

## CERTIFICATE OF ANALYSIS

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**Product Description:** V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 NHP Kit

**Kit Catalog Numbers:** K15056-Series

**Kit Lot Number:** K0081004

**Expiration Date:** 31 Oct 2019

### Acceptance Data/ Percent Recovery Specifications:

Spot	Name	Calibrator		Proinflammatory Panel 1 (human) Control 1		Proinflammatory Panel 1 (human) Control 2		Proinflammatory Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	NHP IFN- $\gamma$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	NHP IL-1 $\beta$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	NHP IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	NHP IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	NHP IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	NHP IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	NHP IFN- $\gamma$	7.47	80% - 120%	< 20%	938	80% - 120%	< 20%
2	NHP IL-1 $\beta$	2.14	80% - 120%	< 20%	375	80% - 120%	< 20%
3	NHP IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
5	NHP IL-6	1.58	80% - 120%	< 20%	488	80% - 120%	< 20%
6	NHP IL-8	1.13	80% - 120%	< 20%	375	80% - 120%	< 20%
7	NHP IL-10	0.680	80% - 120%	< 20%	233	80% - 120%	< 20%

### Acceptance Data/ Non Specific Binding Specifications:

Spot	Name	NSB Spec
1	NHP IFN- $\gamma$	< 1.0%
2	NHP IL-1 $\beta$	< 1.0%
3	NHP IL-2	< 1.0%
5	NHP IL-6	< 1.0%
6	NHP IL-8	< 1.0%
7	NHP IL-10	< 1.0%

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### Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	NHP IFN- $\gamma$	Calibrator	1450	pg/mL
		Proinflammatory Panel 1 (human) Control 1	574	pg/mL
		Proinflammatory Panel 1 (human) Control 2	155	pg/mL
		Proinflammatory Panel 1 (human) Control 3	41.8	pg/mL
2	NHP IL-1 $\beta$	Calibrator	589	pg/mL
		Proinflammatory Panel 1 (human) Control 1	202	pg/mL
		Proinflammatory Panel 1 (human) Control 2	50.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.7	pg/mL
3	NHP IL-2	Calibrator	1450	pg/mL
		Proinflammatory Panel 1 (human) Control 1	400	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.48	pg/mL
5	NHP IL-6	Calibrator	736	pg/mL
		Proinflammatory Panel 1 (human) Control 1	264	pg/mL
		Proinflammatory Panel 1 (human) Control 2	41.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.24	pg/mL
6	NHP IL-8	Calibrator	574	pg/mL
		Proinflammatory Panel 1 (human) Control 1	233	pg/mL
		Proinflammatory Panel 1 (human) Control 2	36.9	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.93	pg/mL
7	NHP IL-10	Calibrator	375	pg/mL
		Proinflammatory Panel 1 (human) Control 1	125	pg/mL
		Proinflammatory Panel 1 (human) Control 2	23.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.47	pg/mL

Controls tested may not be the same lot as shipped.

The calibrator and controls for this assay contain a human recombinant cytokine calibrator sequence that is highly homologous to the non-human primate cytokine. This assay has been verified to cross-react with homologs of rhesus and cynomolgus monkeys. See Product Insert for experimental data.

### Standard Curve Data:

NHP IFN- $\gamma$ - Spot 1			NHP IL-1 $\beta$ - Spot 2			NHP IL-2 - Spot 3		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
1450	275,000	1.5	589	1,790,000	1.6	1450	1,260,000	1.9
363	73,900	1.7	147	520,000	1.7	363	362,000	1.7
90.6	18,700	2.1	36.8	137,000	2.4	90.6	98,500	1.5
22.7	4,960	2.6	9.20	35,700	1.7	22.7	25,600	2.6
5.66	1,570	2.6	2.30	10,700	2.4	5.66	7,210	2.3
1.42	771	4.3	0.575	4,220	2.5	1.42	2,430	3.4
0.354	546	4.9	0.144	2,530	3.3	0.354	1,200	3.4
0.00	472	5.9	0.00	1,950	2.9	0.00	793	4.9

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NHP IL-6 - Spot 5			NHP IL-8 - Spot 6			NHP IL-10 - Spot 7		
Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV	Conc. pg/mL	ECL Signal	%CV
736	1,310,000	3.7	574	1,060,000	2.1	375	655,000	1.6
184	310,000	2.6	144	267,000	1.4	93.8	195,000	1.5
46.0	65,200	3.1	35.9	66,600	1.7	23.4	50,900	1.7
11.5	15,000	3.0	8.97	16,300	2.1	5.86	13,100	2.2
2.88	3,810	1.7	2.24	4,490	2.0	1.46	3,730	2.1
0.719	1,100	3.3	0.561	1,390	2.9	0.366	1,310	3.1
0.180	417	5.2	0.140	606	5.0	0.0916	668	5.7
0.00	193	8.0	0.00	333	6.4	0.00	456	5.5

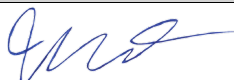
**Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046727	2-8°C	30 Jun 2020
Anti-hu IFN-γ Antibody	D0081014	2-8°C	31 Jan 2020
Anti-hu IL-1β Antibody	D0081082	2-8°C	30 Sep 2021
Anti-hu IL-2 Antibody	D0080982	2-8°C	31 Oct 2019
Anti-hu IL-6 Antibody	D0081018	2-8°C	31 Jan 2020
Anti-hu IL-8 Antibody	D0081037	2-8°C	29 Feb 2020
Anti-hu IL-10 Antibody	D0081024	2-8°C	31 Jan 2020
Proinflammatory Panel 1 (human) Calibrator Blend	A0080151	2-8°C	30 Sep 2022
Diluent 2	M0020098	≤ -10°C	28 Feb 2020
Diluent 3	M0030080	≤ -10°C	31 May 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), 100mL	Not Kit Specific
Proinflammatory Panel 1 (human) Control 1	Not Kit Specific
Proinflammatory Panel 1 (human) Control 2	Not Kit Specific
Proinflammatory 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
<b>Review/Approval</b>	Jessica Drolet	Quality Assurance		16 May 2018