific
Proinflammatory Panel 1 (rat) Control 2	Not Kit Specific
Proinflammatory Panel 1 (rat) 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		18 AUG 2020