

REPORT OF THE 5th Flow Cross Match Exchange AUGUST 17, 2015

Cells	25-26
Serum	27-30

Flow Cytometric Crossmatch

For the 5th Flow Cross Match Exchange, 2 cells (cell nos. 25 - 26) and 4 sera (serum nos. 27 - 30) 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 25. The HLA type for this sample from a Vietnamese donor is A*11:02:01-A*33:03-B*13:01-B*44:03-C*03:04-C*07:01:01G/DRB1*07:01-DRB1*12:02-DRB3*02:02:01G-DRB4*01:01:01G-DQA1*02:01-DQA1*06:01-DQB1*02:02-DQB1*03:01-DPB1*04:01-DPB1*13:01:01G. The flow T-cell crossmatch for this sample was reported as negative against serum 28 and positive against serum samples 27, 29, and 30. Two labs reported the crossmatch against serum 28 as positive instead of negative. There were no discrepancies reported for the crossmatches against serum samples 27, 29, and 30.

The flow B-cell crossmatch for this sample was reported as positive against all 4 sera. One lab reported the B-cell crossmatch against serum 27 as negative instead of positive. The crossmatches against serum samples 28, 29, and 30 were reported without discrepancies.

Cell 26. The HLA type for this sample from a Chinese donor is A*02:01-A*11:01-B*13:01-B*15:02-C*03:04-C*08:01:01G/DRB1*04:05-DRB1*12:02-DRB3*03:01-DRB4*01:01:01G-DQB1*03:01-DQB1*04:01-DPB1*03:01:01G-DPB1*05:01:01G. The flow T-cell crossmatch for this sample was reported as negative against serum 29 and positive against serum 27 and serum 30. Three labs reported the crossmatch against serum 29 as positive instead of negative. Mixed results were observed for the crossmatch against serum 28, as 7 labs reported a positive T-cell crossmatch and 7 reported the crossmatch as negative.

The flow B-cell cell crossmatch for this sample was reported as positive against all 4 sera. One lab reported the crossmatch against serum 27 as negative instead of positive. The crossmatches against serum samples 28, 29, and 30 were reported without discrepancies.

Table 1. Summary of Flow crossmatch results for Cell #025-#026 vs. Serum #027-#030

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results		Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
				Positive(11) <i>Negative(1)</i> NT(2)						Positive(10) <i>Negative(1)</i> NT(3)
25	27	14	Positive(14)	Positive(12) <i>Negative(2)</i>		26	27	14	Positive(14)	Positive(12) <i>Negative(2)</i>
25	28	14	Negative(12) <i>Positive(2)</i>	Positive(12) NT(2)		26	28	14	Positive(7) Negative(7)	Positive(11) NT(3)
25	29	14	Positive(14)	Positive(12) NT(2)		26	29	14	Negative(11) <i>Positive(3)</i>	Positive(12) NT(2)
25	30	14	Positive(14)	Positive(12) NT(2)		26	30	14	Positive(14)	Positive(12) NT(2)

Antibody Identification

Class I and class II Luminex single antigen results for serum samples 27 - 30 are summarized on Tables 10 - 13 and individual laboratory results

for Luminex and Flow PRA are listed in Tables 14 - 21.

For **Serum 27**, strong DSA (A11) were reported against cell 25 and cell 26. A median MFI value of 21673 was reported by Luminex. In addition, strong A33 (21300) reactivity was detected against cell 25. This sample was reported to be negative for class II.

Serum 28 was reported to be positive for DSA against cell 25 and cell 26. Reactivity to B13 was reported, with a median MFI value of 6564. For class II, strong anti-DR53 and -DQ7 reactivity was detected, with respective median MFI values of 20564 and 12299. In addition, DR7 (7809) and DQ2 (13400) reactivity was reported against cell 25, and DR4 (18400), DPw3 (10568), and DQ4 (17070) reactivity was reported against cell 26.

Serum 29 was found to be positive for DSA (A33, Cw7, and B44) against cell 25. Median MFI values were reported as 21501, 18002, and 5097, respectively. In addition, weak anti-Cw10 (1608) reactivity was reported by a number of labs (n=5) against cell 25 and cell 26. For class II,

numerous DSA were detected against each cell. Against cell 25, strong reactivity to DR12, DR52, DP13, DQ7, DP401, DQ2, and DPw4 was reported. Median MFI values ranged from 21366 to 10103. Against cell 26, strong reactivity to DQ4, DR12, DR4, DR52, DPw5, and DQ7 was reported, with median MFI values ranging from 21366 to 10425.

For **serum 30**, class I and class II DSA against cell 25 and cell 26 were detected. Against cell 25, anti-A33, -Cw7, and -A11 reactivity was reported, with median MFI values of 16416, 7302, and 2292, respectively. Against cell 26, A2 (18599) and A11 (2292) reactivity was reported. In addition, moderate reactivity to B13 (7750) was reported against each cell. For class II, strong reactivity to DQ2 and DR7 was reported against cell 25. Respective median MFI values were 17169 and 20466. For cell 26, reactivity to DPw5 (4474), DPw3 (3408), and DQ4 (1845) was reported. Additional reactivity to DR12 (3851) and DQ7 (2863) was also reported against each cell.

Conclusion:

For the **T-cell flow crossmatch**, complete agreement was achieved for 5 out of 8 crossmatches. The 5 crossmatches were each reported as positive, and DSA with high MFI values were detected in each case. A number of discrepancies (n=12) were reported for the remaining 3 crossmatches. For cell 25 against serum 28, 2 labs reported the crossmatch as negative instead of positive, and for cell 26 against serum 29, 3 labs reported the crossmatch as positive instead of negative. Weak to moderate class I DSA were present in each case. No agreement was achieved for cell 26 against serum 28, as 7 labs reported the T-cell crossmatch as positive and 7 reported it as negative. Interestingly, for serum 28, the class I DSA (B13) (6564 ± 4110) detected against cell 25 were similar to those detected

against cell 26. However, the results for cell 26 against serum 28 were more variable than those for cell 25 against serum 28.

For the **B-cell flow crossmatch**, all 8 crossmatches were reported as positive. Among the 8 crossmatches, 6 were reported in complete agreement. For serum samples 28, 29, and 30, strong class II DSA with high MFI values were reported against cell 25 and cell 26, resulting in the positive crossmatches. Serum 27, on the other hand, was found to be absent of class II antibodies. However, strong class I DSA, A33 (21300 ± 15133) and A11 (21673 ± 15854), against cell 25 and cell 26 were present, resulting in the positivity of the crossmatch. One lab accounted for the discrepancies observed for cells 25 and 26 against serum 27.

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Table 2. Individual Flow crossmatch results and DSA reported for Cell #025 vs. Serum #027

Center	Investigator	Serum no	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, Rainer	27					POS						NEG				NO
3224	Chen, Dong-Feng	27	70	349			POS	A33(20160), A1102(19616)	140	340			POS	No DSA reported	243	215	YES
3135	Enczmann, J	27	942 (1.2)	1906	2.4		POS						NT		785		NO
792	Gandhi, Manish	27	52	326			POS	A33(15133), A11(15854)	106	313			POS	No DSA reported	221	262	YES
615	Holdsworth, Rhond	27	40	268			POS		40	360			POS		462	416	YES
859	Kamoun, Malek	27	1.5		43.7	360688	POS	A33(21300), A1102(21000)	1.5		26.8	311800	POS	No DSA reported			YES
206	McAlack-Hanau,	27	2.98	464.25	38.9		POS	A33(21382), A11(21218)	4.94	492.8	35.7		POS	No DSA reported	12.25	14.2	YES
4661	Nishimura, Kenji	27	15	273.8			POS		20	973.4			POS		12.4	55.7	YES
3966	Permpikul, Vejbaes	27	40	137			POS		100	NT			NT		95	NT	NO
2400	Phelan, Donna L.	27	40	387			POS	A33(22213), A11(22511)	80	170			POS	No DSA reported	162	395	NO
3753	Reed, Elaine F.	27	51	412			POS	A33(19765), A11(20593)	101	439			POS	No DSA reported	226	232	YES
3625	Rees, Tracey	27	40	385	N/A	N/A	POS	A33(18500), A1102(17593)	40	250	N/A	N/A	POS	No DSA reported	139	334	NO
3798	Reinsmoen, Nancy	27	70	306		72180	POS	A33(21780), A11(2250)	120	325		110267	POS	No DSA reported	313	334	YES
1160	Rosen-Bronson, Se	27	90	347			POS	A33(22483), A11(22127)	90	379			POS	No DSA reported	255	261	YES

Table 3. Individual Flow crossmatch results and DSA reported for Cell #025 vs. Serum #028

Center	Investigator	Serum no	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, Rainer	28					NEG						POS				NO
3224	Chen, Dong-Feng	28	70				NEG	B13(7616)	140	247			POS	DR53(20425), DR7(7809)	243	215	YES
3135	Enczmann, J	28	942 (1.2)	749	1,0		NEG						NT		785		NO
792	Gandhi, Manish	28	52	52			NEG	B13(4110), A11(530)	106	292			POS	DR53(16353), DR7(6610), DQ7(8923), DQ2(9478)	221	262	YES
615	Holdsworth, Rhond	28	40	117			POS		40	172			POS		462	416	YES
859	Kamoun, Malek	28	1.5		1.43	2232	POS	B13(6500), A1102(1600)	1.5		11.86	114395	POS	DR53(21000), DR7(7100), DQ7(11800), DQ2(13400)			YES
206	McAlack-Hanau,	28	2.98	5.6	1.46		NEG	B13(7974)	4.94	312.3	22.99		POS	DR53(17868), DR7(6573)	12.25	14.2	YES
4661	Nishimura, Kenji	28	15	10.4			NEG		20	155.4			POS		12.4	55.7	YES
3966	Permpikul, Vejbaes	28	40	28			NEG		100	NT			NT		95	NT	NO
2400	Phelan, Donna L.	28	40	16			NEG	B13(9015)	80	159			POS	DR53(22239), DR7(10401), DQ7(14540), DQ2(15143)	162	395	NO
3753	Reed, Elaine F.	28	51	18			NEG	B13(6564), A11(2431)	101	305			POS	DR53(20564), DR7(7925)	226	232	YES
3625	Rees, Tracey	28	40	33	N/A	N/A	NEG	B13(5327)	40	225	N/A	N/A	POS	DR53(18667), DR7(9285), DQ7(12299)	139	334	NO
3798	Reinsmoen, Nancy	28	70	-32		2102	NEG	B13(6821)	120	298		83131	POS	DR53(22096), DR7(8297), DQ7(13498), DQ2(14402)	313	334	YES
1160	Rosen-Bronson, Sa	28	90	<0			NEG	B13(4800)	90	335			POS	DR53(23184), DR7(5868)	255	261	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #025 vs. Serum #029

Center	Investigator	Serum no	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, Rainer	29					POS						POS				NO
3224	Chen, Dong-Feng	29	70	324			POS	A33(20879), B44(5963), Cw7(18002), Cw10(1608)	140	489			POS	DR12(21366), DR52(13259), DP13(10815), DP401(16993)	243	215	YES
3135	Enczmann, J	29	942 (1.2)	1490	1,9		POS						NT		785		NO
792	Gandhi, Manish	29	52	330			POS	A33(17263), B44(3495), Cw7(13496), Cw10(791), B13(386)	106	526			POS	DR12(17545), DR52(9446), DP13(8062), DQ7(8578), DPw4(13098), DQ2(8438)	221	262	YES
615	Holdsworth, Rhond	29	40	126			POS		40	331			POS		462	416	YES
859	Kamoun, Malek	29	1.5		29.8	229371	POS	A33(21800), B44(5200), Cw7(1700), Cw10(1100)	1.5		120	1856447	POS	DR12(21800), DR52(11700), DP13(10500), DQ7(12300), DP401(16200), DQ2(12200)			YES
206	McAlack-Hanau,	29	2.98	391.25	32.94		POS	A33(21501), B44(5490), Cw7(19765)	4.94	2720.8	192.61		POS	DR12(20931), DR52(12364), DQ7(14721)	12.25	14.2	YES
4661	Nishimura, Kenji	29	15	108.4			POS		20	956			POS		12.4	55.7	YES
3966	Permpikul, Vejbaes	29	40	223			POS		100	NT			NT		95	NT	NO
2400	Phelan, Donna L.	29	40	347			POS	A33(22429), B44(5097), Cw7(20463), Cw10(2184)	80	356			POS	DR12(22863), DR52(13716), DP13(11969), DQ7(14497), DPw4(18918), DQ2(11944)	162	395	NO
3753	Reed, Elaine F.	29	51	340			POS	A33(20567), B44(5265), Cw7(17801)	101	565			POS	DR12(21116), DR52(11200), DP13(10087), DP401(16957)	226	232	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #025 vs. Serum #029

Center	Investigator	Serum no	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
3625	Rees, Tracey	29	40	342	N/A	N/A	POS	A33(19316), B44(3670), Cw7(19173), Cw10(2403), B13(665)	40	391	N/A	N/A	POS	DR12(19256), DR52(8347), DP13(7772), DQ7(6633), DP401(10391), DQ2(6956)	139	334	NO
3798	Reinsmoen, Nancy	29	70	333		95742	POS	A33(22652), B44(4287), Cw7(20186)	120	520		848202	POS	DR12(23301), DR52(12000), DP13(10842), DQ7(12800), DPw4(18270), DQ2(10103)	313	334	YES
1160	Rosen-Bronson, Se	29	90	329			POS	A33(22599), B44(3754), Cw7(16988)	90	556			POS	DR12(22336), DR52(10890), DP13(10284), DP401(16245)	255	261	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #025 vs. Serum #030

Center	Investigator	Serum no	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, Rainer	30					POS						POS				NO
3224	Chen, Dong-Feng	30	70	282			POS	A33(16359), B13(9122), Cw7(5302), A1102(2470)	140	444			POS	DR7(19194), DQ2(18590), DR12(4126)	243	215	YES
3135	Enczmann, J	30	942 (1.2)	1619	2,1		POS						NT		785		NO
792	Gandhi, Manish	30	52	285			POS	A33(11872), Cw7(4600), A11(1736)	106	450			POS	DR7(15550), DQ2(14650), DR12(2928), DQ7(1726)	221	262	YES
615	Holdsworth, Rhond	30	40	229			POS		40	384			POS		462	416	YES
859	Kamoun, Malek	30	1.5		19.2	134055	POS	A33(17700), B13(8400), Cw7(7000), A1102(1800)	1.5		64.1	881147	POS	DR7(21000), DQ2(20200), DR12(3000), DQ7(2600)			YES
206	McAlack-Hanau,	30	2.98	232.75	20		POS	A33(17209), B13(8454)	4.94	1635.3	116.16		POS	DR7(19715) , DQ2(15430), DR12(4197)	12.25	14.2	YES
4661	Nishimura, Kenji	30	15	111.4			POS		20	770.4			POS		12.4	55.7	YES
3966	Permpikul, Vejbaes	30	40	273			POS		100	NT			NT		95	NT	NO
2400	Phelan, Donna L.	30	40	315			POS	A33(20046), B13(12810), Cw7(11575), A11(6315)	80	311			POS	DR7(21170), DQ2(16995), DR12(5933), DQ7(4568)	162	395	NO
3753	Reed, Elaine F.	30	51	296			POS	A33(16416), B13(7401), Cw7(7699), A11(2292)	101	488			POS	DR7(20466), DQ2(14358), DR12(3574)	226	232	YES
3625	Rees, Tracey	30	40	312	N/A	N/A	POS	A33(14044), B13(6729), Cw7(7604), A1102(2917)	40	354	N/A	N/A	POS	DR7(17631), DQ2(17169), DR12(3851)	139	334	NO
3798	Reinsmoen, Nancy	30	70	208		25889	POS	A33(17350), B13(7750), Cw7(7795), A11(2992)	120	331		117411	POS	DR7(21800), DQ2(17500), DR12(4500), DQ7(3125)	313	334	YES
1160	Rosen-Bronson, Sa	30	90	292			POS	A33(15350), B13(6291), Cw7(5084), A11(2225)	90	494			POS	DR7(20959), DQ2(19023), DR12(3136)	255	261	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #026 vs. Serum #027

Center	Investigator	Serum no	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, Rainer	27					POS						NEG				NO
3224	Chen, Dong-Feng	27	70	354			POS	A1101(20290)	140	357			POS	no DSA reported	243	215	YES
3135	Enczmann, J	27	539 (1,2)	1521	3,4		POS						NT		449		NO
792	Gandhi, Manish	27	52	372			POS	A11(15854)	106	339			POS	no DSA reported	273	351	YES
615	Holdsworth, Rhonda	27	40	224			POS		40	308			POS		442	414	YES
859	Kamoun, Malek	27	1.5		43.6	368986	POS	A1101(21000)	1.5				NT	no DSA reported			YES
206	McAlack-Hanau,	27	2.98	736.57	79.11		POS	A11(21218)	4.94	1726	91.84		POS	no DSA reported	9.43	19	YES
4661	Nishimura, Kenji	27	15	266.6			POS		20	673.2			POS		10.9	33.7	YES
3966	Permpikul, Vejbaes	27	40	332			POS		100	NT			NT		129	NT	NO
2400	Phelan, Donna L.	27	40	353			POS	A11(22511)	80	208			POS	no DSA reported	195	453	NO
3753	Reed, Elaine F.	27	51	422			POS	A11(20593)	101	449			POS	no DSA reported	217	265	YES
3625	Rees, Tracey	27	40	410	N/A	N/A	POS	A1101(17878)	40	257	N/A	N/A	POS	no DSA reported	166	402	NO
3798	Reinsmoen, Nancy	27	70	314		80562	POS	A11(22250)	120	289		172915	POS	no DSA reported	316	414	YES
1160	Rosen-Bronson, S	27	90	408			POS	A11(22127)	90	410			POS	no DSA reported	297	363	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #026 vs. Serum #028

Center	Investigator	Serum no	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, Rainer	28					NEG						POS				NO
3224	Chen, Dong-Feng	28	70				NEG	B13(7616), B75(1163)	140	393			POS	DR4(18400), DR53(20425), DPw3(12881), DQ4(1626)	243	215	YES
3135	Enczmann, J	28	539 (1,2)	443	1,0		NEG						NT		449		NO
792	Gandhi, Manish	28	52	119			POS	B13(4110), B75(612), A11(530)	106	378			POS	DR4(15042), DR53(16353), DPw3(7001), DQ4(13444), DQ7(8923)	273	351	YES
615	Holdsworth, Rhond	28	40	100			POS		40	424			POS		442	414	YES
859	Kamoun, Malek	28	1.5		2.4	7105	POS	B13(6500), A1101(1900)	1.5		41.6	939158	POS	DR4(19000), DR53(21000), DPw3(11000), DQ4(18300), DQ7(11800)			YES
206	McAlack-Hanau,	28	2.98	15.92	2.69		NEG	B13(7974)	4.94	718	38.79		POS	DR4(16017), DR53(17868),	9.43	19	YES
4661	Nishimura, Kenji	28	15	28.6			POS		20	562.3			POS		10.9	33.7	YES
3966	Permpikul, Vejbaes	28	40	27			NEG		100	NT			NT		129	NT	NO
2400	Phelan, Donna L.	28	40	71			POS	B13(9015)	80	225			POS	DR4(20168), DR53(22239), DPw3(10249), DQ4(20565), DQ7(14540)	195	453	NO
3753	Reed, Elaine F.	28	51	75			POS	B13(6564), A11(2431)	101	460			POS	DR4(18331), DR53(20564), DPw3(9869), DQ4(1154)	217	265	YES
3625	Rees, Tracey	28	40	72	N/A	N/A	POS	B13(5327), B75(901), A1101(512)	40	317	N/A	N/A	POS	DR4(17323), DR53(18667), DPw3(11257), DQ4(17070), DQ7(12299)	166	402	NO
3798	Reinsmoen, Nancy	28	70	67		6078	NEG	B13(6821)	120	355		344927	POS	DR4(19556), DR53(22096), DPw3(10887), DQ4(20293), DQ7(13498)	316	414	YES
1160	Rosen-Bronson, Sa	28	90	86			NEG	B13(4800)	90	422			POS	DR4(19745), DR53(23184), DPw3(9161)	297	363	YES

Table 8. Individual Flow crossmatch results and DSA reported for Cell #026 vs. Serum #029

Center	Investigator	Serum no	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, Rainer	29					NEG						POS				NO
3224	Chen, Dong-Feng	29	70				NEG	Cw10(1608)	140	438			POS	DR12(21366), DQ4(20040), DR4(18959), DR52(13259), DPw5(11262)	243	215	YES
3135	Enczmann, J	29	539 (1,2)	1066	2,4		POS						NT		449		NO
792	Gandhi, Manish	29	52	105			POS	Cw10(791), B13(386)	106	442			POS	DR12(17545), DQ4(16220), DR4(14071), DR52(9446), DPw5(8102), DQ7(8578)	273	351	YES
615	Holdsworth, Rhond	29	40	14			NEG		40				NT		442	414	YES
859	Kamoun, Malek	29	1.5		1.7	4000	NEG	Cw10(1100)	1.5		64.9	2E+06	POS	DR12(21800), DQ4(20600), DR4(16800), DR52(11700), DPw5(10400), DQ7(12300)			YES
206	McAlack-Hanau,	29	2.98	8.32	1.88		NEG	No DSA reported	4.94	1171	62.63		POS	DR12(20931), DQ4(16674), DR4(15183), DR52(12364), DQ7(14721)	9.43	19	YES
4661	Nishimura, Kenji	29	15	7.4			POS		20	577.7			POS		10.9	33.7	YES
3966	Permpikul, Vejbaes	29	40	0			NEG		100	NT			NT		129	NT	NO
2400	Phelan, Donna L.	29	40	43			NEG	Cw10(2184)	80	245			POS	DR12(22863), DQ4(18041), DR4(16293), DR52(13716), DPw5(12945), DQ7(14497)	195	453	NO

Table 8. Individual Flow crossmatch results and DSA reported for Cell #026 vs. Serum #029

Center	Investigator	Serum no	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
3753	Reed, Elaine F.	29	51	50			NEG	No DSA reported	101	508			POS	DR12(21116), DQ4(15706), DR4(13182), DR52(11200), DPw5(10449)	217	265	YES
3625	Rees, Tracey	29	40	25	N/A	N/A	NEG	Cw10(2403), B13(665)	40	291	N/A	N/A	POS	DR12(19256), DQ4(15489), DR4(13904), DR52(8347), DPw5(6318), DQ7(6633)	166	402	NO
3798	Reinsmoen, Nancy	29	70	56		5446	NEG	No DSA reported	120	401		552333	POS	DR12(23301), DQ4(17076), DR4(14546), DR52(12000), DPw5(10900) DQ7(12800)	316	414	YES
1160	Rosen-Bronson, S	29	90	55			NEG	No DSA reported	90	461			POS	DR12(22336), DQ4(19589), DR4(17232), DR52(10890), DPw5(9162)	297	363	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #026 vs. Serum #030

Center	Investigator	Serum no	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, Rainer	30					POS						POS				NO
3224	Chen, Dong-Feng	30	70	290			POS	A2(16855), B13(9122), A1101(3555)	140	350			POS	DR12(4126), DPw5(5052)	243	215	YES
3135	Enczmann, J	30	539 (1,2)	1187	2,6		POS						NT		449		NO
792	Gandhi, Manish	30	52	299			POS	A2(13911), B13(4812), A11(1736)	106	297			POS	DR12(2928), DPw5(3253), DPw3(2682), DQ4(1186), DQ7(1726)	273	351	YES
615	Holdsworth, Rhond	30	40	342			POS		40	436			POS		442	414	YES
859	Kamoun, Malek	30	1.5		20.4	145663	POS	A2(20300), B13(8400), A1101(2500)	1.5		35.5	774584	POS	DR12(3000), DPw5(4400), DPw3(3500), DQ4(2000), DQ7(2600)			YES
206	McAlack-Hanau,	30	2.98	422.07	45.76		POS	A2(18154), B13(8454)	4.94	1336	71.32		POS	DR12(4197)	9.43	19	YES
4661	Nishimura, Kenji	30	15	145.9			POS		20	609.8			POS		10.9	33.7	YES
3966	Permpikul, Vejbaes	30	40	254			POS		100	NT			NT		129	NT	NO
2400	Phelan, Donna L.	30	40	287			POS	A2(19460), B13(12810), A11(6315)	80	197			POS	DR12(5933), DPw5(6547), DPw3(5970), DQ4(2891), DQ7(4568)	195	453	NO
3753	Reed, Elaine F.	30	51	246			POS	A2(18599), B13(7401), A11(2292)	101	332			POS	DR12(3574), DPw5(4547)	217	265	YES
3625	Rees, Tracey	30	40	310	N/A	N/A	POS	A2(14773), B13(6729), A1101(2892)	40	237	N/A	N/A	POS	DR12(3851), DPw5(3975), DPw3(3316), DQ4(1690)	166	402	NO
3798	Reinsmoen, Nancy	30	70	259		45312	POS	A2(18600), B13(7750), A11(2992)	120	272		144739	POS	DR12(4500), DPw5(5200), DPw3(4896), DQ7(3125)	316	414	YES
1160	Rosen-Bronson, Se	30	90	347			POS	A2(18841), B13(6291), A11(2225)	90	408			POS	DR12(3136), DPw5(3732), DPw3(3135)	297	363	YES

Table 10 . Summary of Single Antigen results for Serum #027

Class I							
*** Serum 27 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A1	9	100%	7150	6853	1096	4159	8351
A24	9	100%	3914	4538	1672	1600	7717
A25	9	100%	21500	20715	2142	15974	23044
A26	9	100%	20219	19581	2472	13272	21775
A29	9	100%	20779	20032	2226	14578	21986
A3	9	100%	21700	21324	2184	17353	24040
A30	9	100%	20058	19400	1971	14686	21387
A31	9	100%	20976	20004	2058	15134	21839
A32	9	100%	21400	20374	2100	15642	22629
A33	9	100%	21300	20301	2187	15133	22483
A34	9	100%	18257	19238	2206	16536	23500
A36	9	100%	6922	6737	1166	4184	8159
A43	9	100%	16899	16903	2333	11304	20060
A68	9	100%	21201	20478	1942	15490	22295
A69	9	100%	21000	20095	2337	14434	22357
A74	9	100%	21573	20338	2392	14883	22495
A80	9	100%	12367	11728	2098	6310	14482
B18	9	100%	5935	5918	1280	3436	8347
Cw12	8	89%	4182	4095	1130	2570	6302
Cw17	7	78%	2004	2458	1068	1073	4092
A11	6	43%	21673	20758	2290	15854	22511
A66	5	56%	21811	21109	2503	16518	23471
Cw6	5	56%	1863	2132	774	1174	3495
A23	4	44%	1197	1151	433	499	1712
A6601	4	44%	21181	20820	1448	18489	22431
A6602	4	44%	21010	20714	1617	18250	22590
A1101	3	33%	20290	19722	1336	17878	21000
A1102	3	33%	19616	19403	1399	17593	21000
A2403	3	33%	4915	4772	1393	3000	6402

Class II							
*** Serum 27 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
Negative	9						

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 11 . Summary of Single Antigen results Serum #028

Class I							
*** Serum 28 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B13	9	100%	6564	6525	1484	4110	9015
B76	9	100%	4787	4742	1245	2802	7125
A24	8	89%	2397	2503	1128	1273	4720
A2403	3	33%	2251	2487	990	1410	3800
B62	3	33%	1206	1150	302	756	1489
B75	3	33%	901	892	225	612	1163
A11	2	22%	1481	1480	951	530	2431
A1101	2	22%	1206	1206	694	512	1900

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Class II							
*** Serum 28 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ8	9	100%	14112	15420	3553	10674	19751
DQ9	9	100%	15443	16263	2925	11841	19973
DR10	9	100%	7040	6882	1165	4961	8587
DR4	9	100%	18400	18175	1643	15042	20168
DR53	9	100%	20564	20266	2109	16353	23184
DR7	9	100%	7809	7763	1348	5868	10401
DR9	9	100%	12955	12810	1461	10096	14612
DP14	8	89%	10218	9731	1456	6623	11304
DP17	8	89%	8504	8212	1358	5350	9894
DP20	8	89%	10752	10354	1395	7290	11603
DP9	8	89%	10968	10536	1566	7228	12366
DPw3	8	89%	10568	10288	1612	7001	12881
DPw6	8	89%	9835	9932	1541	7112	12173
DR8	8	89%	2768	2916	835	1815	4760
DQ4	7	78%	17070	13207	7789	1154	20565
DR11	7	78%	1828	2052	682	1377	3479
DR13	7	78%	2959	2905	894	1900	4792
DR14	7	78%	2587	2516	607	1785	3444
DR51	7	78%	2058	2040	469	1346	2743
DR1	6	67%	1306	1520	580	978	2730
DQ2	5	56%	13400	13128	1954	9478	15143
DQ7	5	56%	12299	12212	1901	8923	14540
DP11	3	33%	1153	1335	524	804	2049
DR103	3	33%	1060	1104	482	538	1715
DR52	2	22%	579	579	251	328	830
DR15	1	11%	770	770	-	770	770
DR16	1	11%	550	550	-	550	550

Table 12 . Summary of Single Antigen results Serum #029

Class I							
*** Serum 29 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A25	9	100%	18000	18215	2010	14394	21092
A26	9	100%	17500	17625	2058	13468	20181
A29	9	100%	5700	6034	1076	4858	8823
A3	9	100%	4354	4906	1361	3000	7133
A30	9	100%	5619	6189	1457	4300	8327
A31	9	100%	12248	11708	2430	7908	14735
A33	9	100%	21501	21000	1674	17263	22652
A34	9	100%	21003	20903	1528	17752	22869
A68	9	100%	20792	20542	1731	16910	22994
A69	9	100%	20529	20254	2013	15757	22950
B38	9	100%	8500	8437	879	6408	9450
B41	9	100%	3814	3715	524	2616	4359
B44	9	100%	5097	4691	851	3495	5963
B45	9	100%	4800	4255	932	2783	5373
B54	9	100%	4878	4823	596	3516	5643
B65	9	100%	3261	3255	496	2258	4057
B8	9	100%	7015	7261	1216	5009	8870
Cw7	9	100%	18002	18097	2044	13496	20463
A74	8	89%	2380	2298	522	1528	3098
B18	8	89%	6975	6753	1105	4646	7947
B59	8	89%	2612	2561	400	1762	3122
B63	8	89%	2907	2907	459	2014	3594
Cw16	8	89%	2440	2482	622	1575	3521
B39	7	78%	11400	11064	1367	8182	13103
B64	7	78%	2179	2166	360	1539	2778
B49	6	67%	1186	1209	310	775	1713
B61	6	67%	1154	1195	306	787	1679
A66	5	56%	14980	15416	2319	11686	18065
B47	5	56%	1100	1099	301	711	1587
B50	5	56%	1000	964	328	572	1504
B60	5	56%	1161	1087	292	712	1535
B67	5	56%	1234	1252	311	889	1740
B76	5	56%	1463	1313	400	734	1716
Cw10	5	56%	1608	1617	615	791	2403
A6601	4	44%	16345	16301	1588	14460	18057
A6602	4	44%	15433	15360	1421	13704	16871

Class II							
*** Serum 29 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ4	9	100%	17076	17715	1828	15489	20600
DR103	9	100%	18389	18141	1892	14832	20717
DR11	9	100%	21880	21367	1783	17637	23710
DR12	9	100%	21366	21168	1702	17545	23301
DR13	9	100%	22451	22442	1766	18955	24713
DR14	9	100%	20028	20161	1530	17083	22208
DR15	9	100%	8100	8149	1676	5305	10517
DR16	9	100%	20300	19836	1775	16078	21896
DR17	9	100%	21324	20910	1812	17415	23414
DR18	9	100%	20408	19878	1946	15908	22503
DR4	9	100%	15183	15574	1770	13182	18959
DR52	9	100%	11700	11435	1620	8347	13716
DR8	9	100%	22173	21906	1726	18268	24370
DP11	8	89%	13562	12820	1987	8537	14919
DP13	8	89%	10392	10041	1337	7772	11969
DP15	8	89%	7410	7240	1318	5086	9383
DP19	8	89%	7353	7060	1441	4699	9614
DP23	8	89%	12471	11975	1925	8291	14383
DPw1	8	89%	14025	13589	2024	9708	16108
DPw5	8	89%	10425	9942	1913	6318	12945
DR51	8	89%	19369	18943	2080	15245	21454
DQ7	6	67%	12550	11588	2996	6633	14721
DP401	5	56%	16245	15357	2506	10391	16993
DQ2	5	56%	10103	9928	2015	6956	12200
DQ8	4	44%	1890	1941	773	1089	2896
DQ9	4	44%	1721	1725	636	1042	2417
DPw4	3	33%	18270	16762	2604	13098	18918
DQ6	2	22%	534	533	82	452	615

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 13 . Summary of Single Antigen results Serum #030

Class I							
*** Serum 30 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A2	9	100%	18599	17721	2017	13911	20300
A29	9	100%	13400	12946	2433	8534	17844
A3	9	100%	17013	17599	3155	14194	23711
A30	9	100%	13026	13856	2043	11111	17037
A31	9	100%	17288	16725	1861	13139	19130
A33	9	100%	16416	16260	2199	11872	20046
A34	9	100%	5035	5325	1448	3471	8730
A68	9	100%	16072	16251	1881	12859	18992
A69	9	100%	15119	14633	2406	9367	18680
A74	9	100%	17824	17061	2146	13099	19552
B13	9	100%	7750	7974	2105	4812	12810
B27	9	100%	8700	8958	2279	5532	14012
B42	9	100%	3397	3743	1533	1908	7733
B47	9	100%	4677	4734	1698	2420	8990
B48	9	100%	10458	10177	2451	6217	15595
B60	9	100%	11791	11379	2572	7035	16518
B61	9	100%	8868	9372	2182	6165	14034
B7	9	100%	13356	12879	2563	8523	17922
A25	8	89%	3501	4459	2443	2052	10037
A32	8	89%	3035	3301	1748	1769	7610
Cw6	8	89%	8823	9559	2824	4730	14824
Cw7	8	89%	7302	7082	2082	4600	11575
A36	7	78%	2234	2581	1379	1381	5778
A80	7	78%	1675	2151	1257	1201	5141
B55	7	78%	1551	1825	1109	812	4423
B67	7	78%	2000	2360	1411	1053	5643
B73	7	78%	1524	1980	1162	914	4658
B81	7	78%	12120	11571	2567	7143	15831
B56	6	67%	1187	1534	1057	551	3819
A11	5	56%	2292	3112	1651	1736	6315
A24	4	44%	3182	3580	1476	1974	5985
A66	4	44%	12239	12711	2458	9776	16592
A6602	4	44%	16972	16758	1847	14089	19000
A1101	3	33%	2892	2982	435	2500	3555
A1102	3	33%	2470	2395	459	1800	2917
A2403	3	33%	2990	2515	718	1500	3055

Class II							
*** Serum 30 ***							
9 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ2	9	100%	17169	17101	1886	14358	20200
DR12	9	100%	3851	3916	887	2928	5933
DR15	9	100%	20009	20033	1707	16351	22292
DR16	9	100%	18995	18438	1899	14490	20770
DR7	9	100%	20466	19720	1891	15550	21800
DR9	9	100%	8200	7948	1175	6220	10082
DP10	8	89%	2452	2580	702	1653	4066
DP11	8	89%	9211	9080	1166	7202	10760
DP14	8	89%	3461	3523	886	2388	5401
DP15	8	89%	6446	6578	1164	4713	8853
DP17	8	89%	2697	2782	711	1860	4221
DP9	8	89%	3899	4056	1016	2797	6183
DPw5	8	89%	4474	4588	959	3253	6547
DR103	8	89%	2414	2754	1031	1500	4658
DP18	6	67%	3795	4345	1304	2952	6820
DPw1	6	67%	2977	3436	1088	2336	5494
DPw3	6	67%	3408	3916	1143	2682	5970
DPw6	6	67%	3282	3904	1186	2800	6167
DP13	5	56%	2479	2890	962	2032	4765
DQ5	5	56%	1624	1992	681	1231	3134
DQ9	5	56%	2400	2588	826	1506	4031
DQ4	4	44%	1845	1941	620	1186	2891
DQ7	4	44%	2863	3004	1032	1726	4568
DQ8	4	44%	1670	1849	722	1040	3018
DR51	4	44%	1133	1427	566	1040	2404
DP28	3	33%	1185	1377	682	655	2291
DR1	2	22%	587	587	260	327	847
DR10	1	11%	604	604	-	604	604

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 14a. Individual laboratory results for Serum #027 - class I by Luminex

Investigator	A1	A24	A25	A26	A29	A3	A30	A31	A32	A33	A34	A36	A43	A68	A69	A74	A80	B18	A11	A1101	A1102	Other	Vendor
Chen, Dong-Feng	6624	3420	20712	20219	20086	21078	20058	19717	20375	20160	20662	6651	16899	20617	20423	20598	12417	6159		20290	19616	A6601>	
Gandhi, Manish	4159	3792	15974	13272	14578	17353	14686	15134	15642	15133	17220	4184	11304	15490	14434	14883	6310	3436	15854			A66>	One Lambda
Kamoun, Malek	6500	1600	21500	20200	21000	21700	21000	21400	21400	21300	22000	5600	16500	21700	21000	22000	12400	5200		21000	21000	A6601>	One Lambda
McAlack-Hanau,	6649	3760	21671	21046	20779	22291	20106	21244	21438	21382	17860	6499	17428	21201	21425	21573	11868	6744	21218			A66	One Lambda
Phelan, Donna L.	8351	5620	22622	21775	21986	22969	21044	21839	22342	22213	19196	8159	20060	22295	22167	22495	14482	8347	22511			A66>	One Lambda
Reed, Elaine F.	7150	3914	20431	19160	19368	21268	18670	20169	19819	19765	16536	6922	16194	19852	19482	19522	11181	5278	20593			A66	One Lambda
Rees, Tracey	7275	4982	18280	18238	18645	17878	17983	17990	18231	18500	17918	7082	16358	19853	18296	17886	12367	5935		17878	17593	A6601>	One Lambda
Reinsmoen, Nancy	7602	6044	22207	21638	21982	23342	19672	20976	21491	21780	18257	7594	18592	21344	22357	21699	11795	6777	22250			A6601>	One Lambda
Rosen-Bronson, Sa	7368	7717	23044	20689	21866	24040	21387	21567	22629	22483	23500	7943	18794	21956	21272	22391	12739	5391	22127			A66>	One Lambda
Avg	6853	4539	20716	19582	20032	21324	19401	20004	20374	20302	19239	6737	16903	20479	20095	20339	11729	5919	20759	19723	19403		
Std Dev	1096	1672	2142	2472	2226	2184	1971	2058	2100	2187	2206	1166	2333	1942	2337	2392	2098	1280	2290	1336	1399		
MFI %CV	16%	37%	10%	13%	11%	10%	10%	10%	10%	11%	11%	17%	14%	9%	12%	12%	18%	22%	11%	7%	7%		

Table 14b. Individual laboratory results for Serum #027 - class I by Flow PRA

Investigator	A1	A24	A25	A26	A29	A3	A30	A31	A32	A33	A34	A36	A43	A68	A69	A74	A80	B18	A66	A1101	A23	Other	Vendor
Holdsworth, Rhonda	221	330	629	563	605	671	668	668	644	640	446	333	504	482	587	599	423	436	530	567	227	CW6>	One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 15a. Individual laboratory results for Serum #028 - class I by Luminex

Investigator	B13	B76	A24	A2403	B62	B75	A11	A1101	A1102				Other	Vendor						
Chen, Dong-Feng	7616	5539	1956	2251	1206	1163														
Gandhi, Manish	4110	2802	1328		756	612	530						A34	One Lambda						
Kamoun, Malek	6500	4900	3200	3800					1900	1600				One Lambda						
McAlack-Hanau,	7974	5759	3203											One Lambda						
Phelan, Donna L.	9015	7125	2838											One Lambda						
Reed, Elaine F.	6564	4787	4720				2431						A3	One Lambda						
Rees, Tracey	5327	3509	1273	1410	1489	901		512						One Lambda						
Reinsmoen, Nancy	6821	4651												One Lambda						
Rosen-Bronson, Sa	4800	3608	1512											One Lambda						
Avg	6525.2	4742.2	2503.8	2487	1150	892														
Std Dev	1484.1	1245.1	1127.9	989.88	302	225														
MFI %CV	23%	26%	45%	40%	26%	25%														

Table 15b. Individual laboratory results for Serum #028 - class I by Flow PRA

Investigator	B13	B76	A24		B62	B75	A1101	B62	A3	A2	A25	A69	Other	Vendor						
Holdsworth, Rhonda	381	336	318		237	196	249	237	235	226	200	186	A26,A43,B63>	One Lambda						

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 16a. Individual laboratory results for Serum #029 - class I by Luminex

Investigator	A25	A26	A29	A3	A30	A31	A33	A34	A68	A69	B38	B41	B44	B45	B54	B65	B8	CW7	A74	B18	CW10	B13	Other	Vendor
Chen, Dong-Feng	19449	19028	8823	6007	7518	13669	20879	20818	20792	20529	9367	4359	5963	4812	5515	4057	8863	18002	3098	7833	1608		B59>	
Gandhi, Manish	14394	13468	5700	3855	4777	8698	17263	17752	16910	15757	6408	2616	3495	2783	3516	2258	5009	13496	1528	4646	791	386	B59>	One Lambda
Kamoun, Malek	18000	17500	5700	3000	4300	10800	21800	22000	20000	20000	8500	3900	5200	4800	4700	3300	7000	17000	2200	7100	1100		B59>	One Lambda
McAlack-Hanau,	19996	19540	6432	6335	8291	14735	21501	21003	21446	21398	8915	4137	5490	5373	4852	3704	8870	19765		7947			B39>	One Lambda
Phelan, Donna L.	21092	20181	6169	7133	8327	14685	22429	22232	22994	22950	9450	4246	5097	4824	5643	3681	8167	20463	2821	7758	2184		B59>	One Lambda
Reed, Elaine F.	17634	17389	4858	4354	5619	12248	20567	19932	20082	20467	8358	3814	5265	5288	4311	3088	6886	17801	2590	6849			B59>	One Lambda
Rees, Tracey	15739	15774	5693	3709	5042	7908	19316	19490	18896	18296	7914	3218	3670	3220	5009	2928	5905	19173	1839	5563	2403	665	B59>	One Lambda
Reinsmoen, Nancy	19693	19462	5242	5873	6621	13099	22652	22038	22095	22083	8974	3744	4287	4094	4985	3261	7639	20186	2559				B59>	One Lambda
Rosen-Bronson, Sa	17939	16291	5697	3888	5214	9531	22599	22869	21665	20807	8052	3405	3754	3109	4878	3018	7015	16988	1752	6330			B59>	One Lambda
Avg	18215	17626	6035	4906	6190	11708	21001	20904	20542	20254	8438	3715	4691	4256	4823	3255	7262	18097	2298	6753	1617	526		
Std Dev	2009.6	2057.5	1076	1361	1457	2430.4	1674.1	1527.8	1731.1	2013	879	524	851	932	596	496	1216	2044	522	1105	614.6	140		
MFI %CV	11%	12%	18%	28%	24%	21%	8%	7%	8%	10%	10%	14%	18%	22%	12%	15%	17%	11%	23%	16%	38%	27%		

Table 16b. Individual laboratory results for Serum #029 - class I by Flow PRA

Investigator	A25	A26	A29	A3	A30	A31	A33	A34	A68	B38	B41	B45	B54	B8	CW7	B18	B59	B39	B61	A66	B13	Other	Vendor
Holdsworth, Rhonda	303	262	44	38	63	135	346	256	234	41	63	40	94	102	284	143	18	216	25	184	73		One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Investigator	A2	A29	A3	A30	A31	A33	A34	A68	A69	A74	B13	B27	B42	B47	B48	B60	CW7	A11	A1101	A1102	Other	Vendor
Chen, Dong-Feng	16855	14314	15620	15949	16451	16359	6126	15691	15119	16394	9122	10308	4041	4033	10458	11983	5302		3555	2470	B61>	
Gandhi, Manish	13911	8534	14198	11111	13139	11872	3471	12859	9367	13099	4812	5532	1908	2420	6217	7035	4600	1736			B61>	One Lambda
Kamoun, Malek	20300	13400	21000	16200	18000	17700	4300	18900	15900	19500	8400	8700	3200	4800	10500	12100	7000		2500	1800	B61>	One Lambda
McAlack-Hanau,	18154	13957	17013	12564	17576	17209	4891	16128	15417	17824	8454	10042	3878	5019	11437	13252					B61>	One Lambda
Phelan, Donna L.	19460	17844	15137	17037	19130	20046	8730	18992	18680	19552	12810	14012	7733	8990	15595	16518	11575	6315			B61>	One Lambda
Reed, Elaine F.	18599	12525	20254	11603	17288	16416	4198	16072	14996	18161	7401	8654	3220	4498	10122	11380	7699	2292			B61>	One Lambda
Rees, Tracey	14773	10856	14194	13026	13931	14044	6074	14229	13275	13858	6729	7362	3397	4677	8207	9081	7604		2892	2917	B61>	One Lambda
Reinsmoen, Nancy	18600	13500	17265	12500	18117	17350	5100	16000	15800	18110	7750	9000	3596	4798	10663	11791	7795	2992			B61>	One Lambda
Rosen-Bronson, Sa	18841	11587	23711	14721	16901	15350	5035	17388	13149	17059	6291	7016	2718	3378	8400	9274	5084	2225			B61>	One Lambda
Avg	17721	12946	17599	13857	16726	16261	5325	16251	14634	17062	7974	8958	3743	4734.8	10178	11379	7082	3112	2982.3	2395.7		
Std Dev	2017	2433	3155	2042.6	1861	2199.1	1448	1880.9	2406.1	2146	2105	2279	1533	1697.9	2451.4	2572.4	2082	1651	435.41	459.03		
MFI %CV	11%	19%	18%	15%	11%	14%	27%	12%	16%	13%	26%	25%	41%	36%	24%	23%	29%	53%	15%	19%		

Table 17b. Individual laboratory results for Serum #030 - class I by Flow PRA

Investigator	A2	A29	A3	A30	A31	A33	A34	A68	A69	A74	B13	B27	B42	B47	B48	B60	CW7	B8	A1101	CW16	Other	Vendor
Holdsworth, Rhonda	629	531	674	617	621	586	290	459	542	575	397	402	343	395	522	518	370	219	283	187	B61>	One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 18a. Individual laboratory results for Serum #027 - class II by Luminex

Investigator																						Vendor
Chen, Dong-Feng	neg																					One Lambda
Gandhi, Manish	neg																					One Lambda
Kamoun, Malek	neg																					One Lambda
McAlack-Hanau,	neg																					One Lambda
Phelan, Donna L.	neg																					One Lambda
Reed, Elaine F.	neg																					One Lambda
Rees, Tracey	neg																					One Lambda
Reinsmoen, Nancy	neg																					One Lambda
Rosen-Bronson, Sai	neg																					One Lambda
Avg																						
Std Dev																						
MFI %CV																						

Table 18b. Individual laboratory results for Serum #027- class II by Flow PRA

Investigator																						Other	Vendor
Holdsworth, Rhonda	neg																						One Lambda

DSA present
Red = DSA against cell #025 only
Blue = DSA against cell #026 only
Green = DSA against cell #025 and #026

Table 19a. Individual laboratory results for Serum #028 - class II by Luminex

Investigator	DQ8	DQ9	DR10	DR4	DR53	DR7	DR9	DP14	DP17	DP20	DP9	DPW3	DPW6	DR8	DQ4	DR11	DR13	DR14	DR51	DQ7	DQ2	Other	Vendor
Chen, Dong-Feng	19751	19973	7476	18400	20425	7809	14089	11304	9894	11603	12366	12881	12173	2890	1626	2041	3009	2587	2058			DR1>	One Lambda
Gandhi, Manish	14112	15443	4961	15042	16353	6610	11066	6623	5350	7290	7228	7001	7112	1815	13444	1377	1900	1785	1346	8923	9478	DR1>	One Lambda
Kamoun, Malek	19200	19100	6000	19000	21000	7100	13700	9900	8700	10200	11000	11000	11000	2500	18300	1600	2200	2100	2000	11800	13400	DR1	One Lambda
McAlack-Hanau,	10674	11841	6472	16017	17868	6573	10096																One Lambda
Phelan, Donna L.	12933	14532	8587	20168	22239	10401	14337	10536	8307	11023	10935	10249	9410	3479	20565	2528	3216	3187	2538	14540	15143		One Lambda
Reed, Elaine F.	11373	13028	7040	18331	20564	7925	12418	9801	8137	10481	10571	9869	9198	2645	1154	1828			2115			DR1	One Lambda
Rees, Tracey	18630	18552	8178	17323	18667	9285	14612	10780	9577	11603	11723	11257	11540	4760	17070	3479	4792	3444	2743	12299	13220	DR1>	One Lambda
Reinsmoen, Nancy	12692	14181	7724	19556	22096	8297	12955	10656	8702	11453	11530	10887	10260	2961	20293		2959	2715		13498	14402		One Lambda
Rosen-Bronson, Sa	19422	19718	5502	19745	23184	5868	12019	8253	7034	9181	8936	9161	8763	2281		1517	2259	1797	1483			DR1>	One Lambda
Avg	15421	16263	6882	18176	20266	7763	12810	9731.6	8213	10354	10536	10288	9932	2916	13207	2053	2905	2516	2040	12212	13129		
Std Dev	3552.9	2925.2	1165	1643.1	2108.9	1348	1461	1455.8	1358	1395.5	1566.2	1611.7	1540.5	835.3	7788.9	682	894.07	607.2	469	1901	1953.9		
MFI %CV	23%	18%	17%	9%	10%	17%	11%	15%	17%	13%	15%	16%	16%	29%	59%	33%	31%	24%	23%	16%	15%		

Table 19b. Individual laboratory results for Serum #028 - class II by Flow PRA

Investigator	DQ8	DQ9	DR10	DR4	DR53	DR7	DR9	DR8	DQ4	DR11	DR13	DR14	DR51	DR1	DQ2	DQ7	DR103	DR52	DR12			Other	Vendor
Holdsworth, Rhond	486	541	464	626	326	404	95	297	164	266	655	156	255	255	27	496	245	29	148				One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 20a. Individual laboratory results for Serum #029 - class II by Luminex

Investigator	DR12	DQ4	DR103	DR11	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR52	DR8	DP11	DP13	DPW5	DQ7	DP401	DPW4	DQ2	Other	Vendor
Chen, Dong-Feng	21366	20040	18389	21321	22032	20905	10517	20150	20984	19659	18959	13259	21683	14323	10815	11262		16993			DR51>	One Lambda
Gandhi, Manish	17545	16220	14832	17637	18955	17083	6658	16078	17415	15908	14071	9446	18268	10835	8062	8102	8578		13098	8438	DR51>	One Lambda
Kamoun, Malek	21800	20600	17300	22000	23000	21600	8100	20300	21100	20600	16800	11700	22600	13600	10500	10400	12300	16200		12200	DR51>	One Lambda
McAlack-Hanau,	20931	16674	19239	21880	22451	20028	9703	20907	21324	20861	15183	12364	22129				14721				DR51>	One Lambda
Phelan, Donna L.	22863	18041	20717	23162	23716	21446	10377	21589	22569	22503	16293	13716	22612	14919	11969	12945	14497		18918	11944	DR51>	One Lambda
Reed, Elaine F.	21116	15706	18779	21526	22027	19713	7662	19713	21367	20010	13182	11200	22173	12771	10087	10449		16957			DPw1>	One Lambda
Rees, Tracey	19256	15489	15436	19137	20489	18466	5305	17559	18241	17327	13904	8347	19897	8537	7772	6318	6633	10391		6956	DR51>	One Lambda
Reinsmoen, Nancy	23301	17076	20362	23710	24713	20000	8200	21896	23414	21631	14546	12000	24370	14052	10842	10900	12800		18270	10103	DR51>	One Lambda
Rosen-Bronson, Sai	22336	19589	18215	21936	24598	22208	6824	20333	21778	20408	17232	10890	23425	13524	10284	9162		16245			DR51>	One Lambda
Avg	21168	17715	18141	21368	22442	20161	8149.6	19836	20910	19879	15574	11436	21906	12820	10041	9942.3	11588	15357	16762	9928.2		
Std Dev	1701.8	1827.7	1892	1783	1765.5	1529.6	1676.5	1774.7	1811.6	1945.5	1770.3	1620.2	1725.6	1986.6	1336.7	1912.9	2996.3	2505.9	2604.3	2015.4		
MFI %CV	8%	10%	10%	8%	8%	8%	21%	9%	9%	10%	11%	14%	8%	15%	13%	19%	26%	16%	16%	20%		

Table 20b. Individual laboratory results for Serum #029 - class II by Flow PRA

Investigator	DQ4	DR103	DR11	DR12	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR52	DR8	DR51	DQ7	DQ9					Other	Vendor
Holdsworth, Rhonda	262	326	418	277	192	10	301	35	447	22	252	399	424	335	62	68					DR1>	One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026

Table 21a. Individual laboratory results for Serum #030 - class II by Luminex

Investigator	DR7	DQ2	DR12	DR15	DR16	DR9	DP10	DP11	DP14	DP15	DP17	DP9	DPW5	DR103	DP18	DPW1	DPW3	DPW6	DP13	DQ4	DQ7	Other	Vendor	
Chen, Dong-Feng	19194	18590	4126	19863	17948	8549	2604	9930	3740	6272	2893	4198	5052	2490									DQ5>	One Lambda
Gandhi, Manish	15550	14650	2928	16351	14490	6220	1653	7429	2388	4713	1860	2797	3253	1926	2952	2336	2682	2800	2032	1186	1726		DQ5>	One Lambda
Kamoun, Malek	21000	20200	3000	21000	19200	8200	2300	8900	3200	6200	2500	3600	4400	1500	3800	3100	3500	3300	2700	2000	2600		DQ5>	One Lambda
McAlack-Hanau,	19715	15430	4197	19656	18995	8312																		One Lambda
Phelan, Donna L.	21170	16995	5933	21264	20770	10082	4066	10760	5401	8853	4221	6183	6547	4658	6820	5494	5970	6167	4765	2891	4568		DQ5>	One Lambda
Reed, Elaine F.	20466	14358	3574	20009	18881	7562	2757	8925	3722	6734	2988	4279	4547	1996										One Lambda
Rees, Tracey	17631	17169	3851	18366	16022	7286	2221	7202	2946	5638	2326	3320	3975	4061	3789	2853	3316	3264	2479	1690			DQ5>	One Lambda
Reinsmoen, Nancy	21800	17500	4500	21500	20300	9000	3084	10000	4067	7600	3357	4854	5200	3064	5231	4193	4896	4763			3125		DQ9	One Lambda
Rosen-Bronson, Sai	20959	19023	3136	22292	19337	6326	1958	9496	2721	6620	2113	3220	3732	2338	3478	2641	3135	3134	2478					One Lambda
Avg	19721	17102	3916.1	20033	18438	7948.6	2580.4	9080.3	3523	6579	2782	4056	4588	2754.1	4345	3436	3917	3905	2891	1942	3005			
Std Dev	1891.2	1886	886.77	1706.6	1899.3	1174.8	702.46	1165.8	885.9	1164	710.7	1016	958.9	1031.1	1304	1088	1143	1186	961.9	620	1032			
MFI %CV	10%	11%	23%	9%	10%	15%	27%	13%	25%	18%	26%	25%	21%	37%	30%	32%	29%	30%	33%	32%	34%			

Table 21b. Individual laboratory results for Serum #030 - class II by Flow PRA

Investigator	DQ2	DR12	DR15	DR16	DR7	DR9	DR103	DQ5	DQ9	DQ4	DQ7	DQ8	DR51	DR1								Other	Vendor	
Holdsworth, Rhonda	348	136	72	384	593	607	208	254	63	52	46	37	32	69										One Lambda

DSA present

Red = DSA against cell #025 only

Blue = DSA against cell #026 only

Green = DSA against cell #025 and #026