

## 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:** K0081064  
**Expiration Date:** 31 Mar 2020

**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- $\gamma$	1.76	80% - 120%	< 20%	938	80% - 120%	< 20%
2	NHP IL-1 $\beta$	0.646	80% - 120%	< 20%	375	80% - 120%	< 20%
3	NHP IL-2	0.890	80% - 120%	< 20%	938	80% - 120%	< 20%
5	NHP IL-6	0.633	80% - 120%	< 20%	488	80% - 120%	< 20%
6	NHP IL-8	0.591	80% - 120%	< 20%	375	80% - 120%	< 20%
7	NHP IL-10	0.298	80% - 120%	< 20%	233	80% - 120%	< 20%

**Acceptance Data/ Non Specific Binding Specifications:**

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

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

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### Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1	NHP IFN- $\gamma$	Calibrator	1280	pg/mL
		Proinflammatory Panel 1 (human) Control 1	582	pg/mL
		Proinflammatory Panel 1 (human) Control 2	164	pg/mL
		Proinflammatory Panel 1 (human) Control 3	40.9	pg/mL
2	NHP IL-1 $\beta$	Calibrator	610	pg/mL
		Proinflammatory Panel 1 (human) Control 1	208	pg/mL
		Proinflammatory Panel 1 (human) Control 2	52.7	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.6	pg/mL
3	NHP IL-2	Calibrator	1480	pg/mL
		Proinflammatory Panel 1 (human) Control 1	407	pg/mL
		Proinflammatory Panel 1 (human) Control 2	42.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.54	pg/mL
5	NHP IL-6	Calibrator	780	pg/mL
		Proinflammatory Panel 1 (human) Control 1	271	pg/mL
		Proinflammatory Panel 1 (human) Control 2	43.5	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.03	pg/mL
6	NHP IL-8	Calibrator	639	pg/mL
		Proinflammatory Panel 1 (human) Control 1	233	pg/mL
		Proinflammatory Panel 1 (human) Control 2	37.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.13	pg/mL
7	NHP IL-10	Calibrator	359	pg/mL
		Proinflammatory Panel 1 (human) Control 1	125	pg/mL
		Proinflammatory Panel 1 (human) Control 2	24.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.49	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
1280	198,000	1.9	610	1,480,000	1.7	1480	1,220,000	3.0
320	52,200	1.4	153	393,000	1.2	370	356,000	2.2
80.0	14,000	8.9	38.1	105,000	6.1	92.5	100,000	7.9
20.0	3,800	7.4	9.53	26,900	6.1	23.1	25,900	6.8
5.00	1,300	3.3	2.38	7,020	3.0	5.78	6,700	3.5
1.25	733	4.1	0.596	2,580	3.0	1.45	2,210	2.6
0.313	620	10.0	0.149	1,540	8.9	0.361	1,190	10.0
0.00	576	6.6	0.00	1,150	7.5	0.00	756	7.1

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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
780	1,470,000	1.8	639	711,000	3.1	359	714,000	1.8
195	361,000	1.6	160	188,000	2.8	89.8	209,000	2.3
48.8	82,500	6.7	39.9	49,800	5.9	22.4	58,100	7.0
12.2	19,500	7.6	9.98	12,700	5.2	5.61	14,600	7.3
3.05	4,590	2.6	2.50	3,280	4.5	1.40	3,850	2.9
0.762	1,300	2.4	0.624	1,070	2.1	0.351	1,260	2.9
0.190	534	8.6	0.156	579	11.0	0.0876	688	7.7
0.00	239	11.0	0.00	373	12.0	0.00	444	8.0


### Components:

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0046884	2-8°C	31 Jan 2021
Anti-hu IFN-γ Antibody	D0081094	2-8°C	30 Nov 2021
Anti-hu IL-1β Antibody	D0081095	2-8°C	31 Dec 2021
Anti-hu IL-2 Antibody	D0081096	2-8°C	30 Nov 2021
Anti-hu IL-6 Antibody	D0081078	2-8°C	31 Oct 2021
Anti-hu IL-8 Antibody	D0081097	2-8°C	30 Nov 2021
Anti-hu IL-10 Antibody	D0081098	2-8°C	31 Jan 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080174	2-8°C	31 Jul 2023
Diluent 2	M0020099	≤ -10°C	31 Mar 2020
Diluent 3	M0030084	≤ -10°C	31 Jan 2021
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus	
MSD Wash Buffer (20X), 100mL	Not Kit Specific
Plate Seals	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>	Dawn Stollar	Quality Assurance		25 SEP 2018