



## CERTIFICATE OF ANALYSIS

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COA-04783
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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:** K0080216  
**Expiration Date:** 30 APR 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	500	799	72 000	375	7760	496
LLOQ	2.13	10.2	2.99	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	1 178 388	3.4
263	255 925	2.4
65.6	36 233	3.9
16.4	4608	3.3
4.10	717	5.1
1.03	220	8.5
0.256	144	12.1
0	118	14.3

NHP Eotaxin-3		
Conc., (pg/ml)	Average Signal	%CV
5020	201 746	4.8
1255	48 665	5.3
314	12 817	6.6
78.4	3411	4.3
19.6	973	4.5
4.90	335	8.7
1.23	189	10.4
0	136	18.8

NHP TARC		
Conc., (pg/ml)	Average Signal	%CV
1470	649 004	2.7
368	189 199	3.8
91.9	43 239	3.9
23.0	11 007	3.6
5.74	2874	4.1
1.44	940	5.9
0.359	440	8.7
0	264	11.6

NHP IP-10		
Conc., (pg/ml)	Average Signal	%CV
2650	527 067	6.6
663	334 406	3.9
166	109 372	2.7
41.4	30 525	2.7
10.4	7955	3.9
2.59	2126	3.5
0.647	619	5.9
0	81	20.0

NHP MIP-1 $\alpha$		
Conc., (pg/ml)	Average Signal	%CV
1040	651 701	2.3
260	108 512	1.8
65.0	11 835	3.8
16.3	1380	2.4
4.06	434	4.9
1.02	311	5.9
0.254	292	6.3
0	286	5.8

NHP IL-8		
Conc., (pg/ml)	Average Signal	%CV
93 700	1 432 765	4.9
23 425	205 788	10.1
5856	13 905	9.2
1464	2083	4.1
366	539	7.0
91.5	208	10.0
22.9	140	16.5
0	119	17.9

NHP MCP-1		
Conc., (pg/ml)	Average Signal	%CV
488	543 102	6.0
122	123 412	5.1
30.5	27 320	5.8
7.63	6884	5.5
1.91	1750	6.0
0.477	527	9.2
0.119	218	9.7
0	121	20.6

NHP MDC		
Conc., (pg/ml)	Average Signal	%CV
10 100	1 460 445	4.1
2525	368 005	6.3
631	51 414	5.1
158	6739	6.0
39.5	1345	3.8
9.86	397	6.2
2.47	200	8.7
0	140	14.5

NHP MCP-4		
Conc., (pg/ml)	Average Signal	%CV
645	945 142	2.7
161	137 408	5.1
40.3	15 191	5.4
10.1	1384	4.9
2.52	215	11.0
0.630	118	16.5
0.157	105	21.1
0	101	20.7



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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	Z0045260	2-8°C	30 SEP 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	M0430007	≤ -10°C	30 APR 2016
Diluent 3	M0030062	≤ -10°C	31 OCT 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		23 SEP 2014