



CERTIFICATE OF ANALYSIS

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COA-04228

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: K0080128
Expiration Date: 31 OCT 2015

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 β	hu Eotaxin-3	hu TARC	hu IP-10	hu MIP-1 α	hu IL-8	hu MCP-1	hu MDC	hu MCP-4
Reconstituted Calibrator	1430	1040	4620	1450	2500	991	87 800	468	9680	608
Reconstituted Control 1 (A00C0190)	1150	678	3710	1050	1570	773	148 000	412	6720	516
Reconstituted Control 2 (A00C0191)	297	175	914	260	385	189	52 400	98.9	1400	135
Reconstituted Control 3 (A00C0192)	68.5	36.3	208	61.1	94.8	48.2	N/A	25.7	349	31.8
ULOQ	1160	750	3750	1180	500	804	43 400	380	7860	494
LLOQ	11.6	2.27	10.1	3.16	1.37	8.05	713	1.02	88.3	4.94



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Standard Curve Data from Kit QC:

hu Eotaxin		
Conc., (pg/mL)	Average Signal	%CV
1430	596 971	3.7
358	130 471	2.0
89.4	18 781	2.9
22.3	1947	3.5
5.59	288	9.0
1.40	126	15.5
0.349	112	21.9
0	112	20.3

hu MIP-1 β		
Conc., (pg/mL)	Average Signal	%CV
1040	1 201 117	3.6
260	265 671	3.2
65.0	36 324	2.7
16.3	4023	3.5
4.06	610	6.5
1.02	173	12.4
0.254	115	16.9
0	92	17.0

hu Eotaxin-3		
Conc., (pg/mL)	Average Signal	%CV
4620	241 923	4.6
1155	48 600	2.6
289	12 826	4.1
72.2	3230	4.6
18.0	935	5.1
4.51	300	7.9
1.13	150	14.4
0	101	16.1

hu TARC		
Conc., (pg/mL)	Average Signal	%CV
1450	568 001	6.2
363	172 126	5.6
90.6	39 217	4.0
22.7	9314	5.2
5.66	2408	7.6
1.42	779	9.6
0.354	349	10.2
0	215	11.8

hu IP-10		
Conc., (pg/mL)	Average Signal	%CV
2500	592 851	9.8
625	347 657	3.8
156	110 313	5.0
39.1	29 917	4.6
9.77	7802	3.0
2.44	2069	4.0
0.610	585	4.5
0	87	21.0

hu MIP-1 α		
Conc., (pg/mL)	Average Signal	%CV
991	793 693	2.3
248	132 739	2.2
61.9	15 248	2.4
15.5	1621	3.5
3.87	376	6.3
0.968	206	8.6
0.242	168	10.8
0	162	9.3

hu IL-8		
Conc., (pg/mL)	Average Signal	%CV
87 800	666 989	4.3
21 950	147 058	5.4
5488	14 356	5.4
1372	1961	6.1
343	539	8.5
85.7	207	12.3
21.4	146	15.4
0	115	18.5

hu MCP-1		
Conc., (pg/mL)	Average Signal	%CV
468	695 889	6.8
117	170 249	6.1
29.3	36 058	6.9
7.31	7821	7.2
1.83	1984	6.9
0.457	607	8.6
0.114	249	9.4
0	149	15.1

hu MDC		
Conc., (pg/mL)	Average Signal	%CV
9680	1 074 599	4.1
2420	283 765	7.2
605	42 269	6.9
151	6101	4.8
37.8	1273	5.3
9.45	404	8.4
2.36	205	12.0
0	145	10.5

hu MCP-4		
Conc., (pg/mL)	Average Signal	%CV
608	815 868	1.8
152	135 807	1.8
38.0	16 745	3.6
9.50	1 528	4.3
2.38	235	9.8
0.594	106	18.1
0.148	101	25.1
0	96	18.7



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Chemokine Panel 1 (human) Kit V-PLEX Components			
Description	Lot Number	Storage Temperature	Expiration Date
Chemokine Panel 1 (human) Plate	Z0045161	2-8°C	31 JUL 2016
Anti-hu Eotaxin Antibody	D0080187	2-8°C	30 APR 2016
Anti-hu MIP-1β Antibody	D0080188	2-8°C	30 APR 2016
Anti-hu Eotaxin-3 Antibody	D0080189	2-8°C	30 APR 2016
Anti-hu TARC Antibody	D0080190	2-8°C	30 APR 2016
Anti-hu IP-10 Antibody	D0080191	2-8°C	30 APR 2016
Anti-hu MIP-1α Antibody	D0080192	2-8°C	30 APR 2016
Anti-hu IL-8 (Chemokine) Antibody	D0080193	2-8°C	30 APR 2016
Anti-hu MCP-1 Antibody	D0080194	2-8°C	30 APR 2016
Anti-hu MDC Antibody	D0080195	2-8°C	30 APR 2016
Anti-hu MCP-4 Antibody	D0080196	2-8°C	30 APR 2016
Chemokine Panel 1 (human) Calibrator Blend	A0080017	2-8°C	31 OCT 2015
Diluent 43	M0430005	≤ -10°C	31 MAR 2016
Diluent 3	M0030057	≤ -10°C	31 OCT 2015
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
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.

	Name	Function	Signature	Date
Review/Approval	Caitlin Hansen	Quality Control		02 JUL 2014