

**CERTIFICATE OF ANALYSIS**

**Product Description:** V-PLEX® and V-PLEX Plus Proinflammatory Panel 1 (NHP) Kit  
**Kit Catalog Numbers:** K15056-Series  
**Kit Lot Number:** K0081192  
**Expiration Date:** 31 Mar 2021

**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	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	1230	pg/mL
		Proinflammatory Panel 1 (human) Control 1	512	pg/mL
		Proinflammatory Panel 1 (human) Control 2	132	pg/mL
		Proinflammatory Panel 1 (human) Control 3	40.9	pg/mL
2	NHP IL-1 $\beta$	Calibrator	576	pg/mL
		Proinflammatory Panel 1 (human) Control 1	203	pg/mL
		Proinflammatory Panel 1 (human) Control 2	47.1	pg/mL
		Proinflammatory Panel 1 (human) Control 3	10.9	pg/mL
3	NHP IL-2	Calibrator	1470	pg/mL
		Proinflammatory Panel 1 (human) Control 1	390	pg/mL
		Proinflammatory Panel 1 (human) Control 2	38.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.34	pg/mL
5	NHP IL-6	Calibrator	765	pg/mL
		Proinflammatory Panel 1 (human) Control 1	264	pg/mL
		Proinflammatory Panel 1 (human) Control 2	46.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.18	pg/mL
6	NHP IL-8	Calibrator	569	pg/mL
		Proinflammatory Panel 1 (human) Control 1	235	pg/mL
		Proinflammatory Panel 1 (human) Control 2	36.2	pg/mL
		Proinflammatory Panel 1 (human) Control 3	5.93	pg/mL
7	NHP IL-10	Calibrator	367	pg/mL
		Proinflammatory Panel 1 (human) Control 1	133	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.32	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
1230	211,000	1.8	576	1,440,000	1.7	1470	1,260,000	2.4
308	54,900	1.6	144	398,000	1.3	368	358,000	1.0
76.9	14,000	2.6	36.0	106,000	2.0	91.9	96,600	1.6
19.2	3,670	2.7	9.00	27,000	2.3	23.0	24,400	1.8
4.80	1,170	2.9	2.25	7,310	2.5	5.74	6,470	3.4
1.20	551	4.0	0.563	2,380	2.3	1.44	1,780	3.3
0.300	377	10.0	0.141	1,140	3.8	0.359	610	4.7
0.00	311	6.1	0.00	696	3.2	0.00	208	8.2

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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
765	1,440,000	2.4	569	659,000	2.9	367	742,000	1.6
191	343,000	2.0	142	171,000	1.9	91.8	218,000	1.8
47.8	75,900	1.7	35.6	42,600	2.9	22.9	58,100	1.8
12.0	17,800	2.4	8.89	11,000	2.5	5.73	14,800	1.7
2.99	4,460	2.1	2.22	2,910	2.9	1.43	3,950	2.2
0.747	1,220	2.6	0.556	905	2.6	0.358	1,160	2.2
0.187	397	4.0	0.139	376	6.5	0.0896	466	6.6
0.00	119	13.0	0.00	205	12.0	0.00	228	9.3


**Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047030	2-8°C	31 Jul 2021
Anti-hu IFN- $\gamma$ Antibody	D0081180	2-8°C	31 Mar 2022
Anti-hu IL-1 $\beta$ Antibody	D0081091	2-8°C	31 Oct 2021
Anti-hu IL-2 Antibody	D0081129	2-8°C	31 Jan 2022
Anti-hu IL-6 Antibody	D0081160	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081097	2-8°C	30 Nov 2021
Anti-hu IL-10 Antibody	D0081134	2-8°C	31 Mar 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080187	2-8°C	31 Dec 2023
Diluent 2	M0020103	$\leq -10^{\circ}\text{C}$	31 Mar 2021
Diluent 3	M0030087	$\leq -10^{\circ}\text{C}$	30 Jun 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
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>	Karen Hamilla	Quality		06 JUN 2019