

Report of the 24th Single Antigen, Flow and Virtual Crossmatch Exchange

MARCH 23, 2022

Cells	139-140
Serum	141-144

In Exchange 24, Serum 138 (patient 2) and virtual donor V1 from Exchange 23 (September 2021) were re-examined as serum 141 and cell 139. A comparison of virtual crossmatch (VXM) predictions (serum 138 vs. V1) against the physical flow crossmatch (FXM) (**serum 141 vs. cell 139**) were summarized in **Part 1** of this report. **Part 2** examined the Luminex single

antigen data for the 4 sera tested (**serum nos. 141 - 144**). **Part 3** summarized the flow crossmatch results for 2 cells (**cell nos. 139 - 140**) against the 4 sera. Finally, in **Part 4**, the virtual crossmatch predictions for 4 potential donors (V1 - V4) against 2 sera (serum 143 and serum 144) were evaluated.

Part 1

Physical Flow Cytometric Crossmatch vs. Virtual Crossmatch

Direct comparisons of virtual crossmatch predictions with physical FXM outcomes were shown in Tables 1a – 1c. Seventeen labs submitted virtual predictions for serum 138 vs. donor V1 in Exchange 23. Among them, 12

labs reported back physical T- and B-cell FXM results in Exchange 24 (Table 1a). All 12 labs reported the T- and B-cell FXM as positive in agreement with predictions (Table 1b).

Table 1a. Summary of Virtual XM predictions vs. Physical Flow XM results - Direct comparison

Exchange 023					Exchange 024				
Virtual Crossmatch - Serum 138 (Patient 2) vs. Donor V1					Physical Flow Crossmatch - Serum 141 vs. Cell 139				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V4	132	12	POS(12)	POS(12)	139	141	12	POS(12)	POS(12)

Table 1b. Direct comparison of Physical Flow Crossmatch results vs. Virtual Crossmatch results

		T-cell Virtual XM (Exchange 23)		
		+	-	Ø
Physical T-cell FXM (Exchange 24)	+	12		
	-			
	Ø			

+/- = positive/negative

Ø = uncertain/not typed

		B-cell Virtual XM (Exchange 23)		
		+	-	Ø
Physical B-cell FXM (Exchange 24)	+	12		
	-			
	Ø			

n = number of labs

The reporting of DSA and DSA strength was also consistent across the 2 studies. In each, multiple DSA (B18, Cw7, DR8, DR11, DR52) were reported against the donor. Reported MFI's in Exchange 138 were 9715,

8875, 11352, 5066, 2272, respectively. In Exchange 24, respective MFI's were reported as 12039, 9929, 12817, 5292, and 2335.

Table 1c. Individual Physical Flow Crossmatch results vs. Virtual Crossmatch predictions - Direct Comparison

Cell 139 HLA genotype: A*11:12-A*31:01-B*18:01-B*40:02-C*03:06-C*07:01-DRB1*08:02-DRB1*11:01-DRB3*02:02-DQA1*04:01-DQA1*05:05-DQB1*03:01-DQB1*04:02-DPA1*01:03-DBP1*04:01:01G-

Exchange 023					Exchange 024				
Virtual Crossmatch - Serum 138 (Patient 2) vs. Donor V1					Physical Flow Crossmatch - Serum 141 vs. Cell 139				
Ctr	Virtual T-cell Prediction	Class I DSA(MFI)	Virtual B-cell Prediction	Class II DSA(MFI)	Ctr	T-Cell RESULT	Class I DSA(MFI)	B-Cell RESULT	Class II DSA(MFI)
54	Positive	B18 (8653) Cw7 (2224)	Positive	DR8 (11240) DR11 (3909) DR52 (1134)	54	Positive	B*18:01(8814); C*07:07(5443)	Positive	DRB1*08:02(13124), DRB1*11:01(4588), DRB3*02:02(1408)
792	Positive	B18 (9715) Cw7 (6909)	Positive	DR8 (10889) DR11 (4323)	792	Positive	B18(8244), Cw7(6696)	Positive	DR8(8086), DR11(3351)
1426	Positive	B61 (1380) B18 (13572) Cw10 (1191) Cw7 (7472)	Positive	DR8 (15285) DR11 (6289) DR52 (2012) DQ4 (1372)	1426	Positive	B18(13272), B61(1582), Cw7(8659)	Positive	DQ4(1694), DR11(6728), DR52(2141), DR8(14676)
2400	Positive	B61 (1297) B18 (14957) Cw7 (12919)	Positive	DR8 (14194) DR11 (6040) DR52 (2301) DQ4 (1486) DQA1*04 (12295)	2400	Positive	B*18:01(12954), B*40:02(1204), C*07:02(10616 on 07:01)	Positive	DRB1*08:02(12675 on 08:01), DRB1*11:01(5404), DRB3*02:02(2147), DQB1*04:02(1352),
3224	Positive	B18 (9512) Cw7 (8808)	Positive	DR8 (10899) DR11 (4131)	3224	Positive		Positive	
3753	Positive	B61 (1141) B18 (8957) Cw7 (9386)	Positive	DR8 (10872) DR11 (3927) DR52 (1691)	3753	Positive	B18(8616), Cw7(9476)	Positive	DR8(10060), DR11(3908)
3966	Positive	B18 (15307) Cw7 (8622)	Positive	DR8 (12608) DR11 (4762) DR52 (2347)	3966	Positive		Positive	
8001	Positive	B61 (699) B18 (8902)	Positive	DR11 (3862) DR52 (1284) DQ4 (753)	8001	Positive	B*18:01(11080), B*40:02(1061)	Positive	DRB1*11:01(4352), DRB3*02:02(1529), DQB1*04:02(861)
8050	Positive	B18 (10979) Cw7 (7961)	Positive	DR8 (10731) DR11 (3511)	8050	Positive	B18(12345) Cw7(9885)	Positive	DR8(10919) DR11(4145) DR52(DRB3*02:02, 1026) DQA1*04(1154)
8083	Positive	B61 (1050) B18 (15573)	Positive	DR11 (5970) DR52 (2272) DQ4 (1109)	8083	Positive	B*18:01(22281), 40:02(2742)	Positive	DRB1*11:01(7002), DRB3*02:02(2925)
8103	Positive	B18 (744) Cw7 (4142)	Positive	DR8 (13996) DR11 (6084) DR52 (5946) DQ4 (2286) DQA1*04 (2286)	8103	Positive	B18(1481); C*07(4800)	Positive	DRB1*08(13412); DRB1*11(6748); DQB1*04(1932); DQA1*04(1247)
8111	Positive	B61 (1300) B18 (15300) Cw7 (13300)	Positive	DR8 (12700) DR11 (4600) DR52 (1900) DQ4 (1200)	8111	Positive	B18(11400); Cw7(9000)	Positive	DR8(12100); DR11(4800); DR52(3*02:02, 1300); DQ4(DQB1*04:02/ DQA1*04:01; 1000)

Part 2

Class I and class II Luminex single antigen results for serum samples 141 - 144 were summarized in Tables 12 - 15. Individual listing of results for

each participating laboratory were listed in Tables 16 – 23. Pretreatment and cutoff values are listed in Table 32.

Antibody Identification

Serum 141: This sample was previously examined as serum 138 in Exchange 23. Comparison of results between Exchange 23 and Exchange 24 (below) showed consistency in the reporting of antibodies and antibody strength across the 2 studies.

Exchange 23		Exchange 24		Exchange 23		Exchange 24	
Class I		Class I		Class II		Class II	
Antigen	Median	Antigen	Median	Antigen	Median	Antigen	Median
*** Serum 138 ***		*** Serum 141 ***		*** Serum 138***		*** Serum 141 ***	
B65	14303	B65	16058	DQ6	24519	DQ6	25433
B64	13018	B64	14642	DR51	24469	DR51	25670
B8	11200	B8	12543	DQ5	24452	DQ5	26001
B18	9715	B18	12039	DR1	22650	DR1	22977
Cw7	8875	Cw7	9929	DQ2	22633	DQ2	22284
B57	4406	B57	5953	DR103	21445	DR103	21922
B51	3443	B51	4430	DR15	21292	DR15	22269
B7	2748	B7	3574	DR9	20058	DR9	21213
B73	2633	B73	2493	DR10	19827	DR10	20247
B78	2363	B78	2823	DR16	15256	DR16	16273
B55	2105	B55	2467	DR8	11352	DR8	12817
B58	2006	B58	2456	DR11	5066	DR11	5292
A3	1955	A3	2839	DR12	4525	DR12	5067
				DR7	3993	DR7	4301

In this present study, strong anti-B18 (12039), -Cw7 (9929), -DR11 (5292), -DR8 (12817), and -DR52 (2335) reactivity was reported against cell 139. Against cell 140, labs reported anti-Cw7 (9929), -B7 (3574), -Cw1 (102), -DQ5(26001), -DR12 (5067), and -DR14 reactivity (4475).

Serum 142: Strong reactivity to a number of 7C specificities was detected in this sample, including anti-B7 (14094), -B67 (11593), -B42 (10432), -B55 (9964), and -B56 (9555) reactivity. Each were reported by 100% of labs. In addition, strong reactivity to DQ4 (8989), DQ5 (16815), DQ6 (18484), and DR15 (6441) anti-sera was reported by 100% of labs.

Genotypes of cells provided by UCLA

Cell 139 (Hispanic) - A*11:12-A*31:01-B*18:01-B*40:02-C*03:06-C*07:01-DRB1*08:02-DRB1*11:01-DRB3*02:02-DQA1*04:01-DQA1*05:05-DQB1*03:01-DQB1*04:02-DPA1*01:03-DPB1*04:01:01G-DPB1*04:02:01G

Against cell 139, labs reported anti-DQ4 (8989), -DR11 (1485), and -DR8 (1418) reactivity. Against cell 140, strong anti-B7 (14094) and -DQ5 (16815) reactivity was reported. Additionally, a few labs also reported weak anti-DR12 (1851) and -DP5 (2147) reactivity against cell 140.

Serum 143: Strong class I and II reactivity was detected in this sample, with labs reporting peak antibodies of > 19000 MFI. Anti-A2 (27016), -A11 (19975), -A68 (25336), and -A69 (25249) reactivity, along with reactivity to B57 (22502), B58 (19421), B54 (16572), and other 5C specificities was reported by labs. Class II reactivity included anti-DQ7 (22321), -DQ8 (20550), -DQ9 (19873) reactivity, and reactivity to DR specificities, such as DR4 (10373), DR1 (7619), DR11 (7353), DR13 (6348), and DR14 (7868).

Multiple class I and II DSA were reported against each donor. Against cell 139, anti-A11 (19975), -B18 (13511), -B61 (6545), -Cw10 (1377), -Bw6 (8720), -DQ7 (22321), -DR11 (7356), -DR52 (7731), -DP4 (DP402) (2343) reactivity was reported. Against cell 140, anti-A2 (27016), -A24 (14022), -B7 (6576), -B46 (2174), -Bw6 (8720), -DQ7 (22321), -DR14 (7868), and -DR52 (7731) reactivity was reported.

Serum 144: Strong anti-B8 (18226) reactivity was reported in this sample. In addition, labs reported reactivity to a number of 1C and DP specificities, including anti-A1 (9363), -A11 (5630), -A24 (3807), -A3 (5665), -A36 (6578), -A80 (6975), -DP2 (11601), -DP3 (11542), -DP6 (11532), and -DP17 (10355) reactivity.

Anti-A11 (5630), -A31 (3019), -DR11 (8473), and -DP4 (9027) reactivity was reported against cell 139. Against cell 140, labs reported anti-A24 (3807), -DR14 (5253), and -DR12 (1241) reactivity.

Conclusion:

Good agreement ($\geq 90\%$) was achieved in the reporting of class I and class II antibodies for all 4 serum samples. Peak class I antibodies of > 14000 MFI and peak class II antibodies of > 12000 MFI were detected in each serum.

Cell 140 (Chinese/Filipino) - A*02:03-A*24:07-B*07:06-B*46:01-C*01:02-C*07:02-DRB1*12:01-DRB1*14:04-DRB3*01:01-DQA1*01:04-DQA1*05:06-DQB1*03:01-DQB1*05:03-DPA1*02:02-DPB1*05:01

Part 3

Flow cytometric crossmatch results for cell 139 and cell 140 against serum sample nos. 141 - 144 are summarized in Table 2. Individual results

for each laboratory, along with reported class I and class II DSA for each serum sample, are listed in tables 4 - 11.

Flow Cytometric Crossmatch

Cell 139. For cell 139, all 4 pairs of T- and B-cell FXM achieved $\geq 80\%$ agreement among labs. For the positive FMX, Class I and/or class II DSA > 8000 MFI were reported against the donor.

Cell 140. For cell 140, 7 out of 8 T-cell and B-cell FXM achieved $\geq 80\%$ agreement. Each of the 7 FXM were reported as positive in the presence of class I and class II DSA > 9000 MFI.

Table 2. Summary of Flow crossmatch results for Cell #139- #140 vs. Serum #141 - #144

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
139	141	17	POS(17)	POS(16) NT(1)	140	141	17	POS(14) Borderline(1) NEG(1) NT(1)	POS(16) NT(1)
139	142	17	NEG(16) POS(1)	POS(14) Borderline(1) NEG(1) NT(1)				POS(14) NEG(3)	POS(15) NEG(1) NT(1)
139	143	17	POS(17)	POS(16) NT(1)	140	143	17	POS(17)	POS(16) NT(1)
139	144	17	POS(16) Borderline(1)	POS(16) NT(1)				POS(13) NEG(3) Borderline(1)	POS(14) Borderline(1) NEG(1) NT(1)

indicates < 80% agreement

Conclusion:

Good agreement ($\geq 80\%$) was achieved for 7 out of 8 T-cell FXM. In each case, strong class I DSA (MFI > 9000) were present. For the remaining T-cell FXM, cell 140 vs. serum 144, no agreement was achieved among labs; 13 labs reported the T-cell FXM as positive, 3 reported it as negative, and 1 reported borderline results in the presence of weak anti-A24 (3807) reactivity. Cell 140 carries A*24:07, which is not on the single antigen panel

This may have led some labs to not report it as a DSA. A*24:07 is most similar to A*24:02, differing by a single nucleotide substitution (CAC → CAG) at codon 70 (exon 2).

For the B-cell FXM, all 8 crossmatches achieved $\geq 80\%$ agreement. In each case, class I and /or class II DSA of > 5000 MFI were present.

Part 4

Virtual crossmatch predictions for donor V1 - V4 against serum (patient) samples 143 and 144 are summarized in Table 3 and individual laboratory

predictions are listed in Tables 24 - 31. Fictional donor histories precede each patient-donor summary.

Virtual Crossmatch Paper Challenge

For virtual **T-cell predictions** of the expected T-cell FXM, all 8 predictions achieved $\geq 80\%$ agreement among labs. The presence of class I DSA > 3000 MFI were reported in each case.

For virtual **B-cell predictions** of the expected B-cell FXM, 7 out of 8 predictions achieved $> 80\%$ agreement among labs. In each case, class I and/or class II DSA > 4000 MFI were present.

Table 3. Summary of Virtual Crossmatch Predictions (Serum #143 - #144 vs. Donors V1 - V4)

Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment	Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment
V1	143	17	POS(17)	POS(17)	Unacceptable(17)	V3	143	17	POS(17)	POS(17)	Unacceptable(17)
V1	144	17	POS(15) NEG(1) Borderline(1)	POS(14) NEG(2) Borderline(1)	Unacceptable(15) Acceptable(1) Other(1)	V3	144	17	POS(14) NEG(2) Borderline(1)	POS(12) NEG(2) Borderline(3)	Unacceptable(16) Acceptable(1)
Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment	Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment
V2	143	17	POS(17)	POS(17)	Unacceptable(17)	V4	143	17	POS(17)	POS(16) NEG(1)	Unacceptable(17)
V2	144	17	POS(17)	POS(17)	Unacceptable(17)	V4	144	17	POS(14) NEG(2) Borderline(1)	POS(17)	Unacceptable(16) Acceptable(1)

indicates $< 80\%$ agreement

DSA Identification

Patient 1 (Serum 143)

Patient's fictional case history: This individual is a 39-year-old male being evaluated for his second transplant. The HLA type of his first transplant was A*30:02-A*74:01-B*13:02-B*44:04-C*01:02-C*06:02-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQB1*02:02-DPA1*03:01-DPB1*01:01-DPB1*13:01.

Patient 1's HLA type is as follows: A*30:01-A*74:01-B*13:02-B*44:02-C*05:01-C*06:02-DRB1*07:01-DRB4*01:01-DQA1*02:01-DQB1*02:02-DPA1*03:01-DPB1*01:01

Good agreement was achieved among labs in the reporting of DSA against donor **V1**, as ≥ 90% labs reported anti-B61 (6545) and -DR15 (7946) reactivity. In the presence of DSA of > 6000 MFI, T- and B-cell predictions were reported as positive by 100% of labs. Consequently, all 17 labs assessed the predicted risk of transplant to be unacceptable.

Against donor **V2**, multiple DSA (A3, A68, B53, DR1, and DR10) were reported by ≥ 90% of labs. Respective MFI for each were 10609, 25336, 9363, 7619, and 2812. Additional anti-DP2 (3116) and -DP4 (2343) reactivity was also reported against donor V1 by a number (n = 12) of labs. The presence of strong DSA resulted in 100% of labs to predict the physical T- and B-cell FXM to be positive, and 100% of labs to assess the predicted risk of transplant as unacceptable.

Anti-B57 (22502), -A23 (4716), and -DR4 (10373) reactivity was reported against donor **V3** by ≥ 90% of labs. In addition, 15 labs reported anti-B51 (9066), and -DQ3 (DQ8) (20550) reactivity against the donor. The presence of strong class I and II DSA resulted in all 17 labs to predict the physical T- and B-cell FXM to be positive. In turn, all 17 labs assessed the predicted risk of transplant to be unacceptable.

Against donor **V4**, anti-B38 (14463) reactivity was reported by ≥ 90% of labs. No class II DSA were reported. Good agreement was also achieved for T- and B-cell predictions, as ≥ 80% of labs predicted the physical T- and B-cell FXM to be positive. For renal transplant risk assessment, 100% of labs predicted the risk of transplant to be unacceptable.

Virtual Donors – HLA genotype

Donor 1 (V1): A*29:02:01-A*34:01:01-B*40:02:01-B*44:03:01-C*15:02:01-C*16:01:01-DRB1*07:01-DRB1*15:02-DRB4*01:01-DRB5*01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*05:02-DPA1*02:01-DPA1*02:02-DPB1*01:01-DPB1*11:01

Donor 2 (V2): A*03:01:01-A*68:02:01-B*49:01:01-B*53:01:01-C*04:01:01-C*07:01:01-DRB1*01:01:01-DRB1*10:01:01-DQA1*01:01:01-DQA1*01:05:01-DQB1*05:01-DPA1*01:03:01-DPB1*02:01:02G-DPB1*04:02:01G

Donor 3 (V3): A*23:01:01-A*34:01:01-B*51:01:02-B*57:02:01-C*04:01:01-C*18:02:01-DRB1*04:05:01-DRB4*01:03-DQA1*03:03-DQB1*03:02:01-DQB1*04:01:01-DPA1*02:01-DPA1*02:02-DPB1*01:01:01

Donor 4 (V4): A*26:01:01-A*30:01:01-B*13:02:01-B*38:01:01-C*06:02:01-C*12:03:01-DRB1*07:01:01-DRB4*01:01:01-DRB4*01:03:01-DQA1*02:01:01-DQB1*02:02-DPA1*02:01:01-DPB1*11:01:01-DPB1*17:01:01

Patient 2 (Serum 144)

Patient's fictional case history: This individual is a 27-year-old female being evaluated for her first transplant.

Patient 2's HLA type is as follows: A*02:01-B*35:01-B*44:02-C*05:01-C*08:01-DRB1*04:02-DRB1*09:01-DRB4*01:01-DRB4*01:03-DQA1*03:01-DQB1*02:01-DQB1*03:02-DPA1*01:03-DPA1*03:01-DPB1*11:01-DPB1*13:01.

Against **donor V1**, ≥ 90% of labs reported anti-A29 (4557) reactivity. Additional anti-A34 (3975) reactivity was also reported by 11 labs. In the presence DSA of < 5000 MFI, predictions were mixed among labs; 15 labs predicted the physical T-cell FXM to be positive, 1 lab predicted it to be negative and 1 lab predicted it to be borderline. For B-cell predictions, 14 labs predicted the expected physical B-cell FXM to be positive, 2 labs predicted it to be negative, and 1 lab predicted it to be borderline. For predicted renal transplant risk, 15 labs assessed it as unacceptable and 1 lab assessed it as acceptable. One other lab noted there was "minimum risk of hyperacute rejection due to low level donor specific antibodies but greater than standard risk of rejection."

Anti-A3 (5665), -DP4 (DP402) (9027) and -DP2 (11601) reactivity was reported against **donor V2** by ≥ 90% of labs. Additional anti-A68 (2238) reactivity was also reported by a few labs (n = 6). In the presence of DSA of > 5000 MFI, 100% of labs predicted the expected T- and B-cell FXM to be positive. In turn, all 17 labs assessed the predicted renal transplant risk as unacceptable.

Against **donor V3**, ≥ 90% of labs reported anti-A23 (4117) reactivity. In addition, 10 labs reported anti-A34 (3975) reactivity against the donor. For T-cell predictions, ≥ 80% of labs predicted the physical T-cell FXM to be positive. Labs reporting lower MFI's (< 2000) for A23 and A34, predicted the T-cell FXM to be negative or borderline. B-cell predictions were even more mixed among labs due to the absence of class II DSA. Twelve labs predicted the expected B-cell FXM to be positive, 3 labs predicted it to be borderline, and 2 predicted it to be negative. For predicted renal transplant risk, 16 out of 17 labs assessed the risk as unacceptable.

Anti-A30 (3359) and -DP17 (10355) reactivity was reported by ≥ 90% of labs against **donor V4**. Additionally, 15 labs reported weak anti-A26 (2736) reactivity against the donor. For T-cell predictions, 14 labs predicted the expected T-cell FXM to be positive, 2 predicted it to be negative, and 1 predicted borderline results due to weak class I DSA. By contrast, 100% of labs predicted the expected B-cell FXM to be positive in the presence of strong class II DSA. For predicted renal transplant risk, 16 out of 17 labs assessed the risk as unacceptable.

Conclusion

For **serum 143** against donors V1 - V4, 7 out of the 8 virtual T- and B-cell predictions were reported without any discrepancies. In each case, class I and class II DSA of > 6000 MFI were present.

By contrast, discrepancies were observed for 5 out of 8 virtual T- and B-cell predictions against **serum 144**. In each of those cases, labs reported class I DSA of < 5000 MFI. For example, in the case of donor V3 vs. se-

rum 144, only weak class I DSA (A34, A23), were reported against the donor. Respective MFI's for each were 4117 and 3975. This resulted in predictions to be mixed among labs. The majority of labs predicted the expected T- and B-cell FXM to be positive, however a few labs reporting MFI's below the median predicted the physical FXM to be negative or borderline.

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Flow Cytometric Crossmach

Cell #139 HLA genotype: A*11:12-A*31:01-B*18:01-B*40:02-C*03:06-C*07:01-DRB1*08:02-DRB1*11:01-DRB3*02:02-DQA1*04:01-DQA1*05:05-DQB1*03:01-DQB1*04:02-DPA1*01:03-DPB1*04:01:01G- DPB1*04:02:01G

Table 4. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #141

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	141	61	219			Positive	B*18:01(8814); C*07:07(5443)	91	473			Positive	DRB1*08:02(13124), DRB1*11:01(4588), DRB3*02:02(1408)			
230	141	2.4	0.4			Positive	B18, Cw7	4.2	4.1			Positive		73	105	YES
615	141	312	467			Positive	B*18:01(10912); C*07:02(8156); B*40:02(1047)	344	718			Positive	DRB1*08:01(11308); DRB1*11:01(4890); DRB3*02:02(1586); DQA1*04:01/ DQB1*04:02(1097)	1.4	2.2	YES
792	141	57	275			Positive	B18(8244), Cw7(6696)	107	408			Positive	DR8(8086), DR11(3351)			
1426	141	62	189.5			Positive	B18(13272), B61(1582), Cw7(8659)	102	435.5			Positive	DQ4(1694), DR11(6728), DR52(2141), DR8(14676)			
2400	141	18	83			Positive	B*18:01(12954), B*40:02(1204), C*07:02(10616 on 07:01)	18	196			Positive	DRB1*08:02(12675 on 08:01), DRB1*11:01(5404), DRB3*02:02(2147), DQB1*04:02(1352),	164	213	YES
3135	141	1,125	7515	3,51		Positive						NT		2139		NO
3224	141	70	197			Positive		140	391			Positive		166	181	YES
3753	141	50	184			Positive	B18(8616), Cw7(9476)	100	429			Positive	DR8(10060), DR11(3908)			
3966	141	20	244			Positive		50	315			Positive		208	233	YES
4345	141					Positive						Positive		203	338	NO
5214	141	19	75		34915	Positive	B18(11,732); B61(1,357); Cw7(9,972)	28	112		325427	Positive	DR8(11,937); DR11(3,629-4939); DR52(DRB3*02:02, 1,452); DQ4(1,073-1,144)			
8001	141	50	287			Positive	B*18:01(11080), B*40:02(1061)	100	317			Positive	DRB1*11:01(4352), DRB3*02:02(1529), DQB1*04:02(861)	256	278	YES
														206	310	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #141

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8050	141	50	228			Positive	B18(12345) Cw7(9885)	120	380			Positive	DR8(10919) DR11(4145) DR52(DRB3*02:02, 1026) DQA1*04(1154)	17	168	YES
8083	141	70	52			Positive	B*18:01(22281), 40:02(2742)	140	153			Positive	DRB1*11:01(7002), DRB3*02:02(2925)	261	392	YES
8103	141	177.6	648	1.2		Positive	B18(1481); C*07(4800)	746.3	983	1.7		Positive	DRB1*08(13412); DRB1*11(6748); DQB1*04(1932); DQA1*04(1247)	148	439	NO
8111	141	34	132			Positive	B18(11,400); Cw7(9000)	35	350			Positive	DR8(12,100); DR11(4800); DR52(3*02:02, 1300); DQ4(DQB1*04:02/ DQA1*04:01; 1000)	341	369	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #142

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	142	61	-5			Negative		91	216			Positive	DRB1*11:01(1071), DQB1*04:02(5866)			
230	142	2.4	2.4			Positive		4.2	25			Positive	DQ4(9533)	73	105	YES
														1.4	2.2	YES
615	142	312	259			Negative	N/A	344	509			Positive	DQA1*04:01/ DQB1*04:02(5548); DRB1*08:01(1054); DRB1*11:01(1202)			
792	142	57	28			Negative	No DSA Detected	107	221			Positive	DQ4(4077)	249	272	YES
														244	289	YES
1426	142	62	-5.5			Negative		102	234.5			Positive	DR4(10034), DR11(1857), DR8(2064)			
2400	142	18	4			Negative	No DSA	18	49			Positive	DQB1*04:02(4633)	301	299	YES
3135	142	1,125	2009	0,94		Negative						NT		164	213	YES
3224	142	70				Negative		140	115			Positive		2139		NO
														166	181	YES
3753	142	50	40			Negative		100	202			Positive	DR8(1248), DR11(1335), DQ4(7336)			
3966	142	20	8			Negative		50	109			Positive		208	233	YES
4345	142					Negative						Positive		203	338	NO
																NO
5214	142	19	8		759	Negative		28	62		46580	Positive	DR8(1,125); DR11(1,170-1,245); DQ4(6,472-10,871)			
8001	142	50	0			Negative		100	185			Positive	DQB1*04:02(8918), DRB1*11:01(1258)	256	278	YES
														206	310	YES
8050	142	50	12			Negative	NONE	120	155			Positive	DR8(1563) DR11(1562) DQ4(9717)			
8083	142	70	-1			Negative		140	-39			Negative	DRB1*11:01(4052), DQB1*04:02(25714)	17	168	YES
														261	392	YES
8103	142	177.6	210	1.2		Negative		746.3	4643	1.7		Borderline	DRB1*08(512); DRB1*11(711); DQB1*04(2033)			
														148	439	NO
8111	142	34	0			Negative		35	183			Positive	DQ4(6300); DR11(1000); DR8(1000)			
														341	369	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #143

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	143	61	437			Positive	A11(16875),B*18:01(9206),B*40:02(6317),Bw6	91	454			Positive	DRB1*11:01(6961), DRB3*02:02(4631), DQB1*03:01(23159), DPB1*04:02(1933)	73	105	YES
230	143	2.4	71			Positive	A11,B18,B61,Bw6	4.2	125			Positive	DR11,DQ7	1.4	2.2	YES
615	143	312	669			Positive	A*11:01(19751); B*18:01(14657); B*40:02(9679); C*03:03(3903)	344	748			Positive	DQA1*05:03/ DQB1*03:01(18274); DRB1*11:01(5062); DRB3*02:02(4429); DPA1*01:03/ DPB1*04:02(1389)	249	272	YES
792	143	57	419			Positive	A11(14689), B18(7615), B61(3849)	107	413			Positive	DQ7(17305), DR11(5666), DR52(4384)	244	289	YES
1426	143	62	402.5			Positive	A11(20624), B18(13021), B61(7602), Cw10(1422)	102	413.5			Positive	DP4(2568), DQ7(23217), DR11(8002), DR52(7046)	301	299	YES
2400	143	18	217			Positive	A*11:12(18037 on 11:01), B18:01(10316), B*40:02(4655)	18	195			Positive	DRB1*11:01(3094), DRB3*02:02(2549), DQB1 *03:01(13045)	164	213	YES
3135	143	1,125	5788	2,71		Positive						NT		2139		NO
3224	143	70	375			Positive		140	367			Positive		166	181	YES
3753	143	50	410			Positive	A11(18689), B18(10305), B61(4007), Bw6(6562)	100	422			Positive	DR11(6317), DR52(5435), DQ7(21116)	208	233	YES
3966	143	20	355			Positive		50	376			Positive		203	338	NO
4345	143					Positive						Positive				NO
5214	143	19	131		290398	Positive	A11(21,207-21,792); B18(15,507); B61(9,808-9,905); Cw10(1,734-1,853)	28	117		392142	Positive	DR11(8,520-9,070); DR52(DRB3*02:02, 7,413); DQ7(15,208-22,722); DP4:02(2,633)	256	278	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #143

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8001	143	50	452			Positive	B*18:01(13657), B*40:02(7454)	100	359			Positive	DQB1*03:01(23799), DRB1*11:01(7011), DRB3*02:02(6011), DPB1*04:02(1737)	206	310	YES
8050	143	50	451			Positive	A11(18274), B18(14571), B61(5633), Cw10(1024)	120	396			Positive	DR11(9010) DR52(8041) DQ7(23526) DPB1*04:02(2818)	17	168	YES
8083	143	70	419			Positive	B*18:01(14882), B*40:02(8272)	140	417			Positive	DRB1*11:01(9748), DRB3*02:02(7610), DQB1*03:01(29974)	261	392	YES
8103	143	177.6	1245	1.2		Positive	A*11(8132); B*18(1840); B*40(649)	746.3	6559	1.7		Positive	DQB1*03(8166); DRB1*11(3696)	148	439	NO
8111	143	34	361			Positive	A11(18,400); B18(14,300); B61(6100); Cw10(1300)	35	401			Positive	DQ7(21,100); DR52(6500); DR11(7100); DPB1*04:02(2000)	341	369	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #139 vs. Serum #144

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	144	61	237			Positive	A11(4979), B*31:01(2579)	91	344			Positive	DRB1*11:01(10345)	73	105	YES
230	144	2.4	13			PositiveA	11, A31	4.2	51			Positive	DR11, DP402	1.4	2.2	YES
615	144	312	475			Positive	A*11:01(5924); A*31:01(3011); B*18:01(1260)	344	628			Positive	DPA1*01:03/ DPB1*04:01(9377); DRB1*11:01(8650); DRB1*08:01(1038)	249	272	YES
792	144	57	227			Positive	A11(3845), A31(1631)	107	318			Positive	DP4(6483), DR11(6110)	244	289	YES
1426	144	62	226.5			Positive	A11(6217)	102	366.5			Positive	DP4(12608), DR11(8670)	301	299	YES
2400	144	18	70			Positive	A11:12(4709 on 11:01), A*31:01(2241), B18:01(1047)	18	100			Positive	DRB1*11:01(7594), DRB1*08:02(1019 on 08:01), DPB1*04:02(8840)	164	213	YES
3135	144	1,125	2425	1,13		Positive						NT		2139		NO
3224	144	70	171			Positive		140	272			Positive		166	181	YES
3753	144	50	165			Positive	A11(4276)	100	274			Positive	DR11(6580), DP402(8734)	208	233	YES
3966	144	20	141			Positive		50	268			Positive		203	338	NO
4345	144					Positive						Positive				NO
5214	144	19	81		44951	Positive	A11(6,843-6,872); A31(3,228)	28	84		163740	Positive	DR8(1,334); DR11(9,777-10,904); DP4:02(12,249)	256	278	YES
8001	144	50	246			Positive	A*31:01(2809), B*18: 01(702)	100	263			Positive	DPB1*04:02(9657), DRB1*11:01(8813), DRB3*02:02(544)	206	310	YES
8050	144	50	232			Positive	A11(4669)	120	254			Positive	DR8(1360) DR11(8277) DPB1*04:02(11032)	17	168	YES
8083	144	70	81			Positive	A*31:01(6311), B*18:01(2011),	140	120			Positive	DRB1*11:01(15631), DPB1*04:02(18303)	261	392	YES
8103	144	177.6	737	1.2		Borderline	A*11(1005)	746.3	1726	1.7		Positive	DRB1*08(753); DRB1*11(4405); DPB1*04(3339)	148	439	NO
8111	144	34	127			Positive	A11(3400); A31(1200)	35	265			Positive	DR11(8000); DPB1*04:02(9400)	341	369	YES

Cell #140 HLA genotype: A*02:03-A*24:07-B*07:06-B*46:01-C*01:02-C*07:02-DRB1*12:01-DRB1*14:04-DRB3*01:01-DQA1*01:04-DQA1*05:06-DQB1*03:01-DQB1*05:03-DPA1*02:02-DPB1*05:01

Table 8. Individual Flow crossmatch results and DSA reported for Cell #140 vs. Serum #141

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	141	61	98			Positive	B*07:02(2749), C*07:02(MFI 5101)	91	463			Positive	DQB1*05:03(29077), DRB1*12:02(MFI 2710), DRB1*14:04(MFI 7658)	80	96	YES
230	141	2.5	0.2			Positive	B7, Cw7	5.1	6			Positive	DR12, DR14, DQ5	1.5	3.1	YES
615	141	325	375			Positive	C*07:02(8156); B*07:02(2805)	351	678			Positive	DQA1*01:02/DQB1*05:02(26723); DRB1*12:01(3668); DRB1*14:02(1151)	262	279	YES
792	141	57	126			Positive	Cw7(6696), B7(1993)	107	506			Positive	DQ5(21585), DR12(2145)	239	265	YES
1426	141	62	93			Positive	B7(7203), Cw1(1596), Cw7(10338)	102	422			Positive	DQ5(11611), DR12(5320), DR14(9388), DR52(2141)	280	268	YES
2400	141	18	23			Positive	B*07:06(3576 on 07:02), C*01:02(1333), C*07:02(10616)	18	138			Positive	DRB1*12:01(4615), DQB1*05:03(24595 on 05:02)	174	205	YES
3135	141	1,125	3217	2,39		Positive						NT		1344		NO
3224	141	70	70			Positive		140	361			Positive		185	170	YES
3753	141	50	42			Negative	B7(2684), Cw7(9476)	100	475			Positive	DR12(3052), DQ5(33054)	215	230	YES
3966	141	20	111			Positive		50	296			Positive		186	356	NO
4345	141					Positive						Positive				NO
5214	141	19	37		7082	Positive	B7(3,574); Cw7(9,972)	28	113		297330	Positive	DR12(3,471-5,246); DR14:02(1,182); DQ5(23,753-23,872)	258	274	YES
8001	141	50	160			Positive	C*07:02(9554), C*01:02(1009)	100	333			Positive	DRB1*12:01(2876)	187	271	YES
8050	141	50	120			Positive	B7(2533) Cw1(1052) Cw7(9885)	120	251			Positive	DR12(3772) DQ5(30331)	33	168	YES
8083	141	70	41			Borderline	C*01:01(3032), C*07:02(19685)	140	255			Positive	DRB1*12:01(5219)	208	334	YES
8103	141	169.2	201	1.2		NT-	C*07(4800)	746.3	1156	1.7		Positive	DRB1*12(3472); DRB1*14(6716); DQB1*05(20997);DQA1*01(21115)	141	439	NO
8111	141	32	41			Positive	Cw7(9000); B7(2400); Cw1(1100)	40	384			Positive	DQ5(31,900); DR12(3400)	351	383	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #140 vs. Serum #142

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	142	61	230			Positive	B*07:02(MFI 12099)	91	351			Positive	DQB1*05:03(MFI 11799), DPB1*05:01(MFI 1078)	80	96	YES
230	142	2.5	1.2			Positive	B7(16049)	5.1	2.5			Positive	DQ5(16669)	1.5	3.1	YES
615	142	325	515			Positive	B*07:02(11843)	351	684			Positive	DQA1*01:02/ DQB1*05:02(13189); DRB1*12:01(1077); DPA1*02:02/	262	279	YES
792	142	57	222			Positive	B7(9384)	107	355			Positive	DPB1*05:01(1636) DQ5(12541)	239	265	YES
1426	142	62	260			Positive	B7(13378)	102	404			Positive	DP5(2291), DQ5(17051), DR12(1503)	280	268	YES
2400	142	18	78			Positive	B*07:06(10730 on 07:02)	18	123			Positive	DQB1*05:02(9755), DQA1*01:04(12215 on 01:03), DPB1*05:01(1096)	174	205	YES
3135	142	1,125	2098	1,56		Positive						NT		1344		NO
3224	142	70	170			Positive		140	263			Positive		185	170	YES
3753	142	50	200			Positive	B7(13282)	100	339			Positive	DR12(1546), DQ5(16842)	215	230	YES
3966	142	20	249			Positive		50	279			Positive		186	356	NO
4345	142					Negative						Positive				NO
5214	142	19	86		55804	Positive	B7(14,653)	28	99		174650	Positive	DR12(1,098-2,030); DQ5(14,184-18,486); DP5(1,125-1,444)	258	274	YES
8001	142	50	290			Positive		100	331			Positive	DPB1*05:01(1563), DPA1*02:02(1413), DRB1*12:01(1065)	187	271	YES
8050	142	50	254			Positive	B7(16027)	120	316			Positive	DR12(1851) DQ5(19930) DP5(1862)	33	168	YES
8083	142	70	-108			Negative		140	-75			Negative		208	334	YES
8103	142	169.2	166	1.2		Negative		746.3	910	1.7		Positive	DRB1*12(578); DRB1*14(492); DQB1*05(4855); DQA1*01(6707); DPB1*01(852)	141	439	NO
8111	142	32	159			Positive	B7(11,400); Cw1(2400)	40	283			Positive	DQ5(13,600); DR52(3*01:01, 1600)	351	383	YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #140 vs. Serum #143

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	143	61	466			Positive	A24(MFI 8623), B7(MFI 5462), A*02:03(MFI 25485), B*46:01(MFI 1112), Bw6	91	526			Positive	DQB1*03:01(MFI 23159), DRB3*01:01(MFI 4200), DRB1*14:04(MFI 1019)	80	96	YES
230	143	2.5	160			Positive	A2, A24, B18, B62, Bw6	5.1	170			veDQ7,DR14		1.5	3.1	YES
615	143	325	721			Positive	A*02:03(25092); A*24:03(16357); B*07:02(8871); B*46:01(3780); C*01:02(1384)	351	809			Positive	DQA1*05:03/ DQB1*03:01(18274); DRB1*14:02(6162); DRB3*01:01(3731)	262	279	YES
792	143	57	448			Positive	A2(20251), A24(10053), B7(3338)	107	498			Positive	DQ7(17305), DR14(6181), DR52(5864)	239	265	YES
1426	143	62	429			Positive	A2(28013), A24(14973), B46(2252), B7(7235), Cw1(1174)	102	506			Positive	DQ7(23240), DR14(1334), DR52(5649)	280	268	YES
2400	143	18	228			Positive	A*02:03(25180), A*24:07(11863 on 24:02), B*07:06(4406 on 07:02), B*46:01(1266)	18	234			Positive	DRB1*14:04(2429 on 14:54), DQB1*03:01(13045)	174	205	YES
3135	143	1,125	19771	14,71		Positive						NT		1344		NO
3224	143	70	404			Positive						Positive		185	170	YES
3753	143	50	438			Positive	A2(28786), A24(11345), B7(4517), B46(1202), Bw6(6562)	100	495			Positive	DR14(6147), DR52(5435), DQ7(21116)	215	230	YES
3966	143	20	502			Positive						Positive		186	356	NO
4345	143					Positive						Positive				NO
5214	143	19	130		302038	Positive	A2(23,333-23,503); A24(13,482-15,905); B46(2,174); B7(9,720)	28	128		511608	Positive	DR14(7,001-8,033); DR52(DRB3*02:02, 6,827); DQ7(15,208-22,722)	258	274	YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #140 vs. Serum #143

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8001	143	50	501			Positive	A*02:03(26017), B*46:01(2102), C*01:02(674)	100	448			Positive	DQB1*03:01(23799), DRB3*01:01(5481)	187	271	YES
8050	143	50	470			Positive	A2(28014) A24(11597) B7(6765) B46(1676) Bw6(5000)	120	563			Positive	DR14(8670) DR52(8041) DQ7(23526)	33	168	YES
8083	143	70	408			Positive	A*02:03(32596), B*46:01(2568)	140	392			Positive	DQB1*03:01(29974)	208	334	YES
8103	143	169.2	4359	1.2		Positive	A*02(20439); A*24(4095); B*07(998)	746.3	13271	1.7		Positive	DRB1*14(2824); DQB1*03(8166); DRB3*01(2855)	141	439	NO
8111	143	32	308			Positive	A2(29,600); A24(10,600); B7(5300); B46(2400)	40	366			Positive	DQ7(21,100); DR14(7200); DR52(6500)	351	383	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #140 vs. Serum #144

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()		B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()		T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	144	61	39			Negative	A24(MFI 4096)		91	159			Positive	DRB1*14:04(MFI 1583)		80	96	YES
230	144	2.5	0.1			Positive	A24(7084)		5.1	0.2			Positive	DR14(2517)		1.5	3.1	YES
615	144	325	339			Positive	A*24:03(5116)		351	482			Positive	DRB1*14:02(3747)		262	279	YES
792	144	57	86			Positive	A24(3532)		107	167			Positive	DR14(3670)		239	265	YES
1426	144	62	88			Positive	A24(2924)		102	217			Positive	DR14(1283)		280	268	YES
2400	144	18	14	1,14		Negative	A*24:07(4497 on 24:02)		18	16			Negative	DRB1*14:04(4152 on 14:54)		174	205	YES
3135	144	1,125	1528			Positive							NT			1344		NO
3224	144	70	0.2			Positive			140	68			Positive			185	170	YES
3753	144	50	77			Positive	A24(2407)		100	140			Positive	DR14(3861)		215	230	YES
3966	144	20	96			Positive			50	99			Positive			186	356	NO
4345	144					Negative							Positive					NO
5214	144	19	35	6434		Positive	A24(5,943-6,862)		28	50	24672	Positive	DR12(960-1,191); DR14(4,771-6,020)			258	274	YES
8001	144	50	118			Positive			100	169			Positive	DRB1*12:01(743), DRB3*01:01(490)		187	271	YES
8050	144	50	95			Positive	A24(2129)		120	221			Positive	DR12(1092) DR14(5997)		33	168	YES
8083	144	70	107			Positive			140	152			Positive			208	334	YES
8103	144	169.2	141	1.2		Borderline	A*24(782)		746.3	319	1.7		Borderline	DRB1*12(1149); DRB1*14(2067)		141	439	NO
8111	144	32	53			Positive	A24(1700)		40	93			Positive	DR14(4500)		351	383	YES

Single Antigen

Table 12. Summary of Single Antigen results for Serum #141

Class I								
*** Serum 141 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A3	12	100%	2839	3062	1706	693	7295	
B18	12	100%	12039	11457	5359	1481	22281	
B57	12	100%	5953	5936	3167	1497	14149	
B64	12	100%	14642	14675	4660	6837	25880	
B65	12	100%	16058	16017	4443	7987	26396	
B73	12	100%	2493	3137	2018	572	7295	
B8	12	100%	12543	12350	5036	2960	23945	
Cw7	12	100%	9929	10374	3563	4800	19685	
B58	11	91%	2456	2452	1400	664	6223	
B7	11	91%	3574	3538	1792	853	8046	
B78	11	91%	2823	3037	1435	1064	6668	
B51	10	83%	4430	4976	2509	2540	10953	
B55	9	75%	2467	2918	1478	1455	5948	
B67	8	66%	2201	2513	903	1684	4687	
B42	7	58%	2569	3206	1324	1712	5286	
B76	7	58%	2611	2775	1089	1455	4836	
B37	6	50%	2542	2526	1084	1151	4513	
Cw18	6	50%	1922	2058	771	1091	3193	
A33	5	41%	2926	3250	1615	1159	6042	
B54	5	41%	2277	2290	866	1321	3861	
B61	5	41%	1735	1872	716	1061	2742	
Cw1	5	41%	1052	1503	778	1009	3032	
Cw12	5	41%	1576	2139	1153	1024	4300	
A74	4	33%	2166	2609	1475	1076	5029	
B27	4	33%	1817	2105	931	1161	3626	
B59	4	33%	1616	1811	696	1088	2926	
A32	3	25%	2062	2514	937	1662	3819	
A69	3	25%	1881	2096	693	1375	3032	
B52	3	25%	1748	1977	587	1401	2784	
A66	2	16%	2045	2044	390	1655	2434	
B81	2	16%	1091	1090	91	1000	1181	
Cw9	2	16%	1979	1979	491	1488	2470	
A25	1	8%	1457	1457	-	1457	1457	
A26	1	8%	1365	1365	-	1365	1365	
A34	1	8%	1410	1410	-	1410	1410	
B14	1	8%	7987	7987	-	7987	7987	
B39	1	8%	8066	8066	-	8066	8066	

Class II								
*** Serum 141 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DQ2	12	100%	22284	24299	6042	16732	41196	
DQ5	12	100%	26001	27175	5798	19761	41274	
DQ6	12	100%	25433	27068	5755	19405	40729	
DR1	12	100%	22977	23198	3710	17002	32765	
DR10	12	100%	20247	20476	3228	14331	28934	
DR103	12	100%	21922	22183	3505	15605	31295	
DR11	12	100%	5292	5396	1379	3351	8009	
DR12	12	100%	5067	5181	1569	3052	7659	
DR15	12	100%	22269	22553	3631	16261	31669	
DR16	12	100%	16273	16673	3160	11057	23686	
DR51	12	100%	25670	26745	5527	19378	39830	
DR8	12	100%	12817	12983	2790	8086	18318	
DR9	12	100%	21213	21665	3626	15287	31132	
DR7	11	91%	4301	4811	2433	1562	10287	
DR52	8	66%	2335	2460	1054	1026	4472	
DQ4	4	33%	2031	2773	1367	1895	5137	
DR14	4	33%	4475	4174	2555	1030	6716	
DP17	3	25%	1787	1693	438	1116	2177	
DQA1*02	3	25%	7833	8444	6202	1173	16328	
DQA1*04	3	25%	1247	5204	5662	1154	13211	
DR13	3	25%	4875	4782	1684	2675	6796	
DP9	2	16%	1501	1500	718	783	2218	
DQA1*06	2	16%	1194	1193	124	1070	1317	
DR1403	2	16%	5374	5374	1064	4310	6438	
DR1404	2	16%	8425	8424	1709	6716	10133	
DR4	2	16%	869	869	266	603	1135	
DPw6	1	8%	1805	1805	-	1805	1805	
DQ7	1	8%	3260	3260	-	3260	3260	
DQ8	1	8%	4921	4921	-	4921	4921	
DQ9	1	8%	3994	3994	-	3994	3994	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 13. Summary of Single Antigen results for Serum #142

Class I								
*** Serum 142 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A3	12	100%	6699	6808	3344	1592	15984	
B27	12	100%	7402	7311	3610	1526	16554	
B42	12	100%	10432	9918	4668	1184	20644	
B54	12	100%	5504	5166	2558	769	11834	
B55	12	100%	9964	9857	4598	1530	20179	
B56	12	100%	9555	9490	4490	1221	19993	
B67	12	100%	11593	11052	4847	1627	21669	
B7	12	100%	14094	13316	5728	2233	26102	
B81	12	100%	9184	8870	4327	1140	18701	
B82	12	100%	7446	7254	3328	1401	15675	
B73	11	91%	3544	3503	1569	1260	7710	
Cw17	11	91%	4316	4692	2542	716	10741	
B2708	3	25%	5241	5104	2868	1526	8546	
A29	2	16%	1883	1882	138	1745	2020	
B2705	2	16%	4462	4462	3396	1066	7858	
B703	1	8%	926	926	-	926	926	
B8101	1	8%	1140	1140	-	1140	1140	
Cw14	1	8%	6353	6353	-	6353	6353	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Class II								
*** Serum 142 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DPw3	12	100%	4053	5185	4364	1306	18968	
DPw6	12	100%	3592	4571	3340	1402	14952	
DQ4	12	100%	8989	10426	8093	2033	35435	
DQ5	12	100%	16815	17451	9045	4855	43075	
DQ6	12	100%	18484	19905	9453	6707	46915	
DR15	12	100%	6441	7297	4454	3157	21279	
DR16	12	100%	4611	5470	3582	1867	16593	
DR51	12	100%	3940	4434	3171	1429	14523	
DP9	11	91%	3098	4267	3910	1057	16203	
DP14	10	83%	3004	4086	3506	973	14218	
DP17	10	83%	2928	3892	3269	970	13268	
DP20	9	75%	4053	5449	4232	2567	17072	
DPw1	9	75%	2216	3335	3309	713	12471	
DR12	9	75%	1851	2476	2055	578	8072	
DR11	8	66%	1485	1924	1309	711	5216	
DR13	8	66%	1233	1497	879	548	3633	
DR9	8	66%	1517	1905	1284	524	5074	
DP13	7	58%	1369	1759	1131	531	4345	
DP19	7	58%	2217	2847	1767	1364	7004	
DPw5	7	58%	2147	2674	2005	852	7412	
DR103	7	58%	1331	1733	1071	551	4097	
DR8	7	58%	1418	1370	465	512	2180	
DP11	6	50%	2287	3013	2029	1464	7436	
DP10	5	41%	1272	1739	764	1022	3111	
DR1	4	33%	1151	1241	566	551	2112	
DPw2	2	16%	1107	1107	605	502	1712	
DP18	1	8%	1146	1146	-	1146	1146	
DP28	1	8%	1408	1408	-	1408	1408	
DPw4	1	8%	1568	1568	-	1568	1568	
DQ8	1	8%	4578	4578	-	4578	4578	
DQA1*01	1	8%	6707	6707	-	6707	6707	
DR14	1	8%	492	492	-	492	492	
DR1403	1	8%	1355	1355	-	1355	1355	

Table 14. Summary of Single Antigen results for Serum #143

Class I								
*** Serum 143 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A11	12	100%	19975	18991	4541	8132	25286	
A2	12	100%	27016	25871	4598	16940	33447	
A23	12	100%	4716	4291	1947	521	6722	
A24	12	100%	14022	12817	4247	4095	17875	
A3	12	100%	10609	9868	3172	3210	14162	
A43	12	100%	4640	3840	1807	1329	5962	
A68	12	100%	25336	24907	3814	19292	31316	
A69	12	100%	25249	24293	4005	17431	30278	
B18	12	100%	13511	11225	4423	1840	15507	
B35	12	100%	13301	11992	4044	3167	17301	
B38	12	100%	14463	12929	4020	3676	17667	
B41	12	100%	8244	6957	3148	901	10761	
B42	12	100%	9688	8321	3469	1306	12402	
B45	12	100%	5871	4987	2170	841	8342	
B50	12	100%	7344	6177	2615	1159	10271	
B53	12	100%	9363	8642	2826	2156	11469	
B54	12	100%	16572	15075	3915	6144	19148	
B55	12	100%	7666	6933	3054	1395	12674	
B56	12	100%	6965	6501	2832	1213	10567	
B57	12	100%	22502	20734	5097	9048	27741	
B58	12	100%	19421	17637	4431	6938	22700	
B59	12	100%	7728	6694	2068	1814	8641	
B60	12	100%	4387	3912	1957	577	7347	
B61	12	100%	6545	5898	2938	649	9857	
B62	12	100%	6918	6435	2753	1259	10294	
B64	12	100%	9819	8331	3194	1758	12042	
B65	12	100%	6279	5273	2150	779	7772	
B67	12	100%	12747	11038	4201	2118	15631	
B71	12	100%	10439	9822	3822	3165	19091	
B72	12	100%	7206	6388	2784	1024	11098	
B75	12	100%	12887	11854	3718	4091	17831	
B76	12	100%	6803	6655	2738	1431	11504	
B77	12	100%	9234	8346	2550	2715	11802	
B78	12	100%	7339	6041	2367	1225	9026	
B8	12	100%	17219	15404	4448	5297	20359	
B82	12	100%	5585	5102	1974	1289	8396	
A36	11	91%	4924	4527	2371	585	8100	

Class II								
*** Serum 143 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DQ6	12	100%	7248	6937	3958	979	15498	
DQ7	12	100%	22321	20488	6263	7335	29974	
DQ8	12	100%	20550	19649	5989	8166	29503	
DQ9	12	100%	19873	18228	5584	6521	27545	
DR1	12	100%	7619	6980	2547	2251	10320	
DR11	12	100%	7356	7266	2134	3289	10175	
DR13	12	100%	6348	6323	1979	2866	9306	
DR14	12	100%	7868	7114	2379	2824	11227	
DR15	12	100%	7946	7216	2367	2518	9949	
DR16	12	100%	6063	5626	1936	1782	8036	
DR17	12	100%	6680	6142	1714	2954	8467	
DR18	12	100%	6747	6326	1935	2662	8675	
DR4	12	100%	10373	9879	2727	4707	13841	
DR10	11	91%	2812	2496	822	770	3582	
DR52	11	91%	7731	6914	2245	2957	10272	
DR9	11	91%	2799	2600	935	596	4153	
DR51	10	83%	2652	2605	821	929	3977	
DPw2	9	75%	3116	2629	818	1143	3633	
DR103	8	66%	1864	1837	568	863	2497	
DP18	6	50%	2126	2154	372	1517	2691	
DP28	6	50%	1518	1621	346	1171	2112	
DP10	5	41%	1818	1694	273	1149	1863	
DP402	5	41%	2632	2482	381	1737	2818	
DPw4	2	16%	2053	2053	984	1069	3037	
DR1403	2	16%	4248	4248	1477	2771	5725	
DQ3	1	8%	8166	8166	-	8166	8166	
DQ4	1	8%	13841	13841	-	13841	13841	
DR3	1	8%	3196	3196	-	3196	3196	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 14. Summary of Single Antigen results for Serum #143, cont.

Class I							
*** Serum 143 ***							
12 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B39	11	91%	18997	17468	4629	5674	22622
B7	11	91%	6576	5554	2550	998	9720
B73	11	91%	3711	3405	1114	814	4612
B81	11	91%	3552	3075	1589	575	6014
A34	10	83%	2818	2736	763	1666	3627
B48	10	83%	4155	4245	1933	1886	8339
B51	10	83%	9066	8748	1799	6200	11343
B52	10	83%	2539	2387	527	1525	2956
A25	9	75%	3061	2917	920	1458	4471
B63	9	75%	2337	2311	844	757	3915
A1	8	66%	2141	2081	428	1279	2570
A33	8	66%	3081	2773	888	1294	3784
A66	8	66%	2508	2189	739	884	3038
B27	7	58%	7331	6234	2402	2100	9439
B46	7	58%	2174	2097	482	1202	2734
B2708	6	50%	6395	6156	2765	2100	10345
Cw9	6	50%	2759	2689	506	1767	3338
Cw10	5	41%	1377	1487	311	1024	1873
A29	4	33%	2151	2184	706	1231	3205
B49	4	33%	2022	1932	325	1411	2273
Bw6	4	33%	8720	10400	5497	5000	19160
A203	3	25%	20439	21035	1731	19277	23389
A2403	3	25%	6317	8772	5124	4095	15905
A1101	2	16%	14670	14669	6538	8132	21207
A1102	2	16%	14646	14645	7117	7529	21762
A32	2	16%	1828	1827	364	1464	2191
B37	2	16%	2127	2126	945	1182	3071
B3901	2	16%	7363	7363	1689	5674	9052
Cw8	2	16%	1468	1468	420	1048	1888
A6601	1	8%	2675	2675	-	2675	2675
A74	1	8%	1478	1478	-	1478	1478
B14	1	8%	1758	1758	-	1758	1758
B15	1	8%	4091	4091	-	4091	4091
B40	1	8%	649	649	-	649	649
B4005	1	8%	8326	8326	-	8326	8326
B703	1	8%	890	890	-	890	890
B7801	1	8%	1225	1225	-	1225	1225

Table 15. Summary of Single Antigen results for Serum #144

Class I								
*** Serum 144 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A1	12	100%	9363	9164	4698	1119	20083	
A11	12	100%	5630	5621	2706	1005	11988	
A24	12	100%	3807	4731	3041	782	12400	
A29	12	100%	4557	4591	2569	599	10920	
A3	12	100%	5665	6106	3193	1052	13884	
A36	12	100%	6578	6421	3338	924	14688	
A80	12	100%	6975	6616	3236	830	13278	
B8	12	100%	18226	17252	6975	3630	31958	
A23	11	91%	4117	4508	2347	1540	10122	
A30	11	91%	3359	3890	2181	1010	9100	
A32	11	91%	2824	3420	1888	1000	8179	
A34	11	91%	3975	4760	2877	1199	11616	
B54	11	91%	2715	2886	1550	787	6696	
B59	11	91%	3797	3979	1940	800	8725	
A26	10	83%	2736	2724	1446	1027	6266	
A74	10	83%	3250	3498	2165	920	8448	
A33	9	75%	3670	3953	2262	883	9129	
A31	8	66%	3019	3059	1560	764	6311	
A43	6	50%	1958	2208	1186	940	4624	
A66	6	50%	2501	2680	1369	854	5285	
A68	6	50%	2238	2383	1252	617	4802	
A25	5	41%	2851	3206	1085	2203	5286	
A69	4	33%	1452	1834	872	1111	3323	
A2403	3	25%	1899	2815	2274	605	5943	
A1101	2	16%	3939	3938	2934	1005	6872	
A1102	2	16%	3799	3799	3044	755	6843	
B18	2	16%	1707	1706	305	1402	2011	
A6601	1	8%	1836	1836	-	1836	1836	
A6602	1	8%	2424	2424	-	2424	2424	
B75	1	8%	2034	2034	-	2034	2034	

Class II								
*** Serum 144 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DP14	12	100%	9390	9818	3514	3416	17238	
DP17	12	100%	10355	10538	3758	3762	18665	
DP18	12	100%	9839	9739	3793	3316	18352	
DP28	12	100%	8359	8965	3554	3361	17604	
DP9	12	100%	11314	11331	3903	3683	19038	
DPw2	12	100%	11601	11496	4383	3362	20031	
DPw3	12	100%	11542	11411	3993	4065	19506	
DPw6	12	100%	11532	11352	4016	3765	19273	
DR11	12	100%	8473	9804	4333	4405	20681	
DR13	12	100%	5558	5603	1999	2373	10483	
DR14	12	100%	5253	5228	1748	2272	9684	
DR17	12	100%	4964	5147	1771	2297	9519	
DR18	12	100%	4877	5005	1592	2336	8748	
DP20	10	83%	12374	12412	3477	7157	20288	
DP10	9	75%	6952	7713	2334	4682	12979	
DP19	8	66%	2388	2235	681	887	3110	
DP402	8	66%	11570	10538	3204	3339	14585	
DR8	7	58%	1557	1459	424	753	2087	
DPw4	5	41%	6483	8692	5120	3339	18303	
DR12	4	33%	1241	1466	485	1092	2293	
DR1403	2	16%	3128	3127	1061	2067	4188	
DR1404	2	16%	1659	1658	453	1206	2111	
DR52	2	16%	959	959	185	774	1144	
DR3	1	8%	2336	2336	-	2336	2336	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 16a. Individual laboratory results for Serum #141 - class I by One Lambda Single Antigen

	**** Serum 141 ****																								
Ctr	A3	B18	B57	B64	B65	B73	B8	Cw7	B58	B7	B78	B51	B55	B67	B42	B76	B37	Cw18	A33	B54	B61	Cw1	Cw12	Other	
230	5316	18031	8935	19641	21133	4401	16330	14115	3213	5197	4197	7534	5948	2861	5106	3312	2861		2288	2661		B39		One Lambda	
792	1752	8244	3955	9556	11158	1750	8612	6696		1993	1677	2879													OneLambda
1426	3384	13379	7085	16389	16987	6367	15428	10600	2818	3973	3879	3380	2777	2632	3194	3304	2267	2157	3655	2277	1735	1409	2288	A66,B27,B52,A25 >	One Lambda
2400	3262	13015	6523	15732	16465	3846	13124	10798	2722	3652	2917	5697	2467	2210	2569	2611	2816		2926						One Lambda
3224	3528	13301	6391	14986	16200	4008	13448	10733	2583	3709	3244	5352	2611	2129	2360		1686	2468	1707	1162	1017	1510	B27,B52,A32,A74 >	One Lambda	
3753	2302	8616	4286	13053	15915	1876	11465	9476	1666	2684	2385	2540	1571	1684		1528									One Lambda
5214	3150	11732	6528	14972	16734	2942	13569	9972	2456	3574	2823	2566	2421	2191	2216	2379									One Lambda
8001	2527	11080	5515	13970	15630	2043	11961	9554	1907	2714	2302	3830	1885	1716	1712	1455	1551	1091	1159	1321	1061	1009	1576	B27,A74,B59	One Lambda
8050	1622	12345	3103	14311	15076	1361	11069	9885	1228	2533	2256	5030	1455		1151						1052	1024			One Lambda
8083	7295	22281	14149	25880	26396	7295	23945	19685	6223	8046	6668	10953	5128	4687	5286	4836	4513	3193	6042	3861	2742	3032	4300	Cw6,A66,B27,B52 >	One Lambda
Avg	3414	13202	6647	15849	17169	3589	13895	11151	2757	3808	3235	4976	2918	2514	3206	2775	2527	2032	3250	2291	1872	1504	2140		
Std Dev.S	1725	4201	3135	4348	4041	2012	4160	3503	1440	1744	1429	2644	1567	966	1430	1176	1188	889	1806	968	800	870	1289		
MFI %CV	51%	32%	47%	27%	24%	56%	30%	31%	52%	46%	44%	53%	54%	38%	45%	42%	47%	44%	56%	42%	43%	58%	60%		

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 16b. Individual laboratory results for Serum #141 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 141 ****																								
Ctr	A3	B18	B57	B64	B65	B73	B8	Cw7	B58	B7	B78	B51	B55	B67	B42	B76	B37	Cw18	A33	B54	B61	Cw1	Cw12	Other	
8029	1920	3986	3265	10778	12524	1187	6299	8185	1492	853	1064							2883							Immucor
8103	693	1481	1497	6837	7987	572	2960	4800	664									1339				B14			Immucor
Avg	1307	2734	2381	8808	10256	880	4630	6493	1078	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Std Dev.S	868	1771	1250	2787	3208	435	2361	2394	585	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MFI %CV	66%	65%	53%	32%	31%	49%	51%	37%	54%	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Table 17a. Individual laboratory results for Serum #142 - class I by One Lambda Single Antigen

**** Serum 142 ****														
Ctr	A3	B27	B42	B54	B55	B56	B67	B7	B81	B82	B73	Cw17	Other	
230	8682	9863	12994	6426	14659	13799	14959	17245	11724	9332	4080	7984	Cw14	One Lambda
792	4682	5167	6858	3453	6677	6689	7864	9384	6453	5167	2089	2560		OneLambda
1426	7206	7159	9890	5505	9095	9251	10954	13535	8414	7194	3560	3749	A29	One Lambda
2400	6483	5333	8319	3882	7107	7308	8539	10813	6878	4846	2498	4316		One Lambda
3224	8208	9061	11910	6128	11708	11383	13351	15680	10826	8654	3991	4490		One Lambda
3753	5196	6123	9133	4281	9121	8482	10716	13282	7199	6424	2721	3268		One Lambda
5214	7420	8202	11459	5949	11302	11099	13226	14653	9954	8164	3818	4724	B2705,B2708	One Lambda
8001	6914	7876	10973	5527	10807	10224	12232	14825	10072	8190	3262	4237		One Lambda
8050	5103	7644	11823	5502	11450	9859	12376	16027	11864	7697	3544	4827		One Lambda
8083	15984	16554	20644	11834	20179	19993	21669	26102	18701	15675	7710	10741	A29	One Lambda
Avg	7588	8298	11400	5849	11211	10809	12589	15155	10209	8134	3727	5090	-	-
Std Dev.S	3236	3273	3744	2325	3930	3830	3861	4520	3576	3022	1547	2443	-	-
MFI %CV	43%	39%	33%	40%	35%	35%	31%	30%	35%	37%	42%	48%	-	-

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 17b. Individual laboratory results for Serum #142 - class I by Lifecodes-Immucor Single Antigen

**** Serum 142 ****														
Ctr	A3	B27	B42	B54	B55	B56	B67	B7	B81	B82	B73	Cw17	Other	
8029	4236	3224	3830	2740	4660	4574	5111	6022	3218	4304	1260	716	B703,B2708	lifecodes
8103	1592	1526	1184	769	1530	1221	1627	2233	1140	1401			B8101,B2705,B2708	IMMUCOR
Avg	2914	2375	2507	1755	3095	2898	3369	4128	2179	2853	1260	716	-	-
Std Dev.S	1870	1201	1871	1394	2213	2371	2464	2679	1469	2053	-	-	-	-
MFI %CV	64%	51%	75%	79%	72%	82%	73%	65%	67%	72%	-	-	-	-

Table 18a. Individual laboratory results for Serum #143 - class I by One Lambda Single Antigen

	**** Serum 143 ****																											
Ctr	A11	A2	A23	A24	A3	A43	A68	A69	B18	B35	B38	B41	B42	B45	B50	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B64	B65	B67
230	25286	30391	6722	17488	14162	5160	30380	30278	14893	17301	17667	10761	10876	6282	7980	11331	18830	12674	8565	25834	22700	8641	5050	9562	10177	10823	6821	14701
792	14689	20251	2903	10053	6725	2394	19292	19028	7615	8211	9786	4602	5418	2945	3784	5969	10500	4104	4069	16000	13387	4939	2325	3849	3824	5709	3299	7500
1426	21261	28363	5695	15424	10616	5962	25236	25596	13364	13085	14153	9191	10472	6780	7945	9016	16562	8945	8581	22935	19118	8115	5650	7837	7785	10723	7018	13169
2400	18439	25455	3901	13351	9817	5066	24000	25067	10594	11037	12191	6382	7669	4326	5293	8802	14186	6146	5422	21415	18434	7409	3367	5095	5292	7634	5071	10431
3224	22311	28941	6012	16855	13020	5387	27220	26723	13898	13516	14772	9044	10758	6221	7551	9709	16581	8369	8148	22866	19724	8116	4678	7547	8322	10123	6437	13632
3753	18689	28786	3075	11345	7406	1419	27860	23149	10305	11975	13209	5021	6916	3786	4423	8746	15358	4877	5149	21659	17141	6668	2331	4007	4984	7230	4487	9945
5214	21485	23408	6501	14693	12218	5475	23044	23196	15507	14879	15976	10272	12402	8342	10271	11065	17883	9904	10567	22150	20235	7869	7347	9857	10294	12042	7772	15631
8001	22426	26017	4788	15215	11223	4214	25565	25431	13657	14384	15313	7930	9611	5991	7598	10026	17343	7415	7815	22854	20461	7771	4718	7457	7598	9514	6121	12944
8050	18274	28014	4644	11597	10601	1463	25435	26670	14571	14722	16733	8557	9764	5750	7136	10917	18216	7917	6114	23017	20942	7684	4096	5633	6238	11236	6953	12550
8083	22677	33447	5599	17875	13146	5863	31316	30137	14882	15670	14854	9261	12075	6847	8527	11469	19148	8591	10025	27741	20800	7932	5812	8272	8668	10185	6722	15572
Avg	20554	27307	4984	14390	10893	4240	25935	25528	12929	13478	14465	8102	9596	5727	7051	9705	16461	7894	7446	22647	19294	7514	4537	6912	7318	9522	6070	12608
Std Dev.S	3026	3708	1357	2721	2427	1797	3515	3335	2566	2579	2295	2112	2265	1609	1984	1678	2596	2482	2163	3043	2567	1041	1578	2157	2188	2016	1370	2618
MFI %CV	15%	14%	27%	19%	22%	42%	14%	13%	20%	19%	16%	26%	24%	28%	28%	17%	16%	31%	29%	13%	13%	14%	35%	31%	30%	21%	23%	21%

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 18b. Individual laboratory results for Serum #143 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 143 ****																											
Ctr	A11	A2	A23	A24	A3	A43	A68	A69	B18	B35	B38	B41	B42	B45	B50	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B64	B65	B67
8029	14226	16940	1141	5817	6279	2353	19652	18815	3580	5960	6818	1570	2595	1739	2457	4508	10150	2860	2351	13299	11772	3376	993	1013	2789	2997	1801	4263
8103	8132	20439	521	4095	3210	1329	19889	17431	1840	3167	3676	901	1306	841	1159	2156	6144	1395	1213	9048	6938	1814	577	649	1259	1758	779	2118
Avg	11179	18690	831	4956	4745	1841	19771	18123	2710	4564	5247	1236	1951	1290	1808	3332	8147	2128	1782	11174	9355	2595	785	831	2024	2378	1290	3191
Std Dev.S	4309	2474	438	1218	2170	724	168	979	1230	1975	2222	473	911	635	918	1663	2833	1036	805	3006	3418	1105	294	257	1082	876	723	1517
MFI %CV	39%	13%	53%	25%	46%	39%	1%	5%	45%	43%	42%	38%	47%	49%	51%	50%	35%	49%	45%	27%	37%	43%	37%	31%	53%	37%	56%	48%

Table 18a. Individual laboratory results for Serum #143 - class I by One Lambda Single Antigen - cont.

	**** Serum 143 ****																										
Ctr	B71	B72	B75	B76	B77	B78	B8	B82	A36	B39	B7	B73	B81	A34	B48	B51	B52	A25	B63	A1	A33	B27	B2708	Other			
230	19091	8706	17831	9071	10577	7987	20359	6476	6515	21870		3711		3473	8339	11343	2946	3357	3915	2570			7833	B4005,A66	One Lambda		
792	6062	4085	8895	4218	5914	3779	11278	3099	3111	11963	3338	1894	1660	1704	1898	6200	1525	1513			1781	3697		B46	OneLambda		
1426	10964	8386	12068	8855	9078	7667	16835	6445	8100	18689	7609	4612	4005	3512	4535	7994	2956	4471	2658	2488	3784	7938		B49,A29,A32, B46 >	One Lambda		
2400	8001	5558	10016	5728	7843	5438	13984	4700	6024	15986	4699	3038	2543	2587	2685	6642	2349	3002			3100	5507		A66,B46	One Lambda		
3224	10500	8359	13706	7094	9390	7739	17603	6508	6701	19160	7148	4111	3985	3627	4207	10398	2802	3508	2337	2254			7759	B49,A29,A32, Bw6 >	One Lambda		
3753	8482	5120	10198	5499	8084	4614	15738	3787	2943	17503	4517	2883	1975	1666	1886	6329	1553	1458	1355	1279	1294		5031	Bw6	One Lambda		
5214	12114	11098	13766	11504	10207	9026	18442	8396		19581	9720	4332	6014	2796	6578	8429	2803	3061	2695	2508	3682		10345	A203,B49, Bw6 >	One Lambda		
8001	10378	7756	14250	8110	9848	7057	17811	6337	4924	18997	6576	3683	3552	2840	4103	9702	2416	2428	2270	1731	3061	7628		B49,A29,A66, B46 >	One Lambda		
8050	11410	6960	14209	6511	11802	7746	19600	4832	2875	20113	6765	4110	4291	1691	3239	9915	1863		2073	1793	2002	7331		B37, B46 , Bw6 ,Cw9>	One Lambda		
8083	11511	7452	15885	8831	9982	7620	18845	6659	6717	22622	7733	4273	4287	3473	4982	10535	2661	3461	2741	2028	3482	9439		A29,Cw9,A66, B46	One Lambda		
Avg	10851	7348	13082	7542	9273	6867	17050	5724	5323	18648	6456	3665	3590	2737	4245	8749	2387	2918	2506	2081	2773	6923	7742	-	-		
Std Dev.S	3452	2032	2792	2148	1653	1678	2748	1584	1942	3031	1961	833	1351	804	2038	1897	555	976	727	458	949	2022	2171	-	-		
MFI %CV	32%	28%	21%	28%	18%	24%	16%	28%	36%	16%	30%	23%	38%	29%	48%	22%	23%	33%	29%	22%	34%	29%	28%	-	-		

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 18b. Individual laboratory results for Serum #143 - class I by Lifecodes-Immucor Single Antigen - cont.

	**** Serum 143 ****																										
Ctr	B71	B72	B75	B76	B77	B78	B8	B82	A36	B39	B7	B73	B81	A34	B48	B51	B52	A25	B63	A1	A33	B27	B2708	Other			
8029	6196	2160	7344	3013	4721	2600	9059	2700	1302		1994	814	948						757				3871	A203,B703,A66,A24	Immucor		
8103	3165	1024	4091	1431	2715	1225	5297	1289	585	5674	998		575									2100	2100	A203, B46 ,B40,B15	Immucor		
Avg	4681	1592	5718	2222	3718	1913	7178	1995	944	5674	1496	814	762	-	-	-	-	-	757	-		2100	2986	-	-		
Std Dev.S	2143	803	2300	1119	1418	972	2660	998	507	-	704	-	264	-	-	-	-	-	-	-	-	1252	-	-	-		
MFI %CV	46%	50%	40%	50%	38%	51%	37%	50%	54%	-	47%	-	35%	-	-	-	-	-	-	-	-	42%	-	-	-		

Table 19a. Individual laboratory results for Serum #144 - class I by One Lambda Single Antigen

	**** Serum 144 ****																							
	Ctr	A1	A11	A24	A29	A3	A36	A80	B8	A23	A30	A32	A34	B54	B59	A26	A74	A33	A31	A43	A66	A68	A25	Other
	230	12614	7670	7149	6824	8882	8549	8422	22434	6232	5886	4880	6860	3903	5419	3599	5117	5381	3961	3061		3140		One Lambda
	792	6316	3845	3532	2935	3970	4302	4052	12569	3003	2450	2110	3690	1876	2594	1600	2139	2564	1631					OneLambda
	1426	10382	6319	3116	4939	5517	6992	8783	18465	3400	3020	2757	3214	2147	3797	1857	1877	1924		1314				One Lambda
	2400	8296	4941	4082	4175	5280	5438	5494	17986	4117	3359	2824	5573	3071	3525	2615	2816	3192	2324			2158		One Lambda
	3224	11352	6928	6554	5867	7808	7648	7254	20766	5894	5155	4302	6650	4152	5139	3218	4592	4994	3448	2459	2871	2600	2851	A69,B18
	3753	7555	4276	2407	2754	3850	5327	6102	16477	1793	1630	1668	1199	1485	2572									One Lambda
	5214	11054	6858	6403	5394	7668	7614	7063	19692	5503	4596	4055	3975	3135	4250	3014	4374	3670	3228	1992	2130	2318	2552	A69,A2403,A1101,A1102 >
	8001	10439	6620	6013	5021	6893	7418	6887	18591	5190	4263	3733	5908	2715	4045	2856	3684	3846	2809	1923	1882	1804	2203	A69
	8050	8343	4669	2129	4094	5812	6163	9427	17717	2803	2321	2114	2170	1789	2912	1190	1019							One Lambda
	8083	20083	11988	12400	10920	13884	14688	13278	31958	10122	9100	8179	11616	6696	8725	6266	8448	9129	6311	4624	5285	4802	5286	B75,A69,B18
Avg	10643	6411	5379	5292	6956	7414	7676	19666	4806	4178	3662	5086	3097	4298	2913	3785	4338	3387	2462	3046	2736	3206	-	-
Std Dev.S	3842	2346	3071	2339	2938	2867	2534	5052	2378	2191	1908	2971	1548	1834	1488	2221	2250	1498	1275	1345	1190	1214	-	-
MFI %CV	36%	37%	57%	44%	42%	39%	33%	26%	49%	52%	52%	58%	50%	43%	51%	59%	52%	44%	52%	44%	43%	38%	-	-

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 19b. Individual laboratory results for Serum #144 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 144 ****																								
	Ctr	A1	A11	A24	A29	A3	A36	A80	B8	A23	A30	A32	A34	B54	B59	A26	A74	A33	A31	A43	A66	A68	A25	Other	
	8029	2423	2335	2215	1574	2657	1990	1806	6750	1540	1010	1000	1512	787	800	1027	920	883	764	940	854	617		A2403	Immucor
	8103	1119	1005	782	599	1052	924	830	3630															A2403,A1101,A1102	Immucor
Avg	1771	1670	1499	1087	1855	1457	1318	5190	1540	1010	1000	1512	787	800	1027	920	883	764	940	854	617	-	-	-	-
Std Dev.S	922	940	1013	689	1135	754	690	2206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MFI %CV	52%	56%	68%	63%	61%	52%	52%	43%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 20a. Individual laboratory results for Serum #141 - class II by One Lambda Single Antigen

	**** Serum 141 ****																
Ctr	DQ2	DQ5	DQ6	DR1	DR10	DR103	DR11	DR12	DR15	DR16	DR51	DR8	DR9	DR7	DR52	Other	
230	25261	25584	24148	22546	21400	23265	6098	7325	22796	17675	24740	13942	22014	4301	DR14 ,DQ4	One Lambda	
792	21729	21585	21775	17002	14331	15605	3351	3373	16261	11057	21054	8086	15287	2687		OneLambda	
1426	26458	31234	31934	25286	22758	23995	6271	6812	25946	20476	30487	15420	25503	10287	2374 DR13, DR14 ,DQ4,DPw6 >	One Lambda	
2400	22415	24969	24493	22869	20378	21705	5197	5767	22179	16175	25198	12831	21695	6537	2296	One Lambda	
3224	28755	27086	28724	23084	20539	22095	5387	6256	23235	17662	26954	12802	21874	5843		One Lambda	
3753	21150	33054	32136	24613	20088	23104	3908	3052	22359	13254	31766	10060	19782	1562	1622	One Lambda	
5214	22152	23813	23767	22341	20371	21749	4284	4359	21817	16371	23813	11937	21069	4100		One Lambda	
8001	25870	26418	26372	23675	20122	21634	4352	4366	22063	15295	26142	11056	21357	3037	1529 DR14	One Lambda	
8050	21466	30331	30224	24814	20024	22727	4145	3772	23720	16147	30902	10919	20290		1026 DQA1*02,DQA1*04	One Lambda	
8083	41196	41274	40729	32765	28934	31295	7002	7659	31669	23686	39830	17015	31132	7243	2925	One Lambda	
Avg	25645	28535	28430	23900	20895	22717	5000	5274	23205	16780	28089	12407	22000	5066	1962	-	-
Std Dev.S	6037	5694	5624	3880	3561	3797	1183	1698	3841	3516	5349	2613	4082	2700	691	-	-
MFI %CV	24%	20%	20%	16%	17%	17%	24%	32%	17%	21%	19%	21%	19%	53%	35%	-	-

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 20b. Individual laboratory results for Serum #141 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 141 ****																
Ctr	DQ2	DQ5	DQ6	DR1	DR10	DR103	DR11	DR12	DR15	DR16	DR51	DR8	DR9	DR7	DR52	Other	
8029	18413	19761	19405	19349	18874	18992	8009	5961	19443	18131	19378	18318	19266	4996	4472 DR4,DR13,DR1403, DR1404 >	Immucor	
8103	16732	20997	21115	20037	17904	20037	6748	3472	19159	14152	20685	13412	20715	2330	3441 DR3,DR4,DR13, DR14 >	Immucor	
Avg	17573	20379	20260	19693	18389	19515	7379	4717	19301	16142	20032	15865	19991	3663	3957	-	-
Std Dev.S	1189	874	1209	486	686	739	892	1760	201	2814	924	3469	1025	1885	729	-	-
MFI %CV	7%	4%	6%	2%	4%	4%	12%	37%	1%	17%	5%	22%	5%	51%	18%	-	-

Table 21a. Individual laboratory results for Serum #142 - class II by One Lambda Single Antigen

	**** Serum 142 ****																											
	Ctr	DPw3	DPw6	DQ4	DQ5	DQ6	DR15	DR16	DR51	DP9	DP14	DP17	DP20	DPw1	DR12	DR11	DR13	DR9	DP13	DP19	DPw5	DR103	DR8	DP11	DP10	Other		
230	5900	5531	10069	16788	17110	7852	6193	4017																			One Lambda	
792	2638	2457	7019	12541	14788	4500	3079	2867	2198	2071	1935	2614	1604													OneLambda		
1426	5948	5319	11444	20257	23734	7486	5910	4918	5031	4690	4604	5807	3359	2520	2269	1839	2314	2031	3042	2659	2192	2180	2838	2025		One Lambda		
2400	2528	2376	5150	11473	13435	4196	3057	2656	2192			2567														One Lambda		
3224	5086	4760	12097	19576	22855	7211	5422	4417	4075	3655	3688	4909	3040	2582	1407	1287	1663	1442	2217	2147	1331	1418	2512	1272	DR1	One Lambda		
3753	4054	3606	7336	16842	19108	6167	4540	3300	3416	3097	3023	4053	2169	1546	1335	1007	1226		2143		1153	1248				One Lambda		
5214	3601	3126	8260	16335	17860	5299	4067	3022	2999	2857	2714	3513		1564												One Lambda		
8001	4052	3577	11650	19365	21879	5961	4310	3923	3098	2910	2833	3628	2216	1933	1258	1036	1533	1263	1705	1563		1155	1768	1022		One Lambda		
8050	4876	4251	9717	19930	22054	7742	5924	4180	3937	3686	3653	4885	2380	1851	1562	1178	1500	1335	2457	1862	1161	1563	2061	1267		One Lambda		
8083	18968	14952	35435	43075	46915	21279	16593	14523	16203	14218	13268	17072	12471	8072	5216	3633	5074	4345	7004	7412	4097		7436	3111	DR1,DQ8	One Lambda		
Avg	5765	4996	11818	19618	21974	7769	5910	4782	4794	4648	4465	5450	3891	2867	2175	1663	2218	2083	3095	3129	1987	1513	3323	1739	-	-		
Std Dev.S	4789	3665	8601	8780	9424	4925	3922	3499	4373	3942	3645	4489	3828	2332	1534	1011	1445	1300	1965	2428	1255	405	2336	854	-	-		
MFI %CV	83%	73%	73%	45%	43%	63%	66%	73%	91%	85%	82%	82%	98%	81%	71%	61%	65%	62%	63%	78%	63%	27%	70%	49%	-	-		

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 21b. Individual laboratory results for Serum #142 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 142 ****																										
	Ctr	DPw3	DPw6	DQ4	DQ5	DQ6	DR15	DR16	DR51	DP9	DP14	DP17	DP20	DPw1	DR12	DR11	DR13	DR9	DP13	DP19	DPw5	DR103	DR8	DP11	DP10	Other	
8029	3266	3502	4906	8376	12423	6714	4682	3957	2736	2703	2234		2065	1643	1635	1450	1406	1369	1364	2226	1650	1515	1464		DR1,DR1403,DP2>	Immucor	
8103	1306	1402	2033	4855	6707	3157	1867	1429	1057	973	970		713	578	711	548	524	531		852	551	512			DR1,DR14,DP2>	Immucor	
Avg	2286	2452	3470	6616	9565	4936	3275	2693	1897	1838	1602	-	1389	1111	1173	999	965	950	1364	1539	1101	1014	1464	-	-	-	
Std Dev.S	1386	1485	2032	2490	4042	2515	1991	1788	1187	1223	894	-	956	753	653	638	624	593	-	972	777	709	-	-	-	-	
MFI %CV	61%	61%	59%	38%	42%	51%	61%	66%	63%	67%	56%	-	69%	68%	56%	64%	65%	62%	-	63%	71%	70%	-	-	-	-	

Table 22a. Individual laboratory results for Serum #143 - class II by One Lambda Single Antigen

	**** Serum 143 ****																									
Ctr	DQ6	DQ7	DQ8	DQ9	DR1	DR11	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR10	DR52	DR9	DR51	DPw2	DR103	DP18	DP28	DP10	DP402	Other		
230	9043	26744	26678	21177	9616	10175	9306	8437	9949	8036	8467	8675	12084	3015	8172	3614									One Lambda	
792	6116	18255	17291	16813	5189	5666	5080	6181	5825	4412	4675	4660	8367	1638	5864	2076	1909	1693							OneLambda	
1426	7840	24023	21435	20718	7966	7692	6144	7541	8146	6493	6949	7417	9953	2852	7197	2796	2588	3195	2305	1988	1363	1818	2593		One Lambda	
2400	2415	13113	11427	10873	2892	3289	3538	3008	3442	2656	3235	2662	4707		2957										One Lambda	
3224	11635	24785	23931	22686	8420	8783	8277	9327	8577	6468	7161	7471	12677	2812	9252	2944	3122	3259	1550	2482	2112	1863	2632		One Lambda	
3753	4363	21116	19295	17974	6386	6317	4813	6147	6394	4615	5092	5447	8498	2251	5435	1965	1972	2234	1556						One Lambda	
5214	7252	20300	19665	19090	9029	8795	7085	8195	9209	7676	7645	7043	11197	3481	8072	4153	3392	3116	2472	2120	1547	1835	2633		One Lambda	
8001	8549	23799	23110	22406	7271	7011	6551	8216	7745	5658	6026	5899	10793	2285	7731	2799	2716	2061	1288	1517	1171	1149	1737		One Lambda	
8050	7244	23526	21959	20655	9411	9010	7353	8670	9298	7225	7550	8501	11578	3582	8041	3127	3064	3332	2171	2131	1488	1807	2818		One Lambda	
8083	15498	29974	29503	27545	10320	9748	9242	11227	9864	7676	7543	8499	13841	3074	10272	2896	3977	3633		2691	2050				DQ4,DPw4	One Lambda
Avg	7996	22564	21429	19994	7650	7649	6739	7695	7845	6092	6434	6627	10370	2777	7299	2930	2843	2815	1890	2155	1622	1694	2483	-	-	
Std Dev.S	3651	4679	5021	4354	2288	2118	1909	2207	2073	1744	1639	1950	2633	624	2086	680	700	710	486	408	379	306	426	-	-	
MFI %CV	46%	21%	23%	22%	30%	28%	28%	29%	26%	29%	25%	29%	25%	22%	29%	23%	25%	25%	26%	19%	23%	18%	17%	-	-	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 22b. Individual laboratory results for Serum #143 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 143 ****																									
Ctr	DQ6	DQ7	DQ8	DQ9	DR1	DR11	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR10	DR52	DR9	DR51	DPw2	DR103	DP18	DP28	DP10	DP402	Other		
8029	2321	12894	13334	12289	5011	7019	5622	5604	5630	4823	6410	6450	9920	1702		1644	2386	1143	2497						DR1403,DPw4	Immucor
8103	979	7335	8166	6521	2251	3696	2866	2824	2518	1782	2954	3196	4937	770	3063	596	929		863						DR3,DR1403>	Immucor
Avg	1650	10115	10750	9405	3631	5358	4244	4214	4074	3303	4682	4823	7429	1236	3063	1120	1658	1143	1680	-	-	-	-	-	-	-
Std Dev.S	949	3931	3654	4079	1952	2350	1949	1966	2201	2150	2444	2301	3524	659	-	741	1030	-	1155	-	-	-	-	-	-	
MFI %CV	58%	39%	34%	43%	54%	44%	46%	47%	54%	65%	52%	48%	47%	53%	-	66%	62%	-	69%	-	-	-	-	-	-	

Table 23a. Individual laboratory results for Serum #144 - class II by One Lambda Single Antigen

	**** Serum 144 ****																					
	Ctr	DP14	DP17	DP18	DP28	DP9	DPw2	DPw3	DPw6	DR11	DR13	DR14	DR17	DR18	DP20	DP10	DP19	DP402	DR8	DPw4	Other	
230	13672	14446	13062	11558	15667	15970	15411	15955	12030	7378	6034	6987	6682	15175			14585				One Lambda	
792	6357	6921	6436	6094	7468	7617	7421	7384	6110	3556	3670	3346	3286	7157	4682				6483		OneLambda	
1426	12075	12414	11465	9927	13319	14711	14421	14248	8668	6054	5483	5544	5172	13790	8170	2836	12608	1691			One Lambda	
2400	8560	9186	7358	7152	10308	9306	9336	9065	7904	4546	4211	4653	4272	9810	6766	2338			8904		One Lambda	
3224	11428	12264	12363	12017	13595	13666	13381	13199	11026	6433	6296	5776	5529	13141	8923	2438	12107	1557		DR12,DR52	One Lambda	
3753	7978	8768	7514	6441	9398	9764	9440	9350	6580	4015	3861	3824	3831	9561	5409	2106	8734				One Lambda	
5214	11527	12427	11154	10412	13200	13906	13260	12986	20681	5777	5408	5228	5020	13362	9119			12248			One Lambda	
8001	9068	9708	9782	8968	10814	10601	10862	10862	8813	5339	5098	4700	4476	10235	6952	1515	9657	1008			One Lambda	
8050	9712	11002	9896	7749	11813	12601	12221	12201	8277	6569	5997	5623	5978	11606	6417	2656	11032	1360		DR12	One Lambda	
8083	17238	18665	18352	17604	19038	20031	19506	19273	15631	10483	9684	9519	8748	20288	12979	3110		2087	18303		One Lambda	
Avg	10762	11580	10738	9792	12462	12817	12526	12452	10572	6015	5574	5520	5299	12413	7713	2428	11567	1541	11230	-	-	
Std Dev.S	3147	3325	3475	3436	3303	3669	3504	3531	4535	1973	1715	1743	1576	3665	2476	521	1954	399	6244	-	-	
MFI %CV	29%	29%	32%	35%	27%	29%	28%	28%	43%	33%	31%	32%	30%	30%	32%	21%	17%	26%	56%	-	-	

Blue = DSA against cell #139 only

Gold = DSA against cell #140 only

Green = DSA against cell #139 and #140

Table 23b. Individual laboratory results for Serum #144 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 144 ****																					
	Ctr	DP14	DP17	DP18	DP28	DP9	DPw2	DPw3	DPw6	DR11	DR13	DR14	DR17	DR18	DP20	DP10	DP19	DP402	DR8	DPw4	Other	
8029	6794	6903	6174	6306	7680	6418	7611	7941	7525	4720	4733	4268	4734			887		1762	6432	DR12,DR1403,DR1404,DR52	Immucor	
8103	3416	3762	3316	3361	3683	3362	4065	3765	4405	2373	2272	2297	2336				3339	753	3339	DR3,DR12,DR1403,DR1404	Immucor	
Avg	5105	5333	4745	4834	5682	4890	5838	5853	5965	3547	3503	3283	3535	-	-	887	3339	1258	4886	-	-	
Std Dev.S	2389	2221	2021	2082	2826	2161	2507	2953	2206	1660	1740	1394	1696	-	-	-	713	2187			-	
MFI %CV	47%	42%	43%	43%	50%	44%	43%	50%	37%	47%	50%	42%	48%	-	-	-	57%	45%	-	-	-	

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Table 24. Individual Virtual crossmatch results for Serum #143 vs Donor# V1

Donor #V1 HLA genotype: A*29:02:01-A*34:01:01-B*40:02:01-B*44:03:01-C*15:02:01-C*16:01:01-DRB1*07:01-DRB1*15:02-DRB4*01:01-DRB5*01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*05:02-DPA1*02:01-DPA1*02:02-DPB1*01:01-DPB1*11:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	143	100	Positive	B61 (6317)	Positive	DR15 (6056) DR51 (1274)	Unacceptable	
230	143	89	Positive	B61 (7487) A34 (3033) Bw6 (7487)	Positive	DR15 (9976) DR51 (3936)	Unacceptable	
792	143	100	Positive	B61 (3849) A34 (1704)	Positive	DR15 (5825)	Unacceptable	DRB5*01:01 bead = 1100 MFI
1426	143	100	Positive	B61 (7602) A34 (2783) A29 (2956)	Positive	DR15 (8424) DR51 (1524)	Unacceptable	
1461	143	57	Positive	B61 (1667)	Positive	DR15 (2319) DR51 (581)	Unacceptable	
2400	143	100	Positive	B61 (4921) A34 (2034) A29 (1530)	Positive	DR15 (3144)	Unacceptable	
3224	143	100	Positive	B61 (7547) A34 (3627) A29 (2003) Bw6 (19200)	Positive	DR15 (8577) DR51 (3122)	Unacceptable	
3753	143	99.98	Positive	B61 (4007) A34 (1666) Bw6 (6562)	Positive	DR15 (6394) DR51 (1972)	Unacceptable	
3966	143	100	Positive	B61 (5238) A34 (2969) A29 (1406)	Positive	DR15 (6400) DR51 (3608)	Unacceptable	
8001	143	100	Positive	B61 (7454) A34 (1627) A29 (1231)	Positive	DR15 (7597) DR51 (1180)	Unacceptable	
8029	143	60	Positive	B61 (1013)	Positive	DR15 (5630) DR51 (2386)	Unacceptable	-
8050	143	99.988	Positive	B61 (5633) A34 (1691) Bw6 (5000)	Positive	DR15 (9298) DR51 (3064)	Unacceptable	
8080	143	100	Positive	B61 (6613)	Positive	DR15 (8755) DR51 (1969)	Unacceptable	
8083	143	99.99	Positive	B40 (8272) A34 (2490) A29 (2298)	Positive	DR15 (9458)	Unacceptable	Also Class I antibodies
8103	143	50	Positive	B40 (649)	Positive	DR15 (2518) DR51 (929)	Unacceptable	unacceptable due to high MFI on B cell
8110	143	100	Positive	B61 (5050) A34 (2300) Bw6 (9400)	Positive	DR15 (10400) DR53 (3900) DQ5 (7070)	Unacceptable	
8111	143	100	Positive	B61 (6100) A34 (2200)	Positive	DR15 (7200) DR51 (2600)	Unacceptable	

Table 25. Individual Virtual crossmatch results for Serum #143 vs Donor# V2

Donor #V2 HLA genotype: A*03:01:01-A*68:02:01-B*49:01:01-B*53:01:01-C*04:01:01-C*07:01:01-DRB1*01:01:01-DRB1*10:01:01-DQA1*01:01:01-DQA1*01:05:01-DQB1*05:01-DPA1*01:03:01-DPB1*02:01:02G-DPB1*04:02:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	143	100	Positive	B53 (5429) A68 (21983) A3 (8033)	Positive	DR1 (6205) DR10 (2173) DPw2 (2443) DPw4 (1933)	Unacceptable	
230	143	43	Positive	B53 (11332) A68 (25733) A3 (14787)	Positive	DR1 (9063) DR10 (3015)	Unacceptable	
792	143	100	Positive	B53 (5969) A68 (17226) A3 (6725)	Positive	DR1 (5189) DR10 (1638) DPw2 (1693)	Unacceptable	
1426	143	100	Positive	B49 (1944) B53 (8613) A68 (22598) A3 (10228)	Positive	DR1 (8555) DR10 (2827) DPw2 (3171) DP402 (2568)	Unacceptable	
1461	143	57	Positive	B53 (3906) A68 (21013) A3 (3971)	Positive	DR1 (2199) DR10 (569) DPw2 (532)	Unacceptable	
2400	143	100	Positive	B49 (1246) B53 (8460) A68 (22628) A3 (9499)	Positive	DR1 (2910)	Unacceptable	
3224	143	100	Positive	B49 (1925) B53 (9709) A68 (27220) A3 (13020)	Positive	DR1 (8420) DR10 (2812) DPw2 (3259) DP402 (2632)	Unacceptable	
3753	143	99.98	Positive	B53 (8746) A68 (27860) A3 (7406)	Positive	DR1 (6386) DR10 (2251) DPw2 (2234)	Unacceptable	
3966	143	100	Positive	B49 (1434) B53 (8072) A68 (23895)	Positive	DR1 (7480) DR10 (3005) DPw2 (3448) DPw4 (2634)	Unacceptable	
8001	143	100	Positive	B49 (1411) B53 (10026) A68 (23917) A3 (11223)	Positive	DR1 (7271) DR10 (2285) DPw2 (2061) DP402 (1737)	Unacceptable	C*07:01 not included on LSAB panel; DQA1*01:05 not included on LSAB panel
8029	143	60	Positive	B53 (4508) A68 (19652) A3 (6279)	Positive	DR1 (5011) DR10 (1702) DPw2 (1143) DPw4 (1069)	Unacceptable	
8050	143	99.988	Positive	B53 (10917) A68 (25435) A3 (10601)	Positive	DR1 (9411) DR10 (3582) DPw2 (3332) DP402 (2818)	Unacceptable	
8080	143	100	Positive	B53 (8891) A68 (23814) A3 (10707)	Positive	DR1 (9754) DR10 (3143) DPw2 (3507) DP402 (2852)	Unacceptable	
8083	143	99.99	Positive	B49 (1843) B53 (11469) A68 (28426) A3 (13146)	Positive	DR1 (10320) DR10 (3074)	Unacceptable	Also Class I antibodies
8103	143	50	Positive	B53 (2156) A68 (19889) A3 (3210)	Positive	DR1 (2251) DR10 (770)	Unacceptable	
8110	143	100	Positive	B53 (10740) A68 (27100) A3 (14400)	Positive	DR1 (11100) DR10 (10700) DQ5 (7100)	Unacceptable	
8111	143	100	Positive	B49 (1400) B53 (11300) A68 (25100) A3 (8600)	Positive	DR1 (7100) DR10 (3100) DPw2 (2400) DPw4 (2000)	Unacceptable	

Table 26. Individual Virtual crossmatch results for Serum #143 vs Donor# V3

Donor #V3 HLA genotype: A*23:01:01-A*34:01:01-B*51:01:02-B*57:02:01-C*04:01:01-C*18:02:01-DRB1*04:05:01-DRB4*01:03-DQA1*03:03-DQB1*03:02:01-DQB1*04:01:01-DPA1*02:01-DPA1*02:02-DPB1*01:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	143	100	Positive	B51 (3546) A23 (3343) B57 (18647)	Positive	DR4 (6614) DQ8 (22321)	Unacceptable	
230	143	58	Positive	B51 (8851) A34 (3033) A23 (6722) B57 (25778)	Positive	DR4 (11413) DQ8 (23914)	Unacceptable	
792	143	100	Positive	B51 (3263) A23 (2903) B57 (16000)	Positive	DR4 (5623) DQ8 (17291)	Unacceptable	
1426	143	100	Positive	B51 (5745) A34 (2783) A23 (5247) B57 (22435)	Positive	DR4 (7840) DQ8 (21402)	Unacceptable	
1461	143	57	Positive	B51 (988) A23 (1010) B57 (11430)	Positive	DR4 (4506) DQ8 (8279)	Unacceptable	
2400	143	100	Positive	B51 (4666) A34 (2034) A23 (3581) B57 (21232)	Positive	DR4 (3872) DQ8 (11320)	Unacceptable	
3224	143	100	Positive	B51 (10398) A34 (3627) A23 (6012) B57 (22866)	Positive	DR4 (12677) DQ8 (23931)	Unacceptable	
3753	143	99.98	Positive	B51 (6329) A34 (1666) A23 (3075) B57 (21659)	Positive	DR4 (8498) DQ8 (19295)	Unacceptable	
3966	143	100	Positive	B51 (8132) A34 (1780) A23 (4562) B57 (21219)	Positive	DR4 (10505) DQ8 (20561)	Unacceptable	
8001	143	100	Positive	B51 (5415) A34 (1627) A23 (4788)	Positive	DR4 (7251) DQ8 (23110)	Unacceptable	B*57:02 not included on LSAB panel
8029	143	60	Positive	A23 (1141) B57 (13299)	Positive	DR4 (9355) DQ7 (12894)	Unacceptable	Transplant veto
8050	143	99.988	Positive	B51 (9915) A34 (1691) A23 (4644) B57 (23017)	Positive	DR4 (11578) DQ8 (21959)	Unacceptable	
8080	143	100	Positive	B51 (5160) A23 (5524) B57 (22112)	Positive	DR4 (19764) DQ8 (23056)	Unacceptable	
8083	143	99.99	Positive	B51 (6068) B57 (27741)	Positive	DQ8 (29503)	Unacceptable	Also Class I antibodies
8103	143	50	Positive	A23 (521) B57 (9048)	Positive	DR4 (4937) DQ3 (8166)	Unacceptable	unacceptable due to high MFI on T and B cell
8110	143	100	Positive	B51 (9900) A34 (2300) A23 (6800) B57 (24500)	Positive	DR4 (10150) DR53 (3900) DQ8 (22500)	Unacceptable	
8111	143	100	Positive	B51 (8900) A34 (2200) A23 (3400) B57 (23700)	Positive	DR4 (9300) DQ8 (19700)	Unacceptable	

Table 27. Individual Virtual crossmatch results for Serum #143 vs Donor# V4

Donor #V4 HLA genotype: A*26:01:01-A*30:01:01-B*13:02:01-B*38:01:01-C*06:02:01-C*12:03:01-DRB1*07:01:01-DRB4*01:01:01-DRB4*01:03:01-DQA1*02:01:01-DQB1*02:02-DPA1*02:01:01-DPB1*11:01:01-DPB1*17:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	143	100	Positive	B38 (10024)	Positive	No class II DSA	Unacceptable	Positive due to Class I DSA
230	143	8	Positive	B38 (17079)	Positive	No class II DSA	Unacceptable	Only Class I DSA present
792	143	100	Positive	B38 (9786)	Positive	No class II DSA	Unacceptable	
1426	143	100%	Positive	B38 (13796)	Positive	No class II DSA	Unacceptable	
1461	143	57	Positive	B38 (5892)	Positive	No class II DSA	Unacceptable	
2400	143	100%	Positive	B38 (11910)	Positive	No class II DSA	Unacceptable	Positive B cell crossmatch due to Class I reactivity.
3224	143	100	Positive	B38 (14772)	Positive	No class II DSA	Unacceptable	
3753	143	99.98%	Positive	B38 (13209)	Positive	No class II DSA	Unacceptable	
3966	143	100%	Positive	B38 (13363)	Positive	No class II DSA	Unacceptable	
8001	143	100	Positive	B38 (15313)	Positive	No class II DSA	Unacceptable	
8029	143	60%	Positive	B38 (6818)	Positive	No class II DSA	Unacceptable	
8050	143	99.988	Positive	B38 (16733)	Positive	No class II DSA	Unacceptable	
8080	143	100	Positive	B38 (14029)	Positive	No class II DSA	Unacceptable	Patient has Class I DSA
8083	143	99.99	Positive	B38 (14854)	Positive	No class II DSA	Unacceptable	Due to class I antibodies
8103	143	50	Positive	B38 (3676)	Negative	No class II DSA	Unacceptable	High MFI on class I
8110	143	100	Positive	B38 (12400)	Positive	DR53 (3900) DP17 (3000)	Unacceptable	
8111	143	100	Positive	B38 (16400)	Positive	No class II DSA	Unacceptable	

Table 28. Individual Virtual crossmatch results for Serum #144 vs Donor# V1

Donor #V1 HLA genotype: A*29:02:01-A*34:01:01-B*40:02:01-B*44:03:01-C*15:02:01-C*16:01:01-DRB1*07:01-DRB1*15:02-DRB4*01:01-DRB5*01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*05:02-DPA1*02:01-DPA1*02:02-DBP1*01:01-DBP1*11:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	144	94	Positive	A34 (1167) A29 (4646)	Positive	No class II DSA	Unacceptable	Positive due to Class I DSA
230	144	80	Positive	A34 (4592) A29 (6797)	Positive	No class II DSA	Unacceptable	
792	144	99	Positive	A29 (2935)	Positive	No class II DSA	Unacceptable	A*34:01 bead = 983 MFI
1426	144	94	Positive	A29 (4674)	Positive	No class II DSA	Unacceptable	
1461	144	22	Positive	A34 (786) A29 (884)	Positive	No class II DSA	Unacceptable	
2400	144	95	Positive	A34 (1690) A29 (4045)	Borderline	No class II DSA	Unacceptable	Weakly positive B cell crossmatch due to Class I reactivity.
3224	144	97	Positive	A34 (6650) A29 (5867)	Positive	No class II DSA	Unacceptable	
3753	144	90.86	Negative	A34 (1199) A29 (2754)	Negative	No class II DSA	Unacceptable	Crossmatch is difficult to predict based on DSA strengths. If proceeding, a physical crossmatch is required.
3966	144	96	Positive	A34 (4709) A29 (4859)	Positive	DPA1*02 (9543)	Unacceptable	
8001	144	97	Positive	A34 (1634) A29 (5018)	Positive	No class II DSA	Unacceptable	
8029	144	27	Positive	A29 (1520)	Positive	No class II DSA	Other	Minimum risk of hyperacute rejection due to low level donor HLA specific antibodies but greater than standard risk of rejection
8050	144	93.927	Positive	A29 (4094)	Positive	No class II DSA	Unacceptable	
8080	144	96	Positive	A29 (5741)	Positive	No class II DSA	Unacceptable	Patient has Class I DSA
8083	144	96.94	Positive	A34 (4134) A29 (10920)	Positive	No class II DSA	Unacceptable	Due to class I antibodies
8103	144	12	Borderline	A29 (599)	Negative	No class II DSA	Acceptable	Low MFI on the class I
8110	144	97	Positive	A34 (4600) A29 (8700)	Positive	DR7 (2700) DPw1 (9600)	Unacceptable	
8111	144	67	Positive	A34 (1600) A29 (3200)	Positive	No class II DSA	Unacceptable	

Table 29. Individual Virtual crossmatch results for Serum #144 vs Donor# V2

Donor #V2 HLA genotype: A*03:01:01-A*68:02:01-B*49:01:01-B*53:01:01-C*04:01:01-C*07:01:01-DRB1*01:01:01-DRB1*10:01:01-DQA1*01:01:01-DQA1*01:05:01-DQB1*05:01-DPA1*01:03:01-DPB1*02:01:02G-DPB1*04:02:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	144	94	Positive	A68 (1287) A3 (5747)	Positive	DPw2 (13499) DPw4 (11612)	Unacceptable	
230	144	48	Positive	A68 (2585) A3 (8923)	Positive	DPw2 (16133) DP402 (14585)	Unacceptable	
792	144	99	Positive	A3 (3970)	Positive	DPw2 (7617) DPw4 (6483)	Unacceptable	
1426	144	94	Positive	A3 (5324)	Positive	DPw2 (14390) DP402 (12608)	Unacceptable	
1461	144	22	Positive	A3 (1427)	Positive	DPw2 (3668) DPw4 (3709)	Unacceptable	
2400	144	95	Positive	A3 (5211)	Positive	DPw2 (9190) DP402 (8840)	Unacceptable	
3224	144	97	Positive	A68 (2600) A3 (7808)	Positive	DP402 (12107)	Unacceptable	
3753	144	90.86	Positive	A3 (3850)	Positive	DPw2 (9764) DP402 (8734)	Unacceptable	
3966	144	96	Positive	A30 (3943) A68 (1112)	Positive	DPw2 (12118) DPw4 (10526) DPA1*01 (9653)	Unacceptable	
8001	144	97	Positive	A68 (726) A3 (6893)	Positive	DPw2 (10601) DP402 (9657)	Unacceptable	C*07:01 not included on LSAB panel; DQA1*01:05 not included on LSAB panel
8029	144	27	Positive	A3 (3123)	Positive	DPw2 (6418) DPw4 (6432)	Unacceptable	Low risk of hyperacute rejection but significant risk of early rejection and antibody mediated graft damage.
8050	144	93.927	Positive	A3 (5812)	Positive	DPw2 (12601) DP402 (11032)	Unacceptable	
8080	144	96	Positive	A3 (7009)	Positive	DPw2 (12513) DP402 (11221)	Unacceptable	
8083	144	96.94	Positive	A3 (13884)	Positive	DPw2 (20031) DPw4 (18303)	Unacceptable	Also Class I antibodies
8103	144	12	Positive	A3 (1052)	Positive	DPw2 (3362)	Unacceptable	
8110	144	97	Positive	A68 (2100) A3 (10800)	Positive	DR10 (12800) DPw2 (9400) DP402 (17700)	Unacceptable	
8111	144	67	Positive	A3 (3400)	Positive	DPw2 (10000) DPw4 (9300)	Unacceptable	

Table 30. Individual Virtual crossmatch results for Serum #144 vs Donor# V3

Donor #V3 HLA genotype: A*23:01:01-A*34:01:01-B*51:01:02-B*57:02:01-C*04:01:01-C*18:02:01-DRB1*04:05:01-DRB4*01:03-DQA1*03:03-DQB1*03:02:01-DQB1*04:01:01-DPA1*02:01-DPA1*02:02-DBP1*01:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	144	94	Positive	A34 (1167) A23 (3927)	Positive	No class II DSA	Unacceptable	Positive due to Class I DSA
230	144	8	Positive	A34 (4592) A23 (6231)	Positive	No class II DSA	Unacceptable	Only Class I DSA present
792	144	99	Positive	A23 (3003)	Positive	No class II DSA	Unacceptable	
1426	144	94	Positive	A23 (3207)	Positive	No class II DSA	Unacceptable	
1461	144	22	Positive	A34 (786) A23 (811)	Positive	No class II DSA	Unacceptable	
2400	144	95	Positive	A34 (1690) A23 (4046)	Borderline	No class II DSA	Unacceptable	Weak B Cell crossmatch due to Class I reactivity.
3224	144	97	Positive	A34 (6650) A23 (5894)	Positive	No class II DSA	Unacceptable	
3753	144	90.86	Negative	A34 (1199) A23 (1793)	Negative	No class II DSA	Unacceptable	No Class II DSA detected.
3966	144	96	Positive	A34 (4709) A23 (4354)	Positive	DPA1*02 (9543)	Unacceptable	
8001	144	97	Positive	A34 (1634) A23 (5190)	Positive	No class II DSA	Unacceptable	B*57:02 not included on LSAB panel; DPA1*02:02 not included on LSAB panel
8029	144	27	Positive	A23 (1540)	Borderline	No class II DSA	Unacceptable	Minimum risk of hyperacute rejection due to low level donor HLA specific antibodies but greater than standard risk of rejection
8050	144	93.927	Positive	A23 (2803)	Positive	No class II DSA	Unacceptable	
8080	144	96	Positive	A23 (5427)	Positive	No class II DSA	Unacceptable	Patient has Class I DSA
8083	144	96.94	Positive	A34 (4134) A23 (10122)	Positive	No class II DSA	Unacceptable	Due to class I antibodies
8103	144	12	Negative	no class I DSA	Negative	No class II DSA	Acceptable	There is no donor specific antibodies
8110	144	97	Positive	A34 (4600) A23 (7700)	Positive	DPw1 (9700)	Unacceptable	
8111	144	67	Borderline	A23 (2200)	Borderline	No class II DSA	Unacceptable	A*34:02 reactivity but donor V3 is *34:01

Table 31. Individual Virtual crossmatch results for Serum #144 vs Donor# V4

Donor #V4 HLA genotype: A*26:01:01-A*30:01:01-B*13:02:01-B*38:01:01-C*06:02:01-C*12:03:01-DRB1*07:01:01-DRB4*01:01:01-DRB4*01:03:01-DQA1*02:01:01-DQB1*02:02-DPA1*02:01:01-DPB1*11:01:01-DPB1*17:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	144	94	Positive	A26 (1904) A30 (2957)	Positive	DP17 (12236)	Unacceptable	
230	144	13	Positive	A26 (3542) A30 (5702)	Positive	DP17 (14446)	Unacceptable	
792	144	99	Positive	A26 (1600) A30 (2307)	Positive	DP17 (6921)	Unacceptable	
1426	144	94	Positive	A26 (1664) A30 (2025)	Positive	DP17 (12094)	Unacceptable	
1461	144	22	Positive	A26 (648) A30 (767)	Positive	DP17 (4020)	Unacceptable	
2400	144	95	Positive	A26 (2486) A30 (3214)	Positive	DP17 (9125)	Unacceptable	
3224	144	97	Positive	A26 (3218) A30 (5155)	Positive	DP17 (12264)	Unacceptable	
3753	144	90.86	Negative	A30 (1630)	Positive	DP17 (8768)	Unacceptable	
3966	144	96	Positive	A26 (2322) A30 (3943)	Positive	DP17 (10688)	Unacceptable	
8001	144	97	Positive	A26 (2856) A30 (4038)	Positive	DP17 (9708)	Unacceptable	
								Minimum risk of hyperacute rejection due to low level donor HLA specific antibodies but greater than standard risk of rejection
8029	144	27	Positive	A26 (1027) A30 (1010)	Positive	no class II DSA	Unacceptable	
8050	144	93.927	Positive	A26 (1190) A30 (2321)	Positive	DP17 (11002)	Unacceptable	
8080	144	96	Positive	A26 (1880) A30 (3846)	Positive	DP17 (10988)	Unacceptable	
8083	144	96.94	Positive	A26 (6266) A30 (8969)	Positive	DP17 (18665)	Unacceptable	Also Class I antibodies
8103	144	12	Negative	no class I DSA	Positive	DP17 (3762)	Acceptable	DP antigen considered a low risk
8110	144	97	Positive	A26 (2100) A30 (7100)	Positive	DR7 (2700) DP17 (13700)	Unacceptable	
8111	144	67	Borderline	A26 (1300) A30 (1700)	Positive	DP17 (9300)	Unacceptable	

Table 32: Individual Cutoff values and Pretreatment - Exchange 24

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera Pretreatment
230	A	2000		DRB1	2000	One Lambda	SAB Explex
	B	2000		DRB3/4/5	2000		
	C	4000		DQA1	2000		
	Class I			DQB1	2000		
				DPB1	4000		
				Class II			
792	A	1500		DRB1	1500	OneLambda	Single Antigen
	B	1500		DRB3/4/5	1500		
	C	1500		DQA1	1500		
	Class I	1500		DQB1	1500		
				DPB1	1500		
				Class II	1500		
1426	A	1000		DRB1	1000	One Lambda	Single Antigen
	B	1000		DRB3/4/5	1000		EDTA
	C	1000		DQA1	1000		
	Class I	1000		DQB1	1000		
				DPB1	1000		
				Class II	1000		
2400	A	2000		DRB1	2000	One Lambda	Single Antigen
	B	2000		DRB3/4/5	2000		
	C	2000		DQA1	2000		
	Class I	2000		DQB1	2000		
				DPB1	2000		
				Class II	2000		
3224	A	1000		DRB1	1000	One Lambda	Single Antigen
	B	1000		DRB3/4/5	1000		EDTA
	C	1000		DQA1	1000		
	Class I	1000		DQB1	1000		
				DPB1	1000		
				Class II	1000		
3753	A	1000		DRB1	1000	One Lambda	Single Antigen
	B	1000		DRB3/4/5	1000		DTT
	C	2000		DQA1	1000		
	Class I	1000		DQB1	1000		
				DPB1	2000		
				Class II	1000		
5214	A	2000		DRB1	2000	One Lambda	Singel Antigen
	B	2000		DRB3/4/5	2000		
	C	2000		DQA1	2000		
	Class I	2000		DQB1	2000		
				DPB1	2000		
				Class II	2000		

Table 32: Individual Cutoff values and Pretreatment - Exchange 24

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera Pretreatment
8001	A	1000	DRB1		One Lambda	Singel Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I		DQB1				
			DPB1				
			Class II	1000			
8029	A	500	DRB1	500	lifecodes	Singel Antigen	None
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I	16	DQB1	500			
			DPB1	500			
			Class II	55			
8050	A	1000	DRB1	1000	One Lambda	Singel Antigen	DTT
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
8083	A		DRB1		One Lambda	Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	2000	DQB1				
			DPB1				
			Class II	2000			
8103	A	117	DRB1	225	IMMUCOR	Single Antigen	Heat Inactivation
	B	102	DRB3/4/5	225			
	C	176	DQA1	223			
	Class I	14981	DQB1	223			
			DPB1	140			
			Class II	15729			