



CERTIFICATE OF ANALYSIS

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COA-05218

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: K0080277
Expiration Date: 31 OCT 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	1510	520	1460	749	546	313
Reconstituted Control 1 (A00C0273)	345	129	195	128	129	95.8
Reconstituted Control 2 (A00C0274)	123	52.2	77.6	58.3	37.6	24.7
Reconstituted Control 3 (A00C0293)	37.9	8.62	2.96	8.27	5.19	3.69
ULOQ	1200	415	1160	597	435	250
LLOQ	3.13	0.317	0.890	0.457	0.333	0.191

*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
1510	352 665	2.3
378	95 509	2.1
94.4	23 245	2.2
23.6	5819	2.8
5.90	1554	2.7
1.47	563	5.1
0.369	292	9.4
0	211	11.4

NHP IL-1 β		
Conc., (pg/mL)	Average Signal	%CV
520	1 701 581	2.7
130	410 770	3.1
32.5	96 679	2.6
8.13	23 550	3.6
2.03	6413	4.0
0.508	2044	3.0
0.127	992	5.7
0	591	6.8

NHP IL-2		
Conc., (pg/mL)	Average Signal	%CV
1460	1 182 008	2.4
365	328 911	2.4
91.3	82 777	2.4
22.8	20 367	3.1
5.70	5565	3.2
1.43	1609	3.4
0.356	651	5.1
0	320	8.8

NHP IL-6		
Conc., (pg/mL)	Average Signal	%CV
749	1 329 078	2.6
187	294 704	3.9
46.8	61 533	3.1
11.7	13 880	4.5
2.93	3569	3.4
0.731	1030	4.3
0.183	399	6.3
0	182	10.2

NHP IL-8		
Conc., (pg/mL)	Average Signal	%CV
546	665 294	2.4
137	166 238	2.3
34.1	39 583	2.8
8.53	9263	3.9
2.13	2591	2.7
0.533	753	4.1
0.133	323	7.9
0	172	11.2

NHP IL-10		
Conc., (pg/mL)	Average Signal	%CV
313	609 040	1.6
78.3	171 183	1.9
19.6	42 219	2.6
4.89	10 403	2.5
1.22	2844	2.7
0.306	854	5.1
0.076	393	7.6
0	232	12.0



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Proinflammatory Panel 1 (NHP) Kit V-PLEX Components			
Description	Lot Number	Storage Temperature	Expiration Date
Proinflammatory Panel 1 (human) Plate	Z0045582	2-8°C	30 JUN 2017
Anti-hu IFN- γ Antibody	D0080493	2-8°C	30 JUN 2017
Anti-hu IL-1 β Antibody	D0080358	2-8°C	30 NOV 2016
Anti-hu IL-2 Antibody	D0080381	2-8°C	31 MAR 2017
Anti-hu IL-6 Antibody	D0080499	2-8°C	30 JUN 2017
Anti-hu IL-8 Antibody	D0080496	2-8°C	30 JUN 2017
Anti-hu IL-10 Antibody	D0080382	2-8°C	31 MAR 2017
Proinflammatory Panel 1 (human) Calibrator Blend	A0080045	2-8°C	30 NOV 2019
Diluent 2	M0020085	\leq -10°C	31 JAN 2017
Diluent 3	M0030062	\leq -10°C	31 OCT 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 FEB 2015