



CERTIFICATE OF ANALYSIS

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COA-04399

Product Description: Proinflammatory Panel 1 (NHP) Kit V-PLEX™ and V-PLEX Plus
Kit Catalog Numbers: K15056D-1, K15056D-2, K15056D-4, K15056G-1, K15056G-2, K15056G-4
Kit Lot Number: K0080133
Expiration Date: 31 JUL 2016

Acceptance Data:

Metric		Specifications	Assay					
			NHP IFN- γ	NHP IL-1 β	NHP IL-2	NHP IL-6	NHP IL-8	NHP IL-10
% Recovery Concentration	Calibrators	80% - 120%	Pass	Pass	Pass	Pass	Pass	Pass
	Controls	80% - 120%	Pass	Pass	Pass	Pass	Pass	Pass
	ULOQ	80% - 120%	Pass	Pass	Pass	Pass	Pass	Pass
	LLOQ	80% - 120%	Pass	Pass	Pass	Pass	Pass	Pass
% Recovery CV	Calibrators	< 20%	Pass	Pass	Pass	Pass	Pass	Pass
	Controls	< 20%	Pass	Pass	Pass	Pass	Pass	Pass
	ULOQ	< 20%	Pass	Pass	Pass	Pass	Pass	Pass
	LLOQ	< 20%	Pass	Pass	Pass	Pass	Pass	Pass
Non-specific binding		< 1%	Pass	Pass	Pass	Pass	Pass	Pass

Concentration of Materials Tested:

Units = pg/mL	Assay					
	NHP IFN- γ *	NHP IL-1 β *	NHP IL-2*	NHP IL-6*	NHP IL-8*	NHP IL-10*
Reconstituted Calibrator	1410	510	1470	769	507	324
Reconstituted Control 1 (A00C0213)	426	146	280	235	155	99.5
Reconstituted Control 2 (A00C0214)	115	39.4	78.2	63.1	40.7	26.6
Reconstituted Control 3 (A00C0215)	25.1	9.46	23.0	15.2	10.5	6.61
ULOQ	1110	400	1150	604	398	254
LLOQ	2.90	1.05	0.89	0.466	0.307	0.196

*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.



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Standard Curve Data from Kit QC:

NHP IFN- γ		
Conc., (pg/mL)	Average Signal	%CV
1410	263 369	2.5
353	72 319	2.2
88.1	18 427	2.3
22.0	4857	2.4
5.51	1424	2.9
1.38	572	4.5
0.344	353	7.6
0	279	9.2

NHP IL-1 β		
Conc., (pg/mL)	Average Signal	%CV
510	1 353 654	3.8
128	325 183	2.5
31.9	81 142	2.3
7.97	20 658	2.5
1.99	5566	3.0
0.498	1748	4.3
0.125	809	8.7
0	589	19.7

NHP IL-2		
Conc., (pg/mL)	Average Signal	%CV
1470	845 483	5.0
368	233 986	7.2
91.9	60 664	6.9
23.0	15 286	7.5
5.74	4149	4.8
1.44	1156	7.6
0.359	444	8.7
0	188	8.5

NHP IL-6		
Conc., (pg/mL)	Average Signal	%CV
769	1 082 910	5.1
192	229 265	3.1
48.1	45 832	3.7
12.0	10 482	3.2
3.00	2700	2.8
0.751	797	4.1
0.188	324	9.1
0	157	10.6

NHP IL-8		
Conc., (pg/mL)	Average Signal	%CV
507	526 924	2.5
127	128 269	2.3
31.7	31 547	2.1
7.92	8049	1.9
1.98	2189	2.8
0.495	676	3.7
0.124	301	6.8
0	181	18.3

NHP IL-10		
Conc., (pg/mL)	Average Signal	%CV
324	548 882	1.5
81.0	155 592	1.4
20.3	40 940	2.7
5.06	10 492	2.3
1.27	2860	2.3
0.316	880	5.1
0.079	404	4.9
0	224	10.4



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Proinflammatory Panel 1 (NHP) Kit V-PLEX Components			
Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0045213	2-8°C	31 AUG 2016
Anti-hu IFN- γ Antibody	D0080292	2-8°C	31 AUG 2016
Anti-hu IL-1 β Antibody	D0080293	2-8°C	31 AUG 2016
Anti-hu IL-2 Antibody	D0080294	2-8°C	31 AUG 2016
Anti-hu IL-6 Antibody	D0080296	2-8°C	31 AUG 2016
Anti-hu IL-8 Antibody	D0080297	2-8°C	31 AUG 2016
Anti-hu IL-10 Antibody	D0080298	2-8°C	31 AUG 2016
Proinflammatory Panel 1 (human) Calibrator Blend	A0080036	2-8°C	31 MAR 2019
Diluent 2	M0020083	$\leq -10^{\circ}\text{C}$	31 JUL 2016
Diluent 3	M0030061	$\leq -10^{\circ}\text{C}$	31 AUG 2016
MSD Read Buffer T (4X)	Not Kit Specific	Room Temperature	N/A
Additional Components Included in V-PLEX Plus			
Wash Buffer (20X), 100 mL	Not Kit Specific	Room Temperature	N/A
Plate Seals	Not Kit Specific	Room Temperature	N/A
Proinflammatory Panel 1 (human) Control 1	Not Kit Specific; See Separate Control Pack COA		
Proinflammatory Panel 1 (human) Control 2			
Proinflammatory Panel 1 (human) Control 3			

Statement: The above kit lot was tested using MSD procedures and it conforms to MSD's specifications. The above product is intended for Research Use Only. Not for use in Diagnostic Procedures.

	Name	Function	Signature	Date
Review/Approval	Dana Short	Quality Control		12 MAY 2014