



## CERTIFICATE OF ANALYSIS

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COA-04801
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**Product Description:** Chemokine Panel 1 (human) Kit V-PLEX™ and V-PLEX Plus  
**Kit Catalog Numbers:** K15047D-1, K15047D-2, K15047D-4, K15047G-1, K15047G-2, K15047G-4  
**Kit Lot Number:** K0080215  
**Expiration Date:** 31 AUG 2016

**Acceptance Data:**

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

Metric		Specifications	Assay			
			hu MIP-1α	hu MCP-1	hu MDC	hu 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
			hu 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 Eotaxin	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	1510	1050	5020	1470	2650	1040	93 700	488	10 100	645
Reconstituted Control 1 (A00C0267)	1040	603	3720	971	1470	709	161 000	382	5790	475
Reconstituted Control 2 (A00C0268)	283	156	897	235	378	188	52 300	88.9	1330	131
Reconstituted Control 3 (A00C269)	65.6	36.7	226	63.4	93.5	42.8	16 100	22.7	333	32.2
ULOQ	1160	807	3860	1130	1230	799	72 000	375	7760	496
LLOQ	11.5	2.13	10.2	0.760	1.37	7.91	713	0.992	20.5	4.91



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## Standard Curve Data from Kit QC:

hu Eotaxin		
Conc., (pg/ml)	Average Signal	%CV
1510	644 133	4.1
378	144 143	3.1
94.4	20 822	3.7
23.6	2256	3.5
5.90	379	7.2
1.47	217	12.1
0.369	189	12.7
0	184	9.2

hu 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

hu 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

hu 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

hu 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

hu 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

hu 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

hu 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

hu 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

hu 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 (human) 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 Eotaxin Antibody	D0080302	2-8°C	31 AUG 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