REPORT OF THE 3rd Flow Cross Match Exchange
DECEMBER 3, 2014

Cells	13-14
Serum	15-18

Flow Cytometric Crossmatch

For the 3rd Flow Cross Match Exchange, 2 cells (cell nos. 13 - 14) and 4 sera (serum nos. 15 - 18) were examined. Flow crossmatch results are summarized on Table 1 and individual laboratory results, along with reported DSA, are listed in Tables 2 - 9.

Cell 13. The phenotype for this Hispanic cell is A24-A68-B39-B65-Cw7-Cw8-DR4-DR13-DR52-DR53-DQ6-DQ8-DP402. The T-cell crossmatch results for this sample was reported as positive against all 4 sera. A number of discrepancies were reported, with 3 labs reporting a negative crossmatch against serum 15 and 4 labs reporting a negative crossmatch against serum 17. The B-cell crossmatch for this sample was also reported as positive against all 4 sera. Discrepancies were reported for 3 out of the 4 sera samples. Three labs reported a negative crossmatch against serum 16 and 1 lab reported the crossmatch against serum 17 and 18 as negative instead of as positive.

Cell 14. The phenotype for this Hispanic sample is A2-A29-B44-B51-Cw15-Cw16-DR4-DR7-DR53-DQ2-DQ8-DP402-DP11. The T-cell cross match for the sample was reported as negative against serum samples 15 and 18 and positive against serum samples 16 and 17. A few discrepancies were reported for serum 15, in which 4 labs reported the crossmatch as positive instead of negative. Among the 4 labs, 1 noted a false positive crossmatch as there was no DSA present. The B-cell crossmatch for this sample was reported as positive against sera nos. 15 - 17, without any discrepancies. Against serum 18, the crossmatch was reported as negative by 13 out of 15 labs.

Table 1. Summary of Flow crossmatch results for Cell #013-#014 vs. Serum #015-#018

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
13	15	16	**Positive(12)** *Negative(3)* NT(1)	**Positive(15)** NT(1)
13	16	16	**Positive (16)**	**Positive(12)** *Negative(3)* NT(1)
13	17	16	**Positive(12)** *Negative(4)*	**Positive(14)** *Negative(1)* NT(1)
13	18	16	**Positive(16)**	**Positive(14)** *Negative(1)* NT(1)

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
14	15	16	**Negative(12)** *Positive(4)*	**Positive(16)**
14	16	16	**Positive(16)**	**Positive(16)**
14	17	16	**Positive(16)**	**Positive(16)**
14	18	15	**Negative(14)** *Positive(1)*	**Negative(13)** *Positive(2)*

Antibody Identification

Class I and Class II Luminex single antigen results are summarized on Tables 10 - 13 and individual laboratory results for Luminex and Flow PRA single antigen beads are listed in Tables 14 - 21.

For **serum 15**, class I DSA against cell 13 was detected by Luminex and Flow PRA. Anti-B39, -Cw7, and -Cw8 reactivity was reported with respective median MFI values of 3592, 2712, and 6800. There were no class I DSA reported against cell 14. Class II DSA against cell 13 and cell 14 was detected by Luminex and Flow PRA. Strong reactivity to DQ8 against both cells was reported with a median MFI value of 16143. Additional reactivity to DQ2 (17434) and DP11 (1759) was reported against cell 14 and reactivity to DQ6 (2004) was detected against cell 13 by 5 labs.

Serum 16 was found to be positive for class I DSA against cell 13 and cell 14 by Luminex and Flow PRA. Moderate reactivity to A24 (13722) was reported against cell 13. Reactivity to A29, B44, and B51 against cell 14 was reported with median MFI values of 13676, 9587, and 12447, respectively. Weak class II DSA was detected by 4 Luminex labs and 2 Flow PRA labs against cell 13. Reactivity to DQ6 antisera against cell 13 was reported with a median MFI value of 6591. No class II DSA was detected against cell 14.

For **serum 17** class I and class II DSA against cell 13 and cell 14 were detected by Luminex and Flow PRA. Strong anti-A29 (21488) reactivity was reported against cell 14. Additional weaker reactivity to A2 and B51 were also detected against cell 14, with respective median MFI values of 2857 and 10165. Reactivity to A24 (1941), A68 (2547), and B39 (1703) was reported against cell 13 by 7 labs. Anti-DR13, -DR52, -DR53, -DQ6 reactivity was detected against cell 13, with median MFI values of 8709, 2675, 3782, and 8821. Positivity to DR53 (3782), DR7 (1612), and DQ2 (1414) was reported against cell 14.

Serum 18 was found to be positive for class I DSA against cell 13 and 14 by Luminex and Flow PRA. Strong anti-B65 (17489) reactivity was reported against cell 13. Additional B39 (8205) and A68 (1707) reactivity was also detected against cell 13. Weak reactivity to B51 antisera was reported by 7 labs against cell 14, with a median MFI value of only 1661. Class II DSA against cell 13 and 14 was reported by 2 Luminex labs and Flow PRA. Reactivity to DR53 (8457) antisera was reported by the 2 Luminex labs.

Conclusion:

For the **T-cell Flow crossmatch**, labs were in complete agreement for 4 out of the 8 crossmatch results. In each of the 4 crossmatches, labs reported positive crossmatch results, with Luminex reporting DSA of moderate to high MFI values. A number of discrepancies (n=7) were reported for cell 13 against serum 15 and 17. Three labs reported the cross match of cell 13 against serum 15 as negative and 4 labs reported a negative crossmatch against serum 17. In each case, the class I DSA were reported with low to moderate MFI values. No class I DSA were reported against cell 14 for serum 15, however 4 labs reported the crossmatch as positive.

For the **B-cell Flow crossmatch**, positive crossmatch results were reported for cell 13 against all 4 sera, with Luminex reporting moderate to high MFI values. A few (n=5) negative crossmatch results were reported by several labs, with 1 lab accounting for 3 of the discrepant results. Labs were in complete agreement in reporting the crossmatch results for cell 14 against serum nos. 15 - 17 as positive. Moderate to high HFI values were reported in each case. For cell 14 against serum 18, 2 labs reported the crossmatch as positive instead of negative, despite no DSA being detected.

NEXT MAILING DATE: March 25, 2015

Happy Holidays!

Arlene Locke, David Gjertson, Qiuheng Zhang, and Elaine F. Reed

Table 2. Individual Flow crossmatch results and DSA reported for Cell #013 vs. Serum #015

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					*NEG*						POS				NO
3224	Chen , Dong-Fer	70	12			POS	B38 (3292), Cw7(1945), Cw8(5070)	140	262			POS	DQ8(19046), DQ6(2004)	232	208	YES
792	Gandhi , Manish	52	108			POS	B38(2726), Cw7(1509), Cw8(5049)	106	388			POS	DQ8(16594), DQ6(1222)	189	157	YES
216	Gebel , Bray &	1500 MESF			2669	POS	B38(6153), Cw7(2289), Cw8(10177)	4500 MESF			58457	POS	DQ8(23964), DQ6(3403)			YES
615	Holdsworth , Rho	654				NT		694	176			POS		614	654	YES
859	Kamoun , Malek	1.5	91	2.28	4478	POS	B38(3440), Cw7(3165), Cw8(6800)	1.5	336	20.45	72357	POS	DQ8(22243), DQ6(1911)			YES
23	Mah , Helen	60	626			POS	B38(5249), Cw7(3450), Cw8(7632)	1000	7814			POS	DQ8(14677)	363	1274	NO
206	McAlack-Hanau	2.98	12.81	2.63		POS	B38(4613)	4.94	216.35	21.31		POS	DQ8(15691)	7.85	10.65	YES
4661	Nishimura , Kenj	394.4	15.5			POS		349.1	111.4			POS		7.5	10.4	YES
3966	Permpikul , Vejb	40	3			*NEG*		100	109			POS		110	213	NO
2400	Phelan , Donna	40	30			*NEG*	B38(3677), Cw7(2712), Cw8(6062)	80	QNS			NT	DQ8(15248)	240	486	NO
735	Ramon , Daniel	50	99		850	POS		70	405		30259	POS		139	147	YES
3753	Reed , Elaine F.	50	63			POS	B38(4025), Cw7(2794), Cw8(7273)	100	247			POS	DQ8(15533)	217	297	NO
3625	Rees , Tracey	40 MCS	76			POS	Cw7(704)	40 MCS	245			POS	DQ6(2078)	113	272	NO
3798	Reinsmoen , Nar	70	122		4,063	POS	B38(2744), Cw7(5281)	130	396		71,391	POS	DQ8(18457)	204.5	217	YES
1160	Rosen-Bronson	90	163			POS	B38(2613)	120	343			POS	DQ8(15676)	157	239	YES

Table 3. Individual Flow crossmatch results and DSA reported for Cell #013 vs. Serum #016

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					POS						POS				NO
3224	Chen , Dong-Fer	70	112			POS	A24(14012)	140	99			POS		232	208	YES
792	Gandhi , Manish	52	216			POS	A24(13977)	106	421			POS	DQ6(6654)	189	157	YES
216	Gebel , Bray &	1500 MESF			16593	POS	A24(23732)	4500 MESF			13,773	POS				YES
615	Holdsworth , Rho	654	132			POS		694	103			POS		614	654	YES
859	Kamoun , Malek	1.5	235	8.28	27900	POS	A24(13467)	1.5	219	7.17	21098	POS	DQ6(6528)			YES
23	Mah , Helen	60	701			POS	A24(12136)	1000	0			*NEG*		363	1274	NO
206	McAlack-Hanau	2.98	82.01	11.45		POS	A24(12012)	4.94	32.9	4.09		*NEG*		7.85	10.65	YES
4661	Nishimura , Kenj	394.4	50.9			POS		349.1	54.3			POS		7.5	10.4	YES
3966	Permpikul , Vejb	40	285			POS		100	33			NEG		110	213	NO
2400	Phelan , Donna	40	131			POS	A24(16566)	80	QNS			NT	DQ6(7549)	240	486	NO
735	Ramon , Daniel	50	433		294	POS		70	223		5066	POS		139	147	YES
3753	Reed , Elaine F.	50	194			POS	A24(12276)	100	109			POS		217	297	NO
3625	Rees , Tracey	40 MCS	187			POS		40 MCS	77			POS		113	272	NO
3798	Reinsmoen , Nar	70	248		14,331	POS	A24(10852)	130	241		15,142	POS	DQ6(5394)	204.5	217	YES
1160	Rosen-Bronson	90	287			POS	A24(10852)	120	202			POS		157	239	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #013 vs. Serum #017

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					*NEG*						POS				NO
3224	Chen , Dong-Fer	70				*NEG*	A24(1923), A68(1488), B39(1377)	140	263			POS	DR13(9331), DR52(2202), DR53(3637)	232	208	YES
792	Gandhi , Manish	52	102			POS	A24(1615), A68(1160), B39(1434), Cw7(466), Cw8(582)	106	499			POS	DR13(7155), DR52(1583), DQ6(380), DR53(2673)	189	157	YES
216	Gebel , Bray &	1500 MESF			2907	POS	A68(4030), B39(2437)	4500 MESF			56,250	POS	DR13(16183), DR52(4212), DR53(6242)			YES
615	Holdsworth , Rho	654	96			POS		694	188			POS		614	654	YES
859	Kamoun , Malek	1.5	89	2.24	4331	POS	A24(2420), A68(2482), B39(1703), Cw8(1066)	1.5	373	28.67	106436	POS	DR13(10882), DR52(2809), DR53(4354)			YES
23	Mah , Helen	60	419			POS	A24(1941), A68(2547), B39(2608)	1000	4623			POS	DR13(8469), DR52(2675), DR53(3732)	363	1274	NO
206	McAlack-Hanau	2.98	12.61	2.61		*NEG*	No DSA reported	4.94	401.85	38.73		POS	DR13(8584), DR53(4049)	7.85	10.65	YES
4661	Nishimura , Kenj	394.4	15.1			POS		349.1	114.4			POS		7.5	10.4	YES
3966	Permpikul , Vejb	40	22			*NEG*		100	97			*NEG*		110	213	NO
2400	Phelan , Donna	40	79			POS	A24(2614)	80	QNS			NT	DR13(8709), DR52(2451), DR53(3832)	240	486	NO
735	Ramon , Daniel	50	49		823	POS		70	231		5468	POS		139	147	YES
3753	Reed , Elaine F.	50	59			POS	A68(2820), B39(1230)	100	180			POS	DR13(10341), DR52(2965), DR53(4411)	217	297	NO
3625	Rees , Tracey	40 MESF	109			POS	A24(8459), A68(4475), Cw7(3334)	40 MCS	241			POS	DR13(17768), DR52(17784), DQ6(17261)	113	272	NO
3798	Reinsmoen , Nan	70	98		3,195	POS	No DSA reported	130	460		136,110	POS	DR13(7769), DR53(3089)	204.5	217	YES
1160	Rosen-Bronson ,	90	131			POS	A24(1548), B39(2140)	120	333			POS	DR13(6803),DR52(1517), DR53(2677)	157	239	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #013 vs. Serum #018

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					POS						POS				NO
3224	Chen , Dong-Fer	70	209			POS	B39(7550), B65(16227), A68(1487)	140	205			POS	No DSA reported	232	208	YES
792	Gandhi , Manish	52	304			POS	B39(6573), B65(14532), A68(1364)	106	324			POS	DR53(331)	189	157	YES
216	Gebel , Bray &	1500 MESF			46,537	POS	B39(13990), B65(2447), A68(2649)	4500 MESF			55,711	POS	No DSA reported			YES
615	Holdsworth , Rho	654	194			POS		694	160			POS		614	654	YES
859	Kamoun , Malek	1.5	345	22.36	88870	POS	B39(9330), B65(20698), A68(1707)	1.5	322	18.04	62749	POS	No DSA reported			YES
23	Mah , Helen	60	2611			POS	B39(10081), B65(15524), A68(2632)	1000	2379			POS	No DSA reported	363	1274	NO
206	McAlack-Hanau	2.98	180.66	24.03		POS	B39(8859), B65(18631)	4.94	99.85	10.38		POS	No DSA reported	7.85	10.65	YES
4661	Nishimura , Kenj	394.4	120.8			POS		349.1	122.9			POS		7.5	10.4	YES
3966	Permpikul , Vejb	40	160			POS		100	0			*NEG*		110	213	NO
2400	Phelan , Donna	40	261			POS	B39(11333), B65(19935), A68(2680)	80	QNS			NT	No DSA reported	240	486	NO
735	Ramon , Daniel	50	320		12214	POS		70	245		6281	POS		139	147	YES
3753	Reed , Elaine F.	50	310			POS	B39(7379), B65(18836)	100	208			POS	No DSA reported	217	297	NO
3625	Rees , Tracey	40 MCS	301			POS		40 MCS	172			POS	DQ6(626), DQ8(1331), DR52(8826),DR53(16583)	113	272	NO
3798	Reinsmoen , Nan	70	368		47,607	POS	B39(6832), B65(16346)	130	368		53,949	POS	No DSA reported	204.5	217	YES
1160	Rosen-Bronson	90	405			POS	B39(6021), B65(15469), A68(1024)	120	325			POS	No DSA reported	157	239	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #014 vs. Serum #015

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					NEG						POS				NO
3224	Chen , Dong-Fer	70				NEG	No DSA reported	140	285			POS	DQ2(17919), DQ8(19046), DP11(1607)	232	208	YES
792	Gandhi , Manish	52	78			POS	No DSA reported	106	400			POS	DQ2(15559), DQ8(16594), DP11(1213)	214	178	YES
216	Gebel , Bray &	1500 MESF			2073	NEG	No DSA reported	4500 MESF			80,664	POS	DQ2(24699), DQ8(23964), DP11(3718)			YES
615	Holdsworth , Rho	647	26			NEG		740	155			POS		607	700	YES
859	Kamoun , Malek	1.5	13	1.12	525	NEG	No DSA reported	1.5	301	15.06	78848	POS	DQ2(21114), DQ8(22243), DP11(1759)			YES
23	Mah , Helen	60	520			POS	No DSA reported	1000	10071			POS	DQ8(14677)	896	2399	NO
206	McAlack-Hanau	2.98	2.25	1.22		NEG	No DSA reported	4.94	235.8	13.61		POS	DQ8(15691)	10.25	18.7	YES
4661	Nishimura , Kenj	552.3	7.4			NEG		805.8	134.6			POS		17.9	18.8	YES
3966	Permpikul , Vejb	40	13			NEG		100	121			POS		106	213	NO
2400	Phelan , Donna	40	21			NEG	No DSA reported	80	90			POS	DQ2(14984), DQ8(15248)	257	478	NO
735	Ramon , Daniel	50	153		2745	False-POS	No DSA reported	70	441		73326	POS		156	198	YES
3753	Reed , Elaine F.	50	37			NEG	No DSA reported	100	254			POS	DQ2(15533)	231	314	NO
3625	Rees , Tracey	40 MCS	55			POS	No DSA reported	40 MCS	262			POS	DP11(2412)	108	271	NO
3798	Reinsmoen , Nar	70	29.5		1,843	NEG	No DSA reported	130	362.5		85,477	POS	DQ2(16948), DQ8(18457)	218	268.5	YES
1160	Rosen-Bronson	90	62			NEG	No DSA reported	120	378			POS	DQ8(15676)	157	197	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #014 vs. Serum #016

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					POS						POS				NO
3224	Chen , Dong-Fer	70	233			POS	A29(14112), B44(9587), B51(11875)	140	258			POS	No DSA reported	232	208	YES
792	Gandhi , Manish	52	319			POS	A29(12860), B44(10469), B51(11621)	106	470			POS	No DSA reported	214	178	YES
216	Gebel , Bray &	1500 MESF			40216	POS	A29(21138), B44(19068), B51(22505)	4500 MESF			47037	POS	No DSA reported			YES
615	Holdsworth , Rho	647	212			POS		740	175			POS		607	700	YES
859	Kamoun , Malek	1.5	297	14.46	69608	POS	A29(13676), B44(9556), B51(12591)	1.5	288	13.35	68573	POS	No DSA reported			YES
23	Mah , Helen	60	7633			POS	A29(11175), B44(10091), B51(12316)	1000	8785			POS	No DSA reported	896	2399	NO
206	McAlack-Hanau	2.98	145.75	15.22		POS	A29(11783), B44(8559), B51(12577)	4.94	95.3	6.1		POS	No DSA reported	10.25	18.7	YES
4661	Nishimura , Kenj	552.3	126.4			POS		805.8	222.7			POS		17.9	18.8	YES
3966	Permpikul , Vejb	40	141			POS		100	112			POS		106	213	NO
2400	Phelan , Donna	40	237			POS	A29(17124), B44(12133), B51(15382)	80	94			POS	No DSA reported	257	478	NO
735	Ramon , Daniel	50	448		51883	POS		70	404		50881	POS		156	198	YES
3753	Reed , Elaine F.	50	303			POS	A29(12276), B44(9068), B51(14058)	100	237			POS	No DSA reported	231	314	NO
3625	Rees , Tracey	40 MCS	292			POS	A29(15724), B44(2691)	40 MCS	181			POS	No DSA reported	108	271	NO
3798	Reinsmoen , Nar	70	320		33,711	POS	A29(11055), B44(7557), B51(9534)	130	323		57,574	POS	No DSA reported	218	268.5	YES
1160	Rosen-Bronson	90	471			POS	A29(12493), B44(9613), B51(11723)	120	448			POS	No DSA reported	157	197	YES

Table 8. Individual Flow crossmatch results and DSA reported for Cell #014 vs. Serum #017

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					POS						POS				NO
3224	Chen , Dong-Fer	70	304			POS	A29(19822), A2(2332), B51(11681)	140	329			POS	DR53(3637), DR7(1278)	232	208	YES
792	Gandhi , Manish	52	288			POS	A29(18952), A2(2127), B51(10331)	106	401			POS	DR53(2673), DR7(1013), DQ2(956)	214	178	YES
216	Gebel , Bray &	1500 MESF			73112	POS	A29(25543), A2(5689), B51(22085)	4500 MESF			87044	POS	DR53(6242), DR7(2805)			YES
615	Holdsworth , Rho	647	295			POS		740	185			POS		607	700	YES
859	Kamoun , Malek	1.5	341	21.39	109183	POS	A29(23981), A2(4014), B51(14430)	1.5	329	19.37	104518	POS	DR53(4354), DR7(1751), DQ2(1498)			YES
23	Mah , Helen	60	12939			POS	A29(17697), A2(2800), B51(7623)	1000	11739			POS	DR53(3732), DR7(1473), DQ2(1414)	896	2399	NO
206	McAlack-Hanau	2.98	396.75	39.71		POS	A29(21571), A2(3799)	4.94	1536.3	83.16		POS	DR53(4049)	10.25	18.7	YES
4661	Nishimura , Kenj	552.3	230.8			POS		805.8	361.9			POS		17.9	18.8	YES
3966	Permpikul , Vejb	40	204			POS		100	148			POS		106	213	NO
2400	Phelan , Donna	40	297			POS	A29(21489), A2(2913), B51(7644)	80	131			POS	DR53(3832)	257	478	NO
735	Ramon , Daniel	50	504		90624	POS		70	466		94072	POS		156	198	YES
3753	Reed , Elaine F.	50	379			POS	A29(21964), A2(3509), B51(7838)	100	296			POS	DR53(4411), DR7(2213), DQ2(1187)	231	314	NO
3625	Rees , Tracey	40 MCS	377			POS	A29(6736)	40 MCS	280			POS	DQ2(5851)	108	271	NO
3798	Reinsmoen , Nar	70	430		101,325	POS	A29(20381), A2(2662), B51(10165)	130	422.5		155,793	POS	DR53(3089)	218	268.5	YES
1160	Rosen-Bronson	90	304			POS	A29(21488), A2(1804), B51(9580)	120	290			POS	DR53(2677)	157	197	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #014 vs. Serum #018

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk , Raine					NEG						*POS*				NO
792	Gandhi , Manish	52	43			NEG	B51(1364)	106	49			NEG	DR53(331)	214	178	YES
216	Gebel , Bray &	1500 MESF			335	NEG	B51(2528)	4500 MESF			578	NEG	No DSA reported			YES
615	Holdsworth , Rho	647	15			NEG		740	13			NEG		607	700	YES
859	Kamoun , Malek	1.5	18	1.17	754	NEG	B51(2068)	1.5	10	1.1	449	NEG	No DSA reported			YES
23	Mah , Helen	60	0			NEG	B51(1661)	1000	0			NEG	No DSA reported	896	2399	NO
206	McAlack-Hanau	2.98	3.1	1.3		NEG	No DSA reported	4.94	12.55	1.67		NEG	No DSA reported	10.25	18.7	YES
4661	Nishimura , Kenj	552.3	8.3			NEG		805.8	18.6			NEG		17.9	18.8	YES
3966	Permpikul , Vejb	40	0			NEG		100	56			NEG		106	213	NO
2400	Phelan , Donna	40	-5			NEG	B51(3388)	80	-34			NEG	No DSA reported	257	478	NO
735	Ramon , Daniel	50	68		1179	*False-POS*	No DSA	70	87		2167	*False-POS*	No DSA	156	198	YES
3753	Reed , Elaine F.	50	1			NEG	No DSA reported	100	0			NEG	No DSA reported	231	314	NO
3625	Rees , Tracey	40 MCS	22			NEG	No DSA reported	40 MCS				NEG	DQ8(1331), DR53(16583)	108	271	NO
3798	Reinsmoen , Nar	70	43		2,110	NEG	No DSA reported	130	26		2,950	NEG	No DSA reported	218	268.5	YES
1160	Rosen-Bronson ,	90	31			NEG	B51(1059)	120	25			NEG	No DSA reported	157	197	YES

Table 10 . Summary of Single Antigen results for Serum #015

Class I							
*** Serum 15 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B67	11/11	100%	4285	5467	3706	2907	16591
B38	10/11	91%	3559	3853	1114	2613	6153
B39	10/11	91%	3592	3878	1117	2660	6228
Cw7	9/11	82%	2712	2649	1228	704	5281
Cw10	8/11	73%	3853	4206	1180	2916	6758
Cw9	8/11	73%	5141	5449	1482	3721	8643
B46	7/11	64%	1529	1640	558	991	2635
Cw8	7/11	64%	6800	6866	1643	5049	10177
B37	3/11	27%	1415	1265	531	553	1827

Class II							
*** Serum 15 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR9	11/11	100%	4195	4316	1521	2676	8492
DQ7	10/11	91%	20657	21244	1896	18094	25013
DQ8	10/11	91%	16143	17712	3024	14677	23964
DQ9	10/11	91%	17542	18758	2608	15928	24431
DR12	10/11	91%	11632	12200	3281	8697	21098
DR8	10/11	91%	5185	5335	1649	3087	8804
DR51	9/11	82%	3404	3828	1730	2286	8171
DPw1	7/11	64%	2208	2201	854	1291	3946
DPw3	7/11	64%	2986	3758	1809	1901	6673
DQ4	7/11	64%	10473	11580	3185	8439	18855
DR16	7/11	64%	3410	3986	1678	2251	7553
DP18	6/11	55%	1866	2145	1053	1110	4326
DPw2	6/11	55%	2337	2570	1079	1473	4747
DPw4	6/11	55%	2195	2677	1371	1517	5612
DQ2	6/11	55%	17434	18537	3391	14984	24699
DP11	5/11	45%	1759	2141	878	1213	3718
DP13	5/11	45%	1410	1568	544	898	2445
DQ6	5/11	45%	2004	2123	709	1222	3403
DR10	5/11	45%	1257	1639	568	1112	2493
DPw6	4/11	36%	1565	2482	1860	1114	5686
DR1	3/11	27%	1247	1175	409	643	1637
DR103	3/11	27%	1499	1280	433	675	1667

DSA present

Red = DSA against cell #013 only

Blue = DSA against cell #014 only

Green = DSA aginst cell #013 and #014

Table 11 . Summary of Single Antigen results Serum #016

Class I							
*** Serum 16***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A23	11/11	100%	13656	14297	3447	9337	23201
A29	11/11	100%	13676	14185	2850	11055	21138
B13	11/11	100%	9215	10829	3816	7083	19010
B37	11/11	100%	9873	10213	3228	4578	18079
B38	11/11	100%	11809	12673	3275	8990	21660
B44	11/11	100%	9587	9853	3688	2691	19068
B47	11/11	100%	7743	9198	3027	5727	15362
B49	11/11	100%	13149	13303	4717	2455	23426
B53	11/11	100%	8951	9602	2815	5513	16828
B57	11/11	100%	12503	13240	3898	6881	23501
B58	11/11	100%	12103	12153	4046	4040	21739
B59	11/11	100%	11070	12045	3085	8119	20306
A1	10/11	91%	21151	21044	2419	16834	26125
A24	10/11	91%	13722	14349	3477	10852	23732
A25	10/11	91%	13692	14846	3276	10573	23400
A26	10/11	91%	15742	16323	2798	13070	23097
A32	10/11	91%	14085	14976	3252	10679	23496
A36	10/11	91%	17119	17779	2862	14487	24581
A43	10/11	91%	14596	15388	2819	12130	22167
A80	10/11	91%	16843	17203	2896	13788	23823
B51	10/11	91%	12447	13418	3362	9534	22505
B52	10/11	91%	11125	11998	2732	8841	19111
B63	10/11	91%	12060	13184	3114	9588	21435
B76	10/11	91%	7339	7956	1809	5824	10822
B77	10/11	91%	11057	12008	3060	8422	20306
B27	9/11	82%	8317	9112	3520	4920	17785
B45	9/11	82%	1684	1951	563	1314	2904
A3	8/11	73%	3232	3638	1175	2476	5686
A34	8/11	73%	2664	2896	992	1796	4799
A11	7/11	64%	4758	5085	1250	3563	7755
B82	7/11	64%	1464	1748	558	1167	2788
A6601	5/11	45%	3039	3386	1000	2120	4890
A1101	3/11	27%	4713	5551	1671	4056	7884

Class II							
*** Serum 16 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR11	10/11	91%	4853	4816	936	2496	6033
DR15	10/11	91%	6978	6590	1824	3750	9181
DR16	10/11	91%	10502	10482	2715	6605	16526
DR51	10/11	91%	8277	8472	2105	5412	12946
DR8	9/11	82%	4273	4223	551	3524	5224
DR12	6/11	55%	3993	3946	391	3234	4470
DR9	5/11	45%	1645	1697	300	1336	2152
DQ6	4/11	36%	6591	6531	766	5394	7549

DSA present

Red = DSA against cell #013 only

Blue = DSA against cell #014 only

Green = DSA aginst cell #013 and #014

Table 12 . Summary of Single Antigen results Serum #017

Class I							
*** Serum 17***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A26	11/11	100%	8459	9030	1667	7066	12423
A29	11/11	100%	21488	19965	4669	6736	25543
A30	11/11	100%	9775	10337	3133	6945	18069
A31	11/11	100%	3726	4018	1069	2836	5903
A33	11/11	100%	3600	3843	1062	2741	6055
A36	11/11	100%	13698	13681	2951	8596	21365
A43	11/11	100%	9989	11091	2568	8453	16855
A74	11/11	100%	3769	4020	1123	2800	6532
A80	11/11	100%	10347	11098	2694	8539	18260
B49	11/11	100%	12117	11432	4366	1197	20734
B50	11/11	100%	12407	11475	4449	1049	21004
B56	11/11	100%	14749	14248	5203	854	23540
B62	11/11	100%	9564	9126	3346	1953	16830
B63	11/11	100%	7750	7248	2828	545	12976
B71	11/11	100%	11407	10567	4186	511	19382
B72	11/11	100%	7501	7178	2767	919	13182
B75	11/11	100%	10759	10670	4374	744	20773
B77	11/11	100%	11390	10300	4170	501	19021
A1	10/11	91%	16923	17451	2513	14805	24177
A2	10/11	91%	2857	3164	1081	1804	5689
B35	10/11	91%	14397	14728	3221	11507	23147
B42	10/11	91%	8970	8970	2251	6784	14860
B53	10/11	91%	11130	11058	2833	8424	18677
B55	10/11	91%	12148	12485	2952	9413	20129
B67	10/11	91%	10091	10272	2259	7741	16223
B7	10/11	91%	4726	4578	1291	3157	7781
A23	9/11	82%	2580	2512	610	1728	3838
A34	9/11	82%	3260	3855	2113	2298	9546
B51	9/11	82%	10165	11264	4350	7623	22085
B54	9/11	82%	3326	3447	744	2563	5097
A24	7/11	64%	1941	2931	2285	1548	8459
A68	7/11	64%	2547	2715	1124	1160	4475
B39	7/11	64%	1703	1847	508	1230	2608

Class II							
*** Serum 17 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR10	11/11	100%	4305	5201	3179	2799	14634
DR11	11/11	100%	7629	8550	3116	5202	15544
DR12	11/11	100%	4460	5544	3609	2834	16144
DR13	11/11	100%	8709	10181	3423	6803	17768
DR14	11/11	100%	10706	12239	3995	8766	21019
DR17	11/11	100%	7489	8608	3740	5130	18325
DR18	11/11	100%	6827	7710	3516	4351	16933
DR8	11/11	100%	6311	7276	3563	4142	16978
DR53	10/11	91%	3782	3869	986	2673	6242
DR9	10/11	91%	6530	8041	2743	5687	14273
DR52	9/11	82%	2675	4244	4846	1517	17784
DR7	6/11	55%	1612	1755	601	1013	2805
DQ2	5/11	45%	1414	2181	1845	956	5851
DQ5	2/11	18%	9359	9359	8749	610	18108
DQ6	2/11	18%	8821	8820	8441	380	17261
DQ7	2/11	18%	690	690	191	499	881

DSA present

Red = DSA against cell #013 only

Blue = DSA against cell #014 only

Green = DSA aginst cell #013 and #014

Table 13 . Summary of Single Antigen results Serum #018

Class I							
*** Serum 18***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B54	11/11	100%	7815	8543	2818	4066	15155
B67	11/11	100%	4962	4911	1118	3586	6732
A34	10/11	91%	3284	3421	1252	1195	6200
B18	10/11	91%	15763	16724	3125	12956	23897
B37	10/11	91%	4499	4916	1618	3133	7303
B38	10/11	91%	5867	6304	1948	4065	10235
B39	10/11	91%	8205	8794	2354	6021	13990
B59	10/11	91%	4184	4665	1509	3008	7838
B64	10/11	91%	15169	15805	2878	12764	22660
B65	10/11	91%	17489	18067	2906	14532	24477
B73	10/11	91%	10497	10660	2900	6738	17344
B8	10/11	91%	14946	15792	3331	11899	23363
A33	9/11	82%	7503	7752	2684	4474	14269
B46	9/11	82%	2277	2574	868	1384	4350
B55	9/11	82%	2866	3148	1093	1771	4571
Cw5	9/11	82%	7167	7179	3048	1071	12390
A68	7/11	64%	1707	1934	650	1024	2680
A69	7/11	64%	1833	2032	793	1074	3184
B51	7/11	64%	1661	1948	735	1059	3388
B27	6/11	55%	5443	5489	287	5103	5974
B2708	5/11	45%	5580	6586	1733	4983	9639
B41	5/11	45%	2070	1677	580	873	2191
B42	5/11	45%	1890	2052	990	1145	3896
B47	5/11	45%	1328	1872	874	1040	3047
B81	5/11	45%	1297	1598	528	1068	2357
B13	4/11	36%	1465	1598	612	1013	2452
B7	4/11	36%	1376	1745	830	1063	3165
B78	4/11	36%	1641	1576	625	771	2255
B76	3/11	27%	1154	3794	4228	469	9761
B60	2/11	18%	716	715	403	313	1118

Class II							
*** Serum 18***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR53	2/11	18%	8457	8457	8126	34	16583

DSA present

Red = DSA against cell #013 only

Blue = DSA against cell #014 only

Green = DSA aginst cell #013 and #014

Table 14a. Individual laboratory results for Serum #015 - class I by Luminex

Investigator	B67	B38	B39	CW7	B46	CW10	CW8	CW9	B37	Other	Manufacturer				
MFI															
Chen, Dong-Fen	3652	3292	3190	1945	1529	3529	5070	4706			One Lambda				
Gandhi, Manish	3053	2726	2771	1509	1273	2916	5049	3721	553	A2,B71,CW16	OneLambda				
Gebel, Bray &	6988	6153	6228	2289		6758	10177	8643							
Kamoun, Malek	4047	3440	3462	3165	1708	3834	6800	5100							
Mah, Helen	5507	5249	5342	3450	2635	5350	7632	6572	1415		One Lambda				
McAlack-Hanau,	5288	4613	4577								One Lambda				
Phelan, Donna	4285	3677	3721	2712		3871	6062	5182			One Lambda				
Reed, Elaine F.	4653	4025	3922	2794	2225	4155	7273	5732			One Lambda				
Rees, Tracey	16591			704	991				1827	A1C,A25,A32,A1101 >	One Lambda				
Reinsmoen, Nan	3172	2744	2913	5281		3236		3936			One Lambda				
Rosen-Bronson,	2907	2613	2660		1119						One Lambda				
Avg	5467.5	3853	3879	2650	1640	4206.1	6866.1	5449	1265						
Std Dev	3706.4	1114	1117	1228	558	1179.9	1642.9	1482	531						
MFI %CV	68%	29%	29%	46%	34%	28%	24%	27%	42%						

Table 14a. Individual laboratory results for Serum #015 - class I by Flow PRA

Investigator	B67	B38	B39	CW7	B46	CW10	CW8	CW9	B37	Other					
Holdsworth, Rho	147	135			174				29	A25,A32,A68,A26 >	MCF				
Nishimura, Kenji			2890	229			235			A68,A29,A2,A24 >	MESF				

Table 15a. Individual laboratory results for Serum #016 - class I by Luminex

Investigator	B44	A23	A24	A29	B13	B37	B38	B47	B49	B51	B53	B57	B58	B59	Other	Manufacturer	
MFI																	
Chen, Dong-Fen	9587	13382	14012	14112	9137	9608	11809	7599	12782	11876	8652	12266	11147	10123	A25,A32,A1101,A26 >	One Lambda	
Gandhi, Manish	10469	13872	13977	12860	9470	9365	11554	7706	13300	11621	8951	12886	12103	10738	A25,A32,A68,A26 >	One Lambda	
Gebel, Bray &	19068	23201	23732	21138	19010	18079	21660	14830	23426	22505	16828	23501	21739	20306	A25,A32,A1101,A26 >		
Kamoun, Malek	9556	13485	13467	13676	8816	9509	11416	6873	12870	12591	8699	12404	11634	10615	A25,A32,A1101,A26 >		
Mah, Helen	10091	12897	12136	11175	9844	10703	12350	9146	13149	12316	9608	12503	12198	11087	A25,A32,A26,A11 >	One Lambda	
McAlack-Hanau,	8559	13856	12012	11783	8462	10198	12569	7785	13829	12577	9348	13463	12591	11070	A25,A32,A26,A11 >	One Lambda	
Phelan, Donna	12133	17947	16566	17124	11504	13327	15170	10742	16146	15382	12111	15483	14904	14081	A25,A32,A26,A11 >	One Lambda	
Reed, Elaine F.	9068	14374	12276	14896	8360	9873	13465	7743	15658	14058	10489	14393	13383	12661	A32,A26,A11,A34 >	One Lambda	
Rees, Tracey	2691	9337		15724	18227	4578	9497	15362	2455		5513	6881	4040	13738	A33,A74,A2403,A30 >	One Lambda	
Reinsmoen, Nan	7557	11261	10852	11055	7083	7165	8990	5727	10211	9534	6770	9921	8893	8119	A25,A32,A26,A11 >	One Lambda	
Rosen-Bronson,	9613	13656	14467	12493	9215	9947	10933	7670	12516	11723	8655	11940	11051	9962	A26,A25,A32,A11 >	One Lambda	
Avg	9853.8	14297	14350	14185	10830	10214	12674	9198.5	13304	13418	9602.2	13240	12153	12045			
Std Dev	3688.1	3446.6	3477	2850.3	3816	3228	3275.3	3026.9	4716.7	3361.7	2814.6	3898.2	4046.5	3085.2			
MFI %CV	37%	24%	0	20%	35%	32%	26%	33%	35%	25%	29%	29%	33%	26%			

Table 15a. Individual laboratory results for Serum #016 - class I by Flow PRA

Investigator	B44	A23	A24	A29	B13	B37	B38	B47	B49	B51	B53	B57	B58	B59	Other		
Holdsworth, Rho	147	518	490	503	350	288	315	298	480	332	297	441	412	478	A25,A32,A68,A26 >	MCF	
Nishimura, Kenji	1		1825313990							5839					A68,A2,B39,B65 >	MESF	

Table 16a. Individual laboratory results for Serum #017 - class I by Luminex

Investigator	A29	A2	A26	A30	A31	A33	A36	A43	A74	A80	B49	B50	B56	B62	B63	B71	B72	B75	B77	Other	Manufacturer
MFI																					
Chen, Dong-Fen	19822	2332	7375	9981	2989	2741	11891	9207	2877	9738	11065	11110	13887	8569	6772	10106	6863	11166	9891	A68,A69,A34,A1>	One Lambda
Gandhi, Manish	18952	2127	7066	9281	2897	2774	11693	8699	2800	9000	9888	9800	12615	7723	6242	9207	6141	9482	8644	A32,A68,A69 >	One Lambda
Gebel, Bray &	25543	5689	12423	18069	5858	5474	21365	16855	5509	18260	20734	21004	23540	16830	12976	19382	13182	20773	19021	A69,A34,A1,A68>	
Kamoun, Malek	23981	4014	11422	14889	5017	4674	14663	14338	4771	12695	13351	13595	17795	10592	8339	12225	7865	13029	12428	A68,A69,A34,A1>	
Mah, Helen	17697	2800	8182	7750	3726	3600	13698	9989	3769	10347	12510	12826	14749	10461	8863	11460	8949	10428	11394	A68,A69,A34,A1>	One Lambda
McAlack-Hanau,	21571	3799	8459	8213	3425	3226	14253	11160	3574	11578	12948	12412	15978	9883	7950	11880	7621	10759	11390	A1,B7,B35,B78 >	One Lambda
Phelan, Donna	21489	2913	8965	8572	3910	3785	14435	10996	3939	12207	12714	12557	15700	9725	8299	11407	8054	10846	11458	B57,B46,B58,B59>	One Lambda
Reed, Elaine F.	21964	3509	10448	10167	4270	3805	12898	13470	4172	12048	12117	12407	16570	9564	7750	11850	7501	10960	11538	A68,A69,A34,A1>	One Lambda
Rees, Tracey	6736		9543	6945	5903	6055	8596	8453	6532	8539	1197	1049	854	1953	545	511	919	744	501	A1C,A25,A32>	One Lambda
Reinsmoen, Nan	20381	2662	7809	9775	2836	2781	12738	9580	2865	8954	9513	9686	12562	7400	5653	9134	5763	9844	8824	A1,B7,B35,B78>	One Lambda
Rosen-Bronson,	21488	1804	7644	10066	3373	3362	14270	9254	3415	8713	9721	9783	12481	7693	6348	9081	6108	9347	8220	A69,A34,A1,A23>	One Lambda
Avg	19966	3165	9030.5	10337	4019	3843	13682	11091	4020	11098	11433	11475	14248	9126.6	7248.8	10568	7178.7	10671	10301		
Std Dev	4669.3	1081	1666.9	3133.2	1069	1062	2950.6	2568	1123	2694.4	4365.8	4449.1	5203.4	3346.2	2828.1	4186.3	2767	4373.8	4170		
MFI %CV	23%	34%	18%	30%	27%	28%	22%	23%	28%	24%	38%	39%	37%	37%	39%	40%	39%	41%	40%		

Table 16a. Individual laboratory results for Serum #017 - class I by Flow PRA

Investigator	A29	A2	A26	A30	A31	A33	A36	A43	A74	A80	B49	B50	B56	B62	B63	B71	B72	B75	B77	Other	
Holdsworth, Rho	592	234	346	383	395	328	396	341	193	454	413	463	493	490	423	512	386	460	472	A25,A32,A68,A69 >	MCF
Nishimura, Kenji	23590	1977																		A24,B44,B51,B39>	MESF

Table 17a. Individual laboratory results for Serum #018 - class I by Luminex

Investigator	B39	B54	B65	B67	A34	B18	B37	B38	B59	B64	B73	B8	A33	B46	B55	A68	B51	CW5	A69	B27	Other	Manufacturer
MFI																						
Chen, Dong-Fen	7550	7815	16227	4235	3546	15301	3877	5290	3788	14029	9239	14013	7671	2164	2325	1487	1569	7167	1544		B2708	One Lambda
Gandhi, Manish	6573	6765	14532	3977	2937	12956	3261	4498	3232	12764	7638	12266	5721	2134	2249	1364	1364	4858	1241	5567	B47,B60,B76,B7>	One Lambda
Gebel, Bray &	13990	15155	24477	6732		23897	7157	10235	7838	22660	17344	23363	14269	2647	4293	2649	2528	12390	2213		B41,B2708	
Kamoun, Malek	9330	9916	20698	5804	4273	19768	5121	6506	5060	18306	11805	18027	9407	3013	2866	1707	2068	8087	1833		B47,B7,B78,B81>	
Mah, Helen	10081	9168	15524	5555	3680	15320	7303	8023	5735	14739	11448	15286	7503	3487	4425	2632	1661	9108	3139	5103	B47,B60,B76,B7>	One Lambda
McAlack-Hanau,	8859	9430	18631	5042	4115	17533	5353	6443	4580	15892	11080	16772										One Lambda
Phelan, Donna	11333	11150	19935	6707	6200	18236	6966	8561	6421	17515	12964	18605	7975	4350	4571	2680	3388	9779	3184	5683	B47,B78,B81,B13>	One Lambda
Reed, Elaine F.	7379	7628	18836	3824	2792	16205	3469	4679	3608	15599	9914	14606	4474	2277	1864			6210			B2708	One Lambda
Rees, Tracey		4066		4962	1195									1384	3975			1071		5974	A25,A1101,A26>	One Lambda
Reinsmoen, Nan	6832	6875	16346	3586	3022	14668	3524	4745	3385	13635	8438	13085	7027					5948		5292		One Lambda
Rosen-Bronson,	6021	6013	15469	3602	2457	13359	3133	4065	3008	12912	6738	11899	5725	1717	1771	1024	1059		1074	5319	B47,B81,B13	One Lambda
Avg	8794.8	8543.7	18068	4911	3422	16724	4916	6304.5	4666	15805	10661	15792	7752.4	2575	3149	1935	1948	7179.8	2033	5490		
Std Dev	2354	2817.7	2906.4	1118	1252	3125.3	1618	1947.7	1509	2878.1	2900.3	3330.6	2684	868	1093	650	735	3047.9	793	287		
MFI %CV	27%	33%	16%	23%	37%	19%	33%	31%	32%	18%	27%	21%	35%	34%	35%	34%	38%	42%	39%	5%		

Table 17a. Individual laboratory results for Serum #018 - class I by Flow PRA

Investigator	B39	B54	B65	B67	A34	B18	B37	B38	B59	B64	B73	B8	A33	B46	B55	A68	B51	CW5	A69	B27	Other	
Holdsworth, Rho	303	377	548	183	100	496	169	178	344	488	428	539	351	209	312	80	121		93	277	A25,A32,A26,A11 >	MCF
Nishimura, Kenji	4307		4647													722	907				A29,A2,A24,B44>	MESF

Table 18a. Individual laboratory results for Serum #015 - class II by Luminex

Investigator	DQ8	DR9	DQ7	DQ9	DR8	DR12	DR51	DQ2	DQ4	DR16	DPW1	DPW3	DPW4	DQ6	DP11	DP18	DPW2	DR10	DP13	DPW6	Other	Manufactuer
MFI																						
Chen, Dong-Fen	19046	4195	20725	19891	4476	11650	2286	17919	9811	2643	1291	2942	2460	2004	1607	1829	2238	1189	1200	1469		One Lambda
Gandhi, Manish	16594	3269	20450	17133	3795	9272	2343	15559	8439	2251	1538	2228	1836	1222	1213	1356	1660	1112	898	1114	DR1,DR103,DR11	One Lambda
Gebel, Bray &	23964	8492	25013	24431	8804	21098	5186	24699	18855	5120	3946	6673	5612	3403	3718	4326	4747	2493	2445			
Kamoun, Malek	22243	4432	23835	22481	5614	14055	3467	21114	12521	3410	2208	3172	1929	1911	1759	1903	2435	1257	1410	1661	DP402	
Mah, Helen	14677	5204	18094	15928	7445	11423	3021											2147			DR1,DR103	One Lambda
McAlack-Hanau,	15691	4596	20588	17763	5733	11962	3404		11019	3374												One Lambda
Phelan, Donna	15248	4549	19811	16763	5667	11613	3504	14984	10473	3556	2575	2986	2710			2346	2869					One Lambda
Reed, Elaine F.	15533	3727	21942	17320	4756	11652	3070															One Lambda
Rees, Tracey		2788					8171			7553	2428	6408		2078	2412				1887	5686	DPW5,DP9,DP10>	One Lambda
Reinsmoen, Nan	18457	3557	21729	18857	3973	10584		16948	9942													One Lambda
Rosen-Bronson,	15676	2676	20253	17021	3087	8697					1425	1901	1517			1110	1473					One Lambda
Avg	17713	4317	21244	18759	5335	12201	3828	18537	11580	3987	2202	3759	2677	2124	2142	2145	2570	1640	1568	2483		
Std Dev	3024.3	1521	1895.5	2608.5	1649	3281.4	1730	3391.4	3185.4	1678	854.1	1809	1371	709	877.8	1053	1079	568.1	544.1	1860		
MFI %CV	17%	35%	9%	14%	31%	27%	45%	18%	28%	42%	39%	48%	51%	33%	41%	49%	42%	35%	35%	75%		

Table 18a. Individual laboratory results for Serum #015 - class II by Flow PRA

Investigator	DQ8	DR9	DQ7	DQ9	DR8	DR12	DR51	DQ2	DQ4	DR16	DPW1	DPW3	DPW4	DQ6	DP11	DP18	DPW2	DR10	DP13	DPW6	Other	
Holdsworth, Rho	492	280	549	543	346			4	359	6				1				300			DQ5,DR1,DR13 >	MCF
Nishimura, Kenji	19694							195					2530	189	2530						DR13,DR7,DR4	MESF

Table 19a. Individual laboratory results for Serum #016 - class II by Luminex

Investigator	DR11	DR15	DR16	DR51	DR8	DQ6	DR12	DR9	Other	Manufactuer
MFI										
Chen, Dong-Fen	5082	7152	11450	8930	3769		3825	1645		One Lambda
Gandhi, Manish	5193	6804	11246	10429	4299	6654	4181	1443		One Lambda
Gebel, Bray &	6033	9138	16526	12946	5224					
Kamoun, Malek	4764	5990	11065	8692	3785	6528	3810	1336		
Mah, Helen	4941	4119	6856	5412	4933					One Lambda
McAlack-Hanau,	4290	3750	6605	7841	3714					One Lambda
Phelan, Donna	4679	7341	9456	6682	4273	7549	4161	2152		One Lambda
Reed, Elaine F.	2496	9181	9938	6186						One Lambda
Rees, Tracey									DPW1	One Lambda
Reinsmoen, Nan	4708	4743	9181	7862	3524	5394	3234			One Lambda
Rosen-Bronson,	5979	7690	12503	9746	4488		4470	1909		One Lambda
Avg	4817	6591	10483	8472.6	4223	6531	3947	1697		
Std Dev	935.6	1824	2714.7	2104.6	551	766	390.7	300		
MFI %CV	19%	28%	26%	25%	13%	12%	10%	18%		

Table 19a. Individual laboratory results for Serum #016 - class II by Flow PRA

Investigator	DR11	DR15	DR16	DR51	DR8	DQ6	DR12	DR9	Other	
Holdsworth, Rho	322	314	56	233	315	15		156	DQ5,DQ7,DQ9,DQ2 >	MCF
Nishimura, Kenji						214			DPW4,DP11,DQ2,DQ8 >	MESF

Table 20a. Individual laboratory results for Serum #017 - class II by Luminex

Investigator	DR13	DR10	DR11	DR14	DR17	DR18	DR8	DR12	DR9	DR52	DR53	DR7	DQ2	DQ6	DQ5	DQ7	DR4	Other	Manufactuer
MFI																			
Chen, Dong-Fen	9331	3985	6975	11896	6888	5614	5587	4040	8170	2202	3637	1278							One Lambda
Gandhi, Manish	7155	2888	5511	9291	5334	4692	4222	2932	5687	1583	2673	1013	956	380	610	499		DQ9	One Lambda
Gebel, Bray &	16183	7077	13759	21019	13391	11842	10993	7965	14273	4212	6242	2805							
Kamoun, Malek	10882	4685	8639	14431	8458	7772	6721	5070	11502	2809	4354	1751	1498						
Mah, Helen	8469	4305	7629	8766	7139	6183	6849	4950	5936	2675	3732	1473	1414						One Lambda
McAlack-Hanau,	8584	4519	7495	9782	7575	6827	6212	4100	6767		4049								One Lambda
Phelan, Donna	8709	4305	7647	9393	7489	6883	6311	4460	5942	2451	3832								One Lambda
Reed, Elaine F.	10341	4683	9241	11110	8852	8235	7417	5095	9558	2965	4411	2213	1187						One Lambda
Rees, Tracey	17768	14634	15544	19018	18325	16933	16978	16144		17784			5851	17261	18108	881	10524	DQ4,DR1,DR103,DR15 >	One Lambda
Reinsmoen, Nan	7769	3338	6415	10706	6110	5478	4612	3394	6293		3089								One Lambda
Rosen-Bronson,	6803	2799	5202	9224	5130	4351	4142	2834	6288	1517	2677								One Lambda
Avg	10181	5201.6	8550.6	12240	8608.3	7710	7276.7	5544	8041.6	4244.2	3870	1756	2181	8820.5	9359	690	10524		
Std Dev	3422.6	3179.1	3115.9	3995.1	3740.1	3515.9	3562.6	3609.5	2743.4	4846.4	986.2	601	1845	8440.5	8749	191	0		
MFI %CV	34%	61%	36%	33%	43%	46%	49%	65%	34%	114%	25%	34%	85%	96%	93%	28%	0%		

Table 20a. Individual laboratory results for Serum #017 - class II by Flow PRA

Investigator	DR13	DR10	DR11	DR14	DR17	DR18	DR8	DR12	DR9	DR52	DR53	DR7	DQ2	DQ6	DQ5	DQ7	DR4	Other	
Holdsworth, Rho	3	419	432	9	4	2	412		265	155		242	68	113	73	115	122	DQ9,DQ4,DQ8,DR1 >	MCF
Nishimura, Kenji	13726											2946	489	499			559	DPW4,DP11,DQ8	MESF

Table 21a. Individual laboratory results for Serum #018 - class II by Luminex

Investigator	DR53	DQ6	DQ8	DR7	Other	Manufactuer
MFI						
Chen, Dong-Fen						One Lambda
Gandhi, Manish	331				DPW1,DPW5	One Lambda
Gebel, Bray &						
Kamoun, Malek						
Mah, Helen						One Lambda
McAlack-Hanau,						One Lambda
Phelan, Donna						
Reed, Elaine F.						One Lambda
Rees, Tracey	16583	626	1331	17792	DPW1,DPW4,DP11,DP15 >	One Lambda
Reinsmoen, Nan						One Lambda
Rosen-Bronson,						One Lambda
Avg	8457					
Std Dev	8126					
MFI %CV	96%					

Table 21a. Individual laboratory results for Serum #018 - class II by Flow PRA

Investigator	DR53	DQ6	DQ8	DR7	Other	
Holdsworth, Rho	34	17	5	20	DQ5,DQ7,DQ9,DQ2 >	MCF
Nishimura, Kenji		266	261	256	DPW4,DP11,DQ2,DR13 >	MESF