



CERTIFICATE OF ANALYSIS

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COA-04760

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: K0080208

Expiration Date: 31 AUG 2016

Acceptance Data:

Metric		Specifications	Assay				
			hu Eotaxin	hu MIP-1 β	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-1 α	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	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 (A00C0269)	65.6	36.7	226	63.4	93.5	42.8	16 100	22.7	333	32.2
ULOQ	1160	807	3860	1130	500	799	72 000	375	7760	496
LLOQ	11.5	2.13	10.2	0.76	1.37	7.91	713	0.252	76.9	4.91



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Standard Curve Data from Kit QC:

hu Eotaxin		
Conc., (pg/ml)	Average Signal	%CV
1510	625 888	2.9
378	137 228	2.3
94.4	19 361	3.2
23.6	2076	3.0
5.90	369	7.4
1.47	226	9.2
0.369	204	11.2
0	201	13.7

hu MIP-1 β		
Conc., (pg/ml)	Average Signal	%CV
1050	1 152 170	3.4
263	261 882	2.5
65.6	38 635	3.6
16.4	4912	3.2
4.10	826	4.1
1.03	256	9.3
0.256	142	14.6
0	112	18.3

hu Eotaxin-3		
Conc., (pg/ml)	Average Signal	%CV
5020	219 897	4.2
1255	39 784	4.4
314	10 156	4.3
78.4	2650	5.2
19.6	785	6.0
4.90	299	8.9
1.23	178	10.3
0	128	17.2

hu TARC		
Conc., (pg/ml)	Average Signal	%CV
1470	725 034	4.3
368	232 850	3.3
91.9	56 649	3.7
23.0	13 848	3.7
5.74	3553	7.5
1.44	1116	5.5
0.359	464	7.1
0	251	11.8

hu IP-10		
Conc., (pg/ml)	Average Signal	%CV
2650	615 649	7.1
663	382 477	2.9
166	120 763	3.0
41.4	32 441	3.8
10.4	8490	2.5
2.59	2276	3.4
0.647	635	3.2
0	80	24.5

hu MIP-1 α		
Conc., (pg/ml)	Average Signal	%CV
1040	597 819	1.6
260	96 636	1.7
65.0	10 154	3.0
16.3	1043	2.8
4.06	370	4.5
1.02	293	6.5
0.254	284	6.2
0	273	5.9

hu IL-8		
Conc., (pg/ml)	Average Signal	%CV
93 700	1 363 586	3.1
23 425	192 194	4.4
5856	12 698	4.9
1464	1592	3.9
366	421	7.0
91.5	179	11.3
22.9	128	16.5
0	112	21.3

hu MCP-1		
Conc., (pg/ml)	Average Signal	%CV
488	540 833	5.9
122	131 525	3.9
30.5	30 572	3.5
7.63	7369	4.5
1.91	1857	7.7
0.477	569	4.9
0.119	214	12.2
0	107	23.8

hu MDC		
Conc., (pg/ml)	Average Signal	%CV
10 100	1 686 995	3.0
2525	477 902	5.7
631	66 987	4.6
158	8712	3.7
39.5	1653	3.0
9.86	463	5.3
2.47	209	11.1
0	119	16.0

hu MCP-4		
Conc., (pg/ml)	Average Signal	%CV
645	892 819	3.5
161	129 759	5.6
40.3	13 895	7.6
10.1	1180	6.0
2.52	207	9.8
0.630	112	19.8
0.157	108	18.5
0	97	28.3



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Chemokine Panel 1 (human) Kit V-PLEX Components			
Description	Lot Number	Storage Temperature	Expiration Date
Chemokine Panel 1 (human) Plate	Z0045378	2-8°C	31 DEC 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	M0430010	≤ -10°C	31 DEC 2016
Diluent 3	M0030062	≤ -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), 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.

	Name	Function	Signature	Date
Review/Approval	Patricio Tituana	Quality Control		16 SEP 2014