



## CERTIFICATE OF ANALYSIS

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**Product Description:** Chemokine Panel 1 (NHP) Kit V-PLEX™ and V-PLEX Plus

**Kit Catalog Numbers:** K15055D-1, K15055D-2, K15055D-4, K15055G-1, K15055G-2, K15055G-4

**Kit Lot Number:** K0080215

**Expiration Date:** 31 AUG 2016

**Acceptance Data:**

Metric		Specifications	Assay			
			NHP MIP-1β	NHP Eotaxin-3	NHP TARC	NHP IP-10
% Recovery Concentration	Calibrators	80% - 120%	Pass	Pass	Pass	Pass
	Controls	80% - 120%	Pass	Pass	Pass	Pass
	ULOQ	80% - 120%	Pass	Pass	Pass	Pass
	LLOQ	80% - 120%	Pass	Pass	Pass	Pass
% Recovery CV	Calibrators	< 20%	Pass	Pass	Pass	Pass
	Controls	< 20%	Pass	Pass	Pass	Pass
	ULOQ	< 20%	Pass	Pass	Pass	Pass
	LLOQ	< 20%	Pass	Pass	Pass	Pass
Non-specific binding		< 1%	Pass	Pass	Pass	Pass

Metric		Specifications	Assay			
			NHP MIP-1α	NHP MCP-1	NHP MDC	NHP MCP-4
% Recovery Concentration	Calibrators	80% - 120%	Pass	Pass	Pass	Pass
	Controls	80% - 120%	Pass	Pass	Pass	Pass
	ULOQ	80% - 120%	Pass	Pass	Pass	Pass
	LLOQ	80% - 120%	Pass	Pass	Pass	Pass
% Recovery CV	Calibrators	< 20%	Pass	Pass	Pass	Pass
	Controls	< 20%	Pass	Pass	Pass	Pass
	ULOQ	< 20%	Pass	Pass	Pass	Pass
	LLOQ	< 20%	Pass	Pass	Pass	Pass
Non-specific binding		< 1%	Pass	Pass	Pass	Pass

Metric		Specifications	Assay
			NHP IL-8
% Recovery Concentration	Calibrators	80% - 120%	Pass
	Controls	80% - 120%	Pass
	ULOQ	75% - 125%	Pass
	LLOQ	75% - 125%	Pass
% Recovery CV	Calibrators	< 20%	Pass
	Controls	< 20%	Pass
	ULOQ	< 20%	Pass
	LLOQ	< 20%	Pass
Non-specific binding		< 1%	Pass



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### Concentration of Materials Tested:

Units = pg/mL	Assay								
	hu MIP-1 $\beta$ *	hu Eotaxin-3*	hu TARC*	hu IP-10*	hu MIP-1 $\alpha$ *	hu IL-8*	hu MCP-1*	hu MDC*	hu MCP-4*
Reconstituted Calibrator	1050	5020	1470	2650	1040	93 700	488	10 100	645
Reconstituted Control 1 (A00C0267)	603	3720	971	1470	709	161 000	382	5790	475
Reconstituted Control 2 (A00C0268)	156	897	235	378	188	52 300	88.9	1330	131
Reconstituted Control 3 (A00C0269)	36.7	226	63.4	93.5	42.8	16 100	22.7	333	32.2
ULOQ	807	3860	1130	1230	799	72 000	375	7760	496
LLOQ	2.13	10.2	0.760	1.37	7.91	713	0.992	20.5	4.91

\*The calibrator and controls for this assay contain a human recombinant chemokine calibrator sequence that is highly homologous to the non-human primate chemokine. 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 MIP-1 $\beta$		
Conc., (pg/ml)	Average Signal	%CV
1050	1 162 333	5.5
263	290 628	3.3
65.6	44 792	4.8
16.4	5811	4.1
4.10	987	5.5
1.03	290	10.2
0.256	154	11.3
0	111	17.5

NHP Eotaxin-3		
Conc., (pg/ml)	Average Signal	%CV
5020	243 175	7.6
1255	50 196	3.5
314	12 777	5.4
78.4	3249	5.3
19.6	955	5.4
4.90	345	8.9
1.23	169	12.0
0	107	21.0

NHP TARC		
Conc., (pg/ml)	Average Signal	%CV
1470	547 566	3.2
368	171 194	3.8
91.9	40 715	4.3
23.0	10 171	5.9
5.74	2737	6.2
1.44	967	5.4
0.359	454	5.1
0	294	10.1

NHP IP-10		
Conc., (pg/ml)	Average Signal	%CV
2650	763 258	10.6
663	450 128	3.3
166	138 395	4.1
41.4	37 482	3.3
10.4	9797	4.2
2.59	2626	3.5
0.647	736	4.7
0	97	22.5

NHP MIP-1 $\alpha$		
Conc., (pg/ml)	Average Signal	%CV
1040	635 133	2.4
260	106 883	2.3
65.0	11 534	3.8
16.3	1212	4.4
4.06	409	9.4
1.02	333	7.5
0.254	286	6.4
0	283	8.2

NHP IL-8		
Conc., (pg/ml)	Average Signal	%CV
93 700	1 273 351	3.6
23 425	149 325	8.4
5856	10 251	5.4
1464	1399	6.4
366	427	9.5
91.5	211	14.9
22.9	137	16.9
0	126	20.2

NHP MCP-1		
Conc., (pg/ml)	Average Signal	%CV
488	546 258	9.6
122	127 878	7.7
30.5	29 352	10.3
7.63	7013	8.7
1.91	1833	12.6
0.477	567	12.1
0.119	231	13.3
0	133	17.2

NHP MDC		
Conc., (pg/ml)	Average Signal	%CV
10 100	1 381 298	4.2
2525	370 685	4.7
631	54 527	7.9
158	7548	5.0
39.5	1535	6.3
9.86	501	9.2
2.47	220	11.4
0	161	21.6

NHP MCP-4		
Conc., (pg/ml)	Average Signal	%CV
645	988 910	4.7
161	157 471	3.9
40.3	17 976	5.8
10.1	1572	6.8
2.52	259	19.7
0.630	168	17.3
0.157	105	21.3
0	108	21.9



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<b>Chemokine Panel 1 (NHP) Kit V-PLEX Components</b>			
<b>Description</b>	<b>Lot Number</b>	<b>Storage Temperature</b>	<b>Expiration Date</b>
Chemokine Panel 1 (human) Plate	Z0045291	2-8°C	31 OCT 2016
Anti-hu MIP-1β Antibody	D0080303	2-8°C	31 AUG 2016
Anti-hu Eotaxin-3 Antibody	D0080304	2-8°C	31 AUG 2016
Anti-hu TARC Antibody	D0080305	2-8°C	31 AUG 2016
Anti-hu IP-10 Antibody	D0080306	2-8°C	31 AUG 2016
Anti-hu MIP-1α Antibody	D0080307	2-8°C	31 AUG 2016
Anti-hu IL-8 (HA) Antibody	D0080448	2-8°C	31 JAN 2017
Anti-hu MCP-1 Antibody	D0080309	2-8°C	31 AUG 2016
Anti-hu MDC Antibody	D0080310	2-8°C	31 AUG 2016
Anti-hu MCP-4 Antibody	D0080311	2-8°C	31 AUG 2016
Chemokine Panel 1 (human) Calibrator Blend	A0080044	2-8°C	31 JAN 2017
Diluent 43	M0430009	≤ -10°C	30 NOV 2016
Diluent 3	M0030061	≤ -10°C	31 AUG 2016
MSD Read Buffer T (4X)	Not Kit Specific	Room Temperature	N/A
<b>Additional Components Included in V-PLEX Plus</b>			
Wash Buffer (20X), 100mL	Not Kit Specific	Room Temperature	N/A
Plate Seals	Not Kit Specific	Room Temperature	N/A
Chemokine Panel 1 (human) Control 1	Not Kit Specific; See Separate Control Pack COA		
Chemokine Panel 1 (human) Control 2			
Chemokine 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.

	<b>Name</b>	<b>Function</b>	<b>Signature</b>	<b>Date</b>
<b>Review/Approval</b>	Caitlin Hansen	Quality Control		02 OCT 2014