

**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:** K0081146

**Expiration Date:** 28 Feb 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	1280	pg/mL
		Proinflammatory Panel 1 (human) Control 1	544	pg/mL
		Proinflammatory Panel 1 (human) Control 2	146	pg/mL
		Proinflammatory Panel 1 (human) Control 3	37.8	pg/mL
2	NHP IL-1 $\beta$	Calibrator	554	pg/mL
		Proinflammatory Panel 1 (human) Control 1	218	pg/mL
		Proinflammatory Panel 1 (human) Control 2	51.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	11.9	pg/mL
3	NHP IL-2	Calibrator	1440	pg/mL
		Proinflammatory Panel 1 (human) Control 1	419	pg/mL
		Proinflammatory Panel 1 (human) Control 2	39.6	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.66	pg/mL
5	NHP IL-6	Calibrator	742	pg/mL
		Proinflammatory Panel 1 (human) Control 1	273	pg/mL
		Proinflammatory Panel 1 (human) Control 2	48.4	pg/mL
		Proinflammatory Panel 1 (human) Control 3	8.11	pg/mL
6	NHP IL-8	Calibrator	545	pg/mL
		Proinflammatory Panel 1 (human) Control 1	224	pg/mL
		Proinflammatory Panel 1 (human) Control 2	33.8	pg/mL
		Proinflammatory Panel 1 (human) Control 3	6.31	pg/mL
7	NHP IL-10	Calibrator	378	pg/mL
		Proinflammatory Panel 1 (human) Control 1	136	pg/mL
		Proinflammatory Panel 1 (human) Control 2	25.3	pg/mL
		Proinflammatory Panel 1 (human) Control 3	3.81	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	206,000	1.7	554	1,480,000	1.7	1440	1,160,000	3.0
320	55,100	1.6	139	419,000	1.5	360	331,000	2.8
80.0	14,100	2.8	34.6	110,000	1.9	90.0	88,900	3.5
20.0	3,840	2.4	8.66	28,700	1.8	22.5	22,900	3.1
5.00	1,330	2.7	2.16	8,440	3.3	5.63	6,260	3.6
1.25	731	4.6	0.541	3,250	2.7	1.41	1,970	4.5
0.313	544	4.6	0.135	1,940	4.4	0.352	871	4.0
0.00	501	4.0	0.00	1,500	3.4	0.00	511	3.8

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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
742	1,290,000	1.9	545	839,000	3.1	378	756,000	1.6
186	307,000	1.6	136	220,000	1.7	94.5	229,000	2.0
46.4	66,300	2.2	34.1	56,100	2.3	23.6	61,600	2.2
11.6	15,700	2.4	8.52	14,200	2.5	5.91	15,800	2.5
2.90	4,040	3.3	2.13	3,940	2.6	1.48	4,520	2.4
0.725	1,230	3.5	0.532	1,250	2.3	0.369	1,510	2.5
0.181	514	3.2	0.133	574	3.0	0.0923	759	4.7
0.00	276	6.5	0.00	341	4.5	0.00	514	5.5


**Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0047033	2-8°C	31 Jul 2021
Anti-hu IFN- $\gamma$ Antibody	D0081180	2-8°C	31 Mar 2022
Anti-hu IL-1 $\beta$ Antibody	D0081128	2-8°C	31 Jan 2022
Anti-hu IL-2 Antibody	D0081209	2-8°C	31 May 2022
Anti-hu IL-6 Antibody	D0081210	2-8°C	30 Apr 2022
Anti-hu IL-8 Antibody	D0081168	2-8°C	30 Apr 2022
Anti-hu IL-10 Antibody	D0081098	2-8°C	31 Jan 2022
Proinflammatory Panel 1 (human) Calibrator Blend	A0080186	2-8°C	30 Nov 2023
Diluent 2	M0020103	$\leq -10^\circ\text{C}$	31 Mar 2021
Diluent 3	M0030085	$\leq -10^\circ\text{C}$	28 Feb 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>	Dawn Stollar	Quality Assurance		27 MAR 2019