

Report of the 25th Single Antigen, Flow and Virtual Crossmatch Exchange

June 6, 2022

Cells	145-146
Serum	147-150

In this current study, serum 143 (patient 1) and virtual donor V2 from Exchange 24 (March 2022) were re-examined as serum 147 and cell 145. A comparison of virtual crossmatch predictions (VXM) (serum 143 vs. V2) against the physical flow crossmatch (FXM) (**serum 147 vs. cell 145**) were summarized in **Part 1** of this report. **Part 2** examined the Luminex single

antigen (SAB) data for the 4 sera tested (**sera 147 - 150**). **Part 3** summarized the FXM results for 2 cells (**cells 145 - 146**) against the 4 sera. Finally, in **Part 4**, the VXM predictions for 3 potential donors (V1 - V3) against 2 sera (serum 149 and serum 150) were evaluated.

Part 1

Physical Flow Cytometric Crossmatch vs. Virtual Crossmatch

Direct comparisons of VXM predictions with physical FXM outcomes were shown in Tables 1a – 1c. Seventeen labs submitted VXM predictions for serum 143 vs. donor V2 in Exchange 24. Among them, 12 labs reported back physical T-cell and B-cell FXM results (Table 1a). Review of the data

showed physical FXM outcomes to be consistent with predictions, as each of the 12 labs reported the physical T/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 024					Exchange 025				
Virtual Crossmatch - Serum 143 (Patient 1) vs. Donor V2					Physical Flow Crossmatch - Serum 147 vs. Cell 145				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V2	143	12	POS(12)	POS(12)	145	147	12	POS(12)	POS(12)

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

		T-cell Virtual XM (Exchange 24)		
		+	-	∅
Physical T-cell FXM (Exchange 25)	+	12		
	-			
	∅			

		B-cell Virtual XM (Exchange 24)		
		+	-	∅
Physical B-cell FXM (Exchange 25)	+	12		
	-			
	∅			

+ / - = positive/negative ∅ = uncertain/not typed

n = number of labs

The reporting of DSA and DSA strength was also consistent across the 2 studies. In Exchange 24, anti-A68 (25336), -A3 (10609), -B53 (9363), -DR1 (7619), and -DR10 (2812) reactivity was reported against donor V2. Additional anti-DP2 (3116) and -DP4(DP402) (2343) reactivity was also re-

ported by some labs. In Exchange 25, labs once again reported multiple DSA (A68, A3, B53, DR1, DR10, DP2, DP4) against the donor, with respective MFI of 24757, 10957, 10374, 7230, 2801, 2555, 2411).

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

Cell 145 HLA genotype: A*03:01-A*68:02-B*49:01-B*53:01-C*04:01-C*07:01-DRB1*01:01-DRB1*10:01-DQA1*01:01-DQA1*01:05-DQB1*05:01-DPA1*01:03-DPB1*02:01:02G-DPB1*04:02:01G

Exchange 024					Exchange 025				
Virtual Crossmatch - Serum 143 (Patient 1) vs. Donor V2					Physical Flow Crossmatch - Serum 147 vs. Cell 145				
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)
230	Positive	B53 (11332) A68 (25733) A3 (14787)	Positive	DR1 (9063) DR10 (3015)	230	POSITIVE	A3,A68,B53,B49	POSITIVE	DR1,DR10
792	Positive	B53 (5969) A68 (17226) A3 (6725)	Positive	DR1 (5189) DR10 (1638) DPw2 (1693)	792	POSITIVE	A68 (19677), A3 (7268), B53 (6414)	POSITIVE	DR1 (4387)
1426	Positive	B49 (1944) B53 (8613) A68 (22598) A3 (10228)	Positive	DR1 (8555) DR10 (2827) DPw2 (3171) DP402 (2568)	1426	POSITIVE	A*03:01 (12597), A*68:02 (25421), B*49:01 (1708), B*53:01 (12318)	POSITIVE	DPB1*02:01 (3322), DPB1*04:02 (2872), DRB1*01:01 (8806), DRB1*10:01 (3516)
2400	Positive	B49 (1246) B53 (8460) A68 (22628) A3 (9499)	Positive	DR1 (2910)	2400	POSITIVE	A*03:01(11431), A*68:02(23468), B*49:01(1772), B*53:01(10268)	POSITIVE	DRB1*01:01(6658), DRB1*10:01(2716), DPB1*02:01(2463), DPB1*04:02(2062)
3224	Positive	B49 (1925) B53 (9709) A68 (27220) A3 (13020)	Positive	DR1 (8420) DR10 (2812) DPw2 (3259) DP402 (2632)	3224	POSITIVE		POSITIVE	
3753	Positive	B53 (8746) A68 (27860) A3 (7406)	Positive	DR1 (6386) DR10 (2251) DPw2 (2234)	3753	POSITIVE	A3(9419), A68(26282), B53(9550)	POSITIVE	DR1(6392), DR10(2432), DP2(2235)
3966	Positive	B49 (1434) B53 (8072) A68 (23895)	Positive	DR1 (7480) DR10 (3005) DPw2 (3448) DPw4 (2634)	3966	POSITIVE		POSITIVE	
8001	Positive	B49 (1411) B53 (10026) A68 (23917) A3 (11223)	Positive	DR1 (7271) DR10 (2285) DPw2 (2061) DP402 (1737)	8001	POSITIVE	A*68:02(25182) A*03:01(10957) B*53:01(9906) B*49:01(1328)	POSITIVE	DRB1*01:01 (7445) DRB1*10:01 (2801) DPB1*02:01 (2321) DPB1*04:02 (1756)
8050	Positive	B53 (10917) A68 (25435) A3 (10601)	Positive	DR1 (9411) DR10 (3582) DPw2 (3332) DP402 (2818)	8050	POSITIVE	A3(9148) B53(10374) A68(24385)	POSITIVE	DR1(7230) DR10(2534) DP2(2416) DPB1*04:02(1931)
8083	Positive	B49 (1843) B53 (11469) A68 (28426) A3 (13146)	Positive	DR1 (10320) DR10 (3074)	8083	POSITIVE	A*03:01(13254), A*68:02(28777), B*53:01(11146)	POSITIVE	DRB1*01:01 (13576) DRB1*10:01(6138) DPB1*02:01(5014) DPB1*18:01(4259)
8103	Positive	B53 (2156) A68 (19889) A3 (3210)	Positive	DR1 (2251) DR10 (770)	8103	POSITIVE	A*03(3332); A*68(21030); B*53(4394); C*04(507)	POSITIVE	DRB1*01(2118); DRB1*10(922); DQA*01(3856)
8111	Positive	B49 (1400) B53 (11300) A68 (25100) A3 (8600)	Positive	DR1 (7100) DR10 (3100) DPw2 (2400) DPw4 (2000)	8111	POSITIVE	A68(26500) A3(6000) B53(6000)	POSITIVE	DR1(6500) DR10(2500) DP2(2700) DP(2200)

Part 2

Class I and class II Luminex single antigen results for serum samples 147 - 150 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 30.

Antibody Identification

Serum 147: This sample was previously examined as serum 143 in Exchange 24. A comparison of the results showed the reporting of antibodies and antibody strength to be consistent across the 2 studies.

Serum 148: Anti-A25 (20207), -A26 (14293), -A43 (13574), and -A2 (5139) reactivity was reported by $\geq 90\%$ of labs. In addition, strong anti-A11 (10986), and -A66 (10302) reactivity was detected, along with reactivity to DR4 (5418) and DR53 (3584).

Against cell 145, the reporting of DSA was mixed among labs, with 7 labs reporting weak anti-A68 (1831) reactivity and 4 labs noting the absence of class I DSA. By contrast, strong class I (A26, A2) reactivity was reported against cell 146, with respective MFI = 14293 and 5139.

Serum 149: Strong reactivity to 7C specificities was reported in this sample, including anti-B13 (23901), -B47 (11802), -B27 (16213), -B48 (15110), -B60 (17664), -B61 (17621), -B7 (17374), and -B81 (15506) reactivity. In addition, strong reactivity to DR7 (13915) and to DP anti-sera, including DP9 (10630) and DP10 (10436), was reported.

Against cell 145, labs reported anti-B49 (2020), -DP2 (9616), and -DP4 (DP402) (7004) reactivity. Against cell 146, anti-Cw2 (4580), -B49 (2020), -DP2 (9616) and -DP6 (8987) reactivity was reported.

Serum 150: Strong class I reactivity was detected in the sample by all 13 labs, including reactivity to B49, B50, B72, B62, B35, and B53 anti-sera. Each were reported with median MFI's > 18000 . Class II reactivity was much weaker, with $\geq 90\%$ of labs reporting anti-DR17 (3422), -DR18 (3171), and -DR52 (2181) reactivity.

Multiple DSA (B49, B53, Cw4, A68) were reported against cell 145, with respective MFI = 21539, 18214, 2366, 1110. Against cell 146, labs reported anti-B49 (21539) and -A2 (1811) reactivity.

Conclusion:

For each of the 4 serum samples examined in this study, good agreement ($\geq 90\%$) was achieved in the reporting of class I and class II antibodies. Antibody strength of peak class I antibodies were all > 20000 MFI. By contrast, antibody strength of peak class II antibodies ranged from just above 3000 MFI to over 20000 MFI.

Exchange 24	
Class I	
*** Serum 143 ***	
Antigen	Median
A11	19975
A2	27016
A23	4716
A24	14022
A3	10609
A36	4924
A43	4640
A68	25336
A69	25249
B18	13511
B35	13301
B38	14463
B41	8244
B42	9688
B45	5871
B50	7344

Exchange 25	
Class I	
*** Serum 147 ***	
Antigen	Median
A11	20600
A2	27299
A23	4703
A24	14359
A3	10957
A36	4254
A43	3386
A68	24757
A69	24591
B18	13303
B35	13687
B38	15299
B41	7573
B42	8617
B45	5285
B50	6877

Exchange 24	
Class II	
*** Serum 143***	
Antigen	Median
DQ6	7248
DQ7	22321
DQ8	20550
DQ9	19873
DR1	7619
DR11	7356
DR13	6348
DR14	7868
DR15	7946
DR16	6063
DR17	6680
DR18	6747
DR4	10373
DR10	2812
DR52	7731
DR9	2799

Exchange 25	
Class II	
*** Serum 147 ***	
Antigen	Median
DQ6	6761
DQ7	21965
DQ8	19690
DQ9	19595
DR1	7230
DR11	7237
DR13	6969
DR14	7323
DR15	7543
DR16	6256
DR17	6149
DR18	6953
DR4	9863
DR10	2801
DR52	6981
DR9	2788

Multiple class I (A68, A3, B53) and class II DSA (DR1, DR10, DP2, DP4) were detected against cell 145, with the strength of the highest DSA exceeding 24000 MFI. Against cell 146, anti-A2 (27299), DQ7 (21965), DR1 (7230), and DP2 (2555) reactivity was reported. Additional anti-B49 (1855) and DQA1*06 (17405) reactivity was also reported by some labs.

Genotypes of cells provided by UCLA

Cell 145 (Mixed): A*03:01-A*68:02-B*49:01-B*53:01-C*04:01-C*07:01-DRB1*01:01-DRB1*10:01-DQA1*01:01-DQA1*01:05-DQB1*05:01-DPA1*01:03-DPB1*02:01:02G-DPB1*04:02:01G

Cell 146 (Hispanic): A*02:01-A*26:01-B*27:05-B*49:01-C*02:02-C*07:01-DRB1*01:02-DRB1*08:03-DQA1*01:01-DQA1*06:01-DQB1*03:01-DQB1*05:01:01G-DPA1*01:03-DPB1*02:01:02G-DPB1*06:01:01G

Part 3

Flow cytometric crossmatch results for cell 145 and cell 146 against serum samples 147 - 150 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 145. For cell 145, 2 out of 4 T-cell FXM and 3 out of 4 B-cell FXM achieved $\geq 80\%$ agreement. For the remaining FXM, the presence of weak DSA (MFI < 2100) led to the variability observed in crossmatch outcome.

Cell 146. For cell 146, all 4 pairs of T/B-cell FXM against each of the serum samples achieved $\geq 80\%$ agreement. Across the 4 pairs of FXM, strong class I (MFI > 14000) DSA were present.

Table 2. Summary of Flow crossmatch results for Cell #145- #146 vs. Serum #147 - #150

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
145	147	16	POS(16)	POS(15) NT(1)	146	147	16	POS(16)	POS(15) NT(1)
145	148	16	NEG(10) POS(5) Borderline(1)	POS(10) NEG(4) Borderline(1) NT(1)	146	148	16	POS(15) Borderline(1)	POS(13) NEG(2) NT(1)
145	149	16	POS(8) NEG(6) Borderline(2)	POS(13) NEG(1) Borderline(1) NT(1)	146	149	16	POS(16)	POS(15) NT(1)
145	150	16	POS(16)	POS(13) NEG(2) NT(1)	146	150	16	POS(16)	POS(13) NEG(2) NT(1)

indicates $< 80\%$ agreement

Conclusion:

Good agreement was achieved in the reporting of FXM outcome for 6 out of 8 T-cell FXM and 7 out of 8 B-cell FXM. In each case, the strength of the reported immune dominate DSA was > 14000 MFI. However, in cases in which weak DSA (MFI < 3000) were present, greater variability was observed in the reporting of FXM outcome, as well as in the reporting of DSA.

In the case of cell 145 vs. serum 148, for example, 7 labs reported weak anti-A68 (1831) reactivity and 5 labs noted there were no class I DSA present. It's known from previous studies that the sensitivity of the FXM is vari-

able in the presence of weak DSA. As was the case here, with 10 labs reporting the T-cell FXM as negative, 5 labs reporting it as positive and 1 lab reporting borderline results. The B-cell FXM for this cell-serum pair was also variable among labs due to the absence of class II DSA.

For cell 145 against serum 149, 8 labs reported a positive T-cell FXM outcome, 6 labs reported the FXM as negative, and 2 labs reported borderline results. Weak DSA (B49, 2020 MFI) was reported by 7 labs, while 5 labs indicated there were no class I DSA present.

Part 4

Virtual crossmatch predictions for donor V1 - V4 against serum samples 149 and 150 are summarized in Table 3 and individual laboratory pre-

dictions are listed in Tables 24 - 29. Fictional donor histories precede each patient-donor summary.

Virtual Crossmatch Paper Challenge

For virtual **T-cell predictions** of the expected T-cell FXM, $\geq 80\%$ agreement was achieved for all 6 T-cell predictions. Among them, 4 were predicted to be positive in the presence of class I DSA of > 16000 MFI. For serum 149 vs. donor V2, a single DSA (B38) at 3531 MFI resulted in 14 labs to predict the T-cell FXM to be positive, 1 lab to predict it be negative and 2 labs to predict borderline results

For virtual **B-cell predictions** of the expected B-cell FXM, $\geq 80\%$ agreement was achieved for all 6 B-cell predictions. Each were predicted to be positive in the presence of class I DSA of > 16000 MFI. Interestingly, 2 labs predicted a negative B-cell FXM for serum 150 against donors V1– V3; no class II DSA were reported in each case, only class I DSA.

Table 3. Summary of Virtual Crossmatch Predictions (Serum #149 - #150 vs. Donors V1 - V3)

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	149	17	NEG(16) POS(1)	POS(17)	Unacceptable(16) Other(1)	V2	149	17	POS(14) NEG(1) Borderline(2)	POS(17)	Unacceptable(15) Other(2)
V1	150	17	POS(17)	POS(14) NEG(2) NT(1)	Unacceptable(17)	V2	150	17	POS(17)	POS(14) NEG(2) NT(1)	Unacceptable(17)
Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment						
V3	149	17	POS(17)	POS(17)	Unacceptable(17)						
V3	150	17	POS(16) Borderline(1)	POS(13) NEG(2) Borderline(1) NT(1)	Unacceptable(16) Other(1)						

DSA Identification

Patient 1 (Serum 149)

Patient's fictional case history: This individual is a 26-year-old female being evaluated for her first transplant. The patient has had one prior pregnancy. The HLA type of the child was A*02:01-A*23:01-B*35:01-B*15:01-C*04:01-C*01:02-DRB1*01:01-DRB1*13:02-DRB3*03:01-DQA1*01:01-DQA1*01:02-DQB1*05:01-DQB1*06:04-DPA1*01:03-DPB1*04:01. Patient 1's HLA type was A*02:01-A*32:01 B*35:01 B*51:01-C*04:01 C*14:02-DRB1*01:01-DRB1*15:01-DRB5*01:01-DQA1*01:01-DQA1*01:02-DQB1*05:01-DQB1*06:02- DPA1*01:03-DPB1*04:01.

Good agreement was achieved among labs in the reporting of DSA against donor **V1**, with labs reporting the presence of multiple class II DSA (DR7, DR53, DP4(DP402), DP11), with respective MFI = 13915, 4089, 7004, 5444. No class I DSA were reported. Good agreement was also achieved for virtual predictions; all but 1 lab predicted the T-cell FXM to be negative and all 17 labs predicted the B-cell FXM to be positive. Predicted renal transplant risk was assessed as unacceptable by 16 labs.

Against donor **V2**, anti-B38 (3531), -DP3 (9447), and -DP5 (5871) reactivity was reported by $\geq 90\%$ of labs. Additional anti-DR53 (4089) reactivity was also reported by 14 labs. In the presence of weak class I DSA, 14 labs predicted the expected T-cell FXM to be positive, 2 labs predicted it to be borderline, and 1 predicted it to be negative. By contrast, all 17 labs predicted the expected B-cell FXM to be positive due to the presence of multiple class II DSA. Sixteen labs assessed the predicted transplant to be unacceptable. One lab assessing the risk as intermediate and another assessing it as borderline, reported the strength of DSA present was < 3000 MFI.

Good agreement was achieved in the reporting of DSA against donor **V3**, as $\geq 90\%$ of labs detected the presence of DSA (B60, B39, DP1). Respective strength of each were 17664, 4358, 5574 MFI. Additional anti-DR53 (4089) reactivity was also reported by 15 labs. In the presence of multiple DSA, all 17 labs predicted the expected T/B-cell FXM to be positive. Good agreement was also achieved for predicted renal transplant risk, with all 17 labs assessing the risk as unacceptable.

Virtual Donors – HLA genotype

Donor 1 (V1): A*02:01-A*29:02-B*44:03-B*51:13-C*15:02-C*16:01-DRB1*04:04-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQA1*03:01-DQB1*02:02-DQB1*03:02-DPA1*01:03-DPA1*02:01-DPB1*04:02-DPB1*11:01

Donor 2 (V2): A*02:01-A*02:02-B*38:01-B*53:01-C*04:01-C*12:03-DRB1*04:11-DRB1*08:06-DRB4*01:01-DRB4*01:03-DQA1*01:02-DQA1*03:01-DQB1*03:02-DQB1*06:02-DPA1*01:03-DPA1*02:02-DPB1*03:01-DPB1*05:01

Donor 3 (V3): A*11:01-A*24:02-B*39:01-B*40:01-C*07:02-DRB1*09:01-DRB1*15:02-DRB4*01:03-DRB5*01:02-DQA1*01:01-DQA1*03:02-DQB1*03:03-DQB1*05:01-DPA1*02:02-DPB1*01:01

Patient 2 (Serum 150)

Patient's fictional case history: This individual is a 48-year-old male being evaluated for his second transplant. The HLA type of his first transplant was A*11:01-A*11:02-B*07:02-B*27:05-C*07:02-C*01:02-DRB1*04:01-DRB1*15:02-DRB4*01:03-DRB5*01:01-DQA1*03:01-DQA1*01:03-DQB1*03:02-DQB1*06:01-DPA1*01:03-DPB1*04:02. **Patient 2's HLA type** is A*11:01 A*11:02-B*07:02-B*27:05-C*07:02-C*02:02-DRB1*04:01-DRB1*15:02-DRB4*01:03-DRB5*01:01-DQA1*03:02-DQA1*01:03-DQB1*03:01.

Against **donor V1**, all 17 labs reported strong anti-B44 (15441) reactivity. B51 (17409) was also reported as a DSA. However, a number of labs noted B*51:13 was not included on the single antigen bead panel. By contrast, no agreement was achieved for the reporting of class II DSA. The majority of labs (n = 13) indicated no class II DSA were present, while 4 labs reported weak anti-DQ2 (1266) reactivity against the donor. In the presence of strong class I DSA, all 17 labs predicted the expected T-cell FXM to be positive and 14 labs predicted the expected B-cell FXM to be positive. Predicted risk of transplant was assessed to be unacceptable by all 17 labs.

Strong anti-B38 (10532) and –B53 (18214) reactivity was reported by ≥ 90% of labs against **donor V2**. Additional reactivity to Cw4 (2366) and A2 (1811) was also reported by some labs. No class II DSA were detected. In the presence of multiple DSA, all 17 labs predicted the expected T-cell FXM to be positive. For virtual B-cell predictions, 14 labs predicted the expected B-cell FXM to be positive due to class I DSA. In line with predictions, all 17 labs assessed the predicted risk of transplant as unacceptable.

Against **donor V3**, ≥ 90% of labs reported anti-A24 (3176), -B39 (6265), and –B60 (16155) reactivity. One lab reported weak anti-DQ5 (1377) reactivity, while the remaining 16 labs indicated no class II DSA were present. For virtual predictions, 16 labs predicted the expected T-cell FXM to be positive and 13 labs predicted the expected B-cell FXM to be positive. One lab predicted both the T-cell and B-cell FXM to be borderline. Interestingly, it did not report B60 as a DSA and reported lower MFI's for A24 (787) and B39 (1750) compared to other labs. Consequently, this lab assessed the predicted risk of transplant as low, while the remaining 16 labs assessed it as unacceptable.

Conclusion

For **serum 149** against donors V1 - V3, discrepancies were observed for 2 out of 6 T/B-cell virtual predictions. For serum 149 vs. donor V1, 1 lab predicted the expected T-cell FXM to be positive, despite indicating there were no class II DSA present. Against donor V2, the presence of a single weak DSA (B38, 3531 MFI) resulted in predictions to be mixed among labs. For example, labs which predicted borderline results reported the strength of the DSA as being < 1000 MFI, while those reporting the DSA to be a little strong (> 2000 MFI), predicted the expected T-FXM to be positive.

For **serum 150** against donors V1– V4, discrepancies were observed across 4 out of 6 T/B-cell virtual predictions. However, the discrepancies for the B-cell predictions were primarily due to 2 labs predicting the expected B-cell FXM to be negative despite the presence of class I DSA. As a reminder, labs should consider the role of both class I and class II DSA in predicting the expected physical B-cell FXM as B-cells express both class I and class II antigens.

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Flow Cytometric Crossmach

Table 4. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #147

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
230	147	8	31.5			POSITIVE	A3,A68,B53,B49	3.2	36			POSITIVE	DR1,DR10	4.2	1.7	YES
792	147	57	454			POSITIVE	A68 (19677), A3 (7268), B53 (6414)	107	514			POSITIVE	DR1 (4387)	228	211	YES
1426	147	59	402.5			POSITIVE	A*03:01 (12597), A*68:02 (25421), B*49:01 (1708), B*53:01 (12318)	86	443			POSITIVE	DPB1*02:01 (3322), DPB1*04:02 (2872), DRB1*01:01 (8806), DRB1*10:01 (3516)	277.5	251	YES
2400	147	18	286			POSITIVE	A*03:01(11431), A*68:02(23468), B*49:01(1772), B*53:01(10268)	18	262			POSITIVE	DRB1*01:01(6658), DRB1*10:01(2716), DPB1*02:01(2463), DPB1*04:02(2062)	152	187	YES
3135	147	1.2	24494	9.29		POSITIVE						NT	2637			NO
3224	147	70	398			POSITIVE		140	410			POSITIVE		187	141	YES
3753	147	50	468			POSITIVE	A3(9419), A68(26282), B53(9550)	100	466			POSITIVE	DR1(6392), DR10(2432), DP2(2235)	185	203	YES
3808	147	313	405			POSITIVE strong	A*68:02(20055); B*53:01(4052); A*03:01(3491)	390	366			POSITIVE strong	DRB1*01:01(2631)	244	277	YES
3966	147	20	509			POSITIVE		50	445			POSITIVE		145	250	NO
4345	147					POSITIVE						POSITIVE				NO
5214	147	19	131		313647	POSITIVE	A3(12,525); A68(23,746-24,757); B49(2,088); B53(11,268)	28	131		365215	POSITIVE	DR1(9,654-10,535); DR10(3,918); DPB1*02:01(3,621); DPB1*04:02(3,070)	259	263	YES
8001	147	50	455			POSITIVE	A*68:02(25182) A*03:01(10957) B*53:01(9906) B*49:01(1328)	100	469			POSITIVE	DRB1*01:01 (7445) DRB1*10:01 (2801) DPB1*02:01 (2321) DPB1*04:02 (1756)	187	228	YES
8050	147	50	471			POSITIVE	A3(9148) B53(10374) A68(24385)	120	440			POSITIVE	DR1(7230) DR10(2534) DP2(2416) DPB1*04:02(1931)	38	100	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #147

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
8083	147	70	583			POSITIVE	A*03:01(13254), A*68:02(28777), B*53:01(11146)	140	581			POSITIVE	DRB1*01:01 (13576) DRB1*10:01(6138) DPB1*02:01(5014) DPB1*18:01(4259)			YES
8103	147	118	612	1.2		POSITIVE	A*03(3332); A*68(21030); B*53(4394); C*04(507)	257	1120	1.7		POSITIVE	DRB1*01(2118); DRB1*10(922); DQA*01(3856)	92,04	158.78	NO
8111	147	32	319			POSITIVE	A68(26500) A3(6000) B53(6000)	40	345			POSITIVE	DR1(6500) DR10(2500) DP2(2700) DP(2200)	262	269	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #148

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
230	148	8	0			NEGATIVE	No class I DSA	3.2	7.1			POSITIVE	No class II DSA	4.2	1.7	YES
792	148	57	39			NEGATIVE	No class I DSA	107	109			POSITIVE	No class II DSA	228	211	YES
1426	148	59	43.5			Borderline	A*68:02 (1107); Note - Possible epitope specific antibodies (144TKH, 145KHA or 245V).	86	96			POSITIVE	No class II DSA	277.5	251	YES
2400	148	18	20			POSITIVE	A*68:02(5457)	18	26			POSITIVE	No class II DSA, Positive due to class I Reactivity	152	187	YES
3135	148	1.2	2896	1.1		NEGATIVE						NT		2637		NO
3224	148	70				NEGATIVE		140	2			POSITIVE		187	141	YES
3753	148	50	47			NEGATIVE	No class I DSA	100	72			NEGATIVE	No class II DSA	185	203	YES
3808	148	313	-7			NEGATIVE	No class I DSA	390	31			Borderline	No class II DSA	244	277	YES
3966	148	20	62			POSITIVE		50	126			POSITIVE		145	250	NO
4345	148					NEGATIVE						NEGATIVE				NO
5214	148	19	24		3376	POSITIVE	A68(1,372-1,910)	28	37		8111	POSITIVE	No class II DSA	259	263	YES
8001	148	50	78			POSITIVE	A*68:02 (1005)	100	160			POSITIVE	No class II DSA	187	228	YES
8050	148	50	63			POSITIVE	A68(1015)	120	88			NEGATIVE	No class II DSA	38	100	YES
8083	148	70	48			NEGATIVE	A*68:02(2748)	140	389			POSITIVE	No class II DSA			YES
8103	148	118	84,2	1.2		NEGATIVE	No class I DSA	257	157	1.7		NEGATIVE	No class I DSA	92,04	158.78	NO
8111	148	32	27			NEGATIVE	A68(1200)	40	64			POSITIVE	No class II DSA	262	269	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #149

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
230	149	8	0			NEGATIVE	No class I DSA	3.2	7			POSITIVE	wkDP2,DP4	4.2	1.7	YES
792	149	57	64			POSITIVE	No class I DSA	107	356			POSITIVE	DP2(5671), DP4(5058)	228	211	YES
1426	149	59	50.5			Borderline	B*49:01 (2784)	86	277			POSITIVE	DPB1*02:01(11334), DPB1*04:02(9812)	277.5	251	YES
2400	149	18	21			POSITIVE	B*49:01(1876)	18	106			POSITIVE	DPB1*02:01(9459), DPB1*04:02(8010)	152	187	YES
3135	149	1.2	2583	0.98		NEGATIVE						NT		2637		NO
3224	149	70	12			POSITIVE		140	214			POSITIVE		187	141	YES
3753	149	50	43			NEGATIVE	B49(1344)	100	268			POSITIVE	DP2(9616), DP402(8299)	185	203	YES
3808	149	313	9			Borderline	No class I DSA	390	174			POSITIVE moderate	DPB1*02:01(3343); DPB1*04:02(3233)	244	277	YES
3966	149	20	71			POSITIVE		50	260			POSITIVE		145	250	NO
4345	149					NEGATIVE						NEGATIVE				NO
5214	149	19	26		3910	POSITIVE	B49(2,890)	28	89		72047	POSITIVE	DPB1*02:01(13836), DPB1*04:02(12627)	259	263	YES
8001	149	50	77			POSITIVE	B*49:01 (1670)	100	319			POSITIVE	DPB1*02:01(8978) DPB1*04:02(7640)	187	228	YES
8050	149	50	50			POSITIVE	B49(2011)	120	214			POSITIVE	DP2(10422) DPB1*04:02(8899)	38	100	YES
8083	149	70	70			NEGATIVE	No class I DSA	140	443			POSITIVE	DPB1*02:01(13062), DPB1*04:02(10939)			YES
8103	149	118	80	1.2		NEGATIVE	No class I DSA	257	161	1.7		Borderline	DPA1*01(2499); DPB1*02(2499); DPB1*04(2036)	92.04	158.78	NO
8111	149	32	35			POSITIVE	B49 (2000)	40	212			POSITIVE	DP2(9700) DP4(8500)	262	269	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #150

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
230	150	8	17.4			POSITIVE	B49,B43	3.2	21.9			POSITIVE	No class II DSA	4.2	1.7	YES
792	150	57	321			POSITIVE	B49(17325), B53(13722), Cw4(1918)	107	364			POSITIVE	No class II DSA	228	211	YES
1426	150	59	400.5			POSITIVE	A*68:02(1186), B*49:01(25712), B*53:01(21336), Cw*04:01(4048)	86	412			POSITIVE	No class II DSA	277.5	251	YES
2400	150	18	256			POSITIVE	A*68:02(1131), B*49:01(21511), B*53:01(18720), C*04:01(2348)	18	209			POSITIVE	No class II DSA, Positive due to class I Reactivity	152	187	YES
3135	150	1.2	4776	1.81		POSITIVE						NT		2637		NO
3224	150	70	321			POSITIVE		140	340			POSITIVE		187	141	YES
3753	150	50	373			POSITIVE	A68(1001), B49(20939), B53(16558), Cw4(3084)	100	339			POSITIVE	No class II DSA	185	203	YES
3808	150	313	415			POSITIVE strong	B*49:01(9413); B*53:01(6793)	390	329			POSITIVE strong	No class II DSA	244	277	YES
3966	150	20	353			POSITIVE		50	318			POSITIVE		145	250	NO
4345	150					POSITIVE						NEGATIVE				NO
5214	150	19	125		255804	POSITIVE	A68(1,258-1,489); B49(23,574); B53(22,193); C4(2,243)	28	119		231675	POSITIVE	No class II DSA	259	263	YES
8001	150	50	355			POSITIVE	A*68:02(983) B*49:01(23147) B*53:01(19452) C*04:01(2288)	100	377			POSITIVE	No class II DSA	187	228	YES
8050	150	50	454			POSITIVE	A68(1102) B49(24176) B53(18214) Cw4(3792)	120	401			POSITIVE	No class II DSA	38	100	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #145 vs. Serum #150

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
8083	150	70	121			POSITIVE	B*49:01(29319), B*53:01(26442), C*04:01(3997),	140	288			POSITIVE	No class II DSA			YES
8103	150	118	108	1.2		POSITIVE	B*49(5640); B*53(1133); C*04(1963)	257	307	1.7		NEGATIVE	No class II DSA	92,04	158.78	NO
8111	150	32	263			POSITIVE	B49(22300) B53(17600) Cw4(3100) A68(1100)	40	274			POSITIVE	No class II DSA	262	269	YES

Cell #146 HLA genotype: A*02:01-A*26:01-B*27:05-B*49:01-C*02:02-C*07:01-DRB1*01:02-DRB1*08:03-DQA1*01:01-DQA1*06:01-DQB1*03:01-DQB1*05:01:01G-DPA1*01:03-DPB1*02:01:02G-DPB1*06:01:01G

Table 8. Individual Flow crossmatch results and DSA reported for Cell #146 vs. Serum #147

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
230	147	7	29			POSITIVE	A2,B49	3.4	56			POSITIVE	DR1,DQ6,DQ7	3.6	1.8	YES
792	147	57	488			POSITIVE	A2 (23068)	107	484			POSITIVE	DQ7(17721), DR1(4387)	256	285	YES
1426	147	59	447.5			POSITIVE	A*02:01(29296), B*49:01(1708)	86	483.5			POSITIVE	DPB1*02:01(3322), DQB1*03:01(23532), DRB1*01:02(9267)	290.5	283.5	YES
2400	147	18	309			POSITIVE	A*02:01(24265), B*49:01(1772)	18	295			POSITIVE	DRB1*01:02(6749), DQB1*03:01(20510), DPB1*02:01(2465)	147	193	YES
3135	147	1,2	24111	9.14		POSITIVE						NT		3303		NO
3224	147	70	413			POSITIVE		140	435			POSITIVE		241	205	YES
3753	147	50	503			POSITIVE	A2(28699)	100	508			POSITIVE	DR1(6392), DQ7(20170), DP2(2235)	209	241	YES
3808	147	293	467			POSITIVE Strong	A*02:01(20048)	389	388			POSITIVE strong	DQB1*03:01(10914); DRB1*01:02(2630)	224	277	YES
3966	147	20	495			POSITIVE		50	411			POSITIVE		156	305	NO
4345	147					POSITIVE						POSITIVE				NO
5214	147	19	139		476549	POSITIVE	A2(24,688-24,821); B49 (2,088)	28	141		706238	POSITIVE	DR1(9,654-10,535); DQ7(17,649-24,637); DPB1*02:01(3,621)	262	271	YES
8001	147	50	534			POSITIVE	A*02:01(30171) B*49:01(1328)	100	462			POSITIVE	DRB1*01:02(7416) DQB1*03:01(26002) DQA1*06:01(26002) DPB1*02:01(2321)	199	297	YES
8050	147	50	500			POSITIVE	A2(27672) B27(6620)	120	433			POSITIVE	DR1(7230) DQ7(21965) DP2(2416)	32	149	YES
8083	147	70	574			POSITIVE	A*02:01(34039)	140	536			POSITIVE	DRB1*01:02(13889), DPB1*02:01(5014)			YES
8103	147	152	837	1.2		POSITIVE	A*02(22221); B*27(5732);	468	1976	1.7		POSITIVE	DQB1*03(10025); DRB1*01(2118); DQA1*01(3856); DQA1*06(10025)	103,56	159,8	NO
8111	147	32	375			POSITIVE	A2 (27500)	40	409			POSITIVE	DP2(2700)	259	279	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #146 vs. Serum #148

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	
230	148	7	8			POSITIVE	A2,A26	3.4	8			POSITIVE	No class II DSA	3.6	1.8	YES	
792	148	57	273			POSITIVE	A26(10730), A2(3204)	107	267			POSITIVE	No class II DSA	256	285	YES	
1426	148	59	273.5			POSITIVE	A*02:01(5269), A*26:01(15532)	86	301.5			POSITIVE	No class II DSA	290.5	283.5	YES	
2400	148	18	155			POSITIVE	A*02:01(6620), A*26:01(12996)	18	117			POSITIVE	No class II DSA, Positive due to Class I Reactivity	147	193	YES	
3135	148	1,2	3959	1.5		POSITIVE						NT	3303			NO	
3224	148	70	187			POSITIVE		140	187			POSITIVE	241	205		YES	
3753	148	50	290			POSITIVE	A2(3441), A26(11832)	100	267			POSITIVE	No class II DSA	209	241		YES
3808	148	293	328			POSITIVE strong	A*26:01(4392); A*02:01(787)	389	230			POSITIVE	No class II DSA	224	277		YES
3966	148	20	217			POSITIVE		50	187			POSITIVE	156	305		NO	
4345	148					POSITIVE						NEGATIVE				NO	
5214	148	19	97		96776	POSITIVE	A2(6,428-6,988); A26(19,303)	28	94		118560	POSITIVE	No class II DSA	262	271		YES
8001	148	50	353			POSITIVE	A*02:01(5198) A*26:01(15464)	100	293			POSITIVE	No class II DSA	199	297		YES
8050	148	50	290			POSITIVE	A2(4392) A26(14293)	120	216			POSITIVE	No class II DSA	32	149		YES
8083	148	70	193			POSITIVE	A*02:01(15273), A26:01(38293)	140	169			POSITIVE	No class II DSA				YES
8103	148	152	119	1.2		Borderline	A*02(1106); A*26(3875)	468	247	1.7		NEGATIVE	No class II DSA	103,56	159,8		NO
8111	148	32	196			POSITIVE	A26(15600) A2(5300)	40	201			POSITIVE	No class II DSA	259	279		YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #146 vs. Serum #149

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
230	149	7	8			POSITIVE	B27,B49, CW2	3.4	22			POSITIVE	DP2,DP6	3.6	1.8	YES
792	149	57	246			POSITIVE	B27 (10197), Cw2 (2569)	107	338			POSITIVE	DP2(5671), DP6(5389)	256	285	YES
1426	149	59	296.5			POSITIVE	B*27:05 (18687), B*49:01 (2784), Cw*02:02 (6388)	86	382.5			POSITIVE	DPB1*02:01(11334), DPB1*06:01(10489)	290.5	283.5	YES
2400	149	18	162			POSITIVE	B*27:05(14350),B*49:01(1876),C*02:02(4093)	18	193			POSITIVE	DPB1*02:01(9459), DPB1*06:01(8788)	147	193	YES
3135	149	1,2	3833	1.45		POSITIVE						NT		3303		NO
3224	149	70	199			POSITIVE		140	291			POSITIVE		241	205	YES
3753	149	50	312			POSITIVE	B27(15416), B49(1344), Cw2(3450)	100	388			POSITIVE	DP2(9616), DP6(8762)	209	241	YES
3808	149	293	345			POSITIVE strong	B*27:05(5000)	389	321			POSITIVE strong	DPB1*06:01(3559); DPB1*02:01(3343)	224	277	YES
3966	149	20	291			POSITIVE		50	330			POSITIVE		156	305	NO
4345	149					POSITIVE						POSITIVE				NO
5214	149	19	98		100253	POSITIVE	B27:05(19,030); B49(2,890); C2(5,759)	28	115		263320	POSITIVE	DPB1*02:01(13,836); DPB1*06:01(13,441)	262	271	YES
8001	149	50	350			POSITIVE	B*27:05 (15415) B*49:01 (1670) C*02:02 (4580)	100	358			POSITIVE	DPB1*02:01 (8978) DPB1*06:01 (8442)	199	297	YES
8050	149	50	356			POSITIVE	B27(17408) B49(2011) Cw2(4585)	120	349			POSITIVE	DP2(10422) DP6(9235)	32	149	YES
8083	149	70	392	9296),C*0		POSITIVE		140	417			POSITIVE	DPB1*02:01(13062), DPB1*06:01(11711)			YES
8103	149	152	117	1.2		POSITIVE	B*27(5231); C*02(1177)	468	516	1.7		POSITIVE	DPA1*01 (2499); DPB1*02 (2499); DPB1*06 (2654)	103,56	159,8	NO
8111	149	32	197			POSITIVE	B27(15700) Cw2(4600)	40	261			POSITIVE	DP2(9700) DP6(9000)	259	279	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #146 vs. Serum #150

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
230	150	7	10.1			POSITIVE	A2,B49	3.4	21.8			POSITIVE	No class II DSA	3.6	1.8	YES
792	150	57	292			POSITIVE	B49 (17325)	107	304			POSITIVE	No class II DSA	256	285	YES
1426	150	59	349.5			POSITIVE	A*02:01 (1873), B*49:01 (25712)	86	383.5			POSITIVE	No class II DSA	290.5	283.5	YES
2400	150	18	216			POSITIVE	A*02:01(1836),B*4 9:01(21511)	18	200			POSITIVE	No class II DSA, Positive due to Class I Reactivity	147	193	YES
3135	150	1,2	4844	1.78		POSITIVE						NT	3303			NO
3224	150	70	279			POSITIVE		140	309			POSITIVE		241	205	YES
3753	150	50	392			POSITIVE	A2(1338), B49(20939)	100	392			POSITIVE	No class II DSA	209	241	YES
3808	150	293	387			POSITIVE strong	B*49:01(9413)	389	294			POSITIVE	No class II DSA	224	277	YES
3966	150	20	317			POSITIVE		50	254			POSITIVE		156	305	NO
4345	150					POSITIVE						NEGATIVE				NO
5214	150	19	114		180193	POSITIVE	A2(1,747-2,159); B49(23,574)	28	112		239607	POSITIVE	No class II DSA	262	271	YES
8001	150	50	406			POSITIVE	A*02:01 (1714) B*49:01 (23147)	100	355			POSITIVE	No class II DSA	199	297	YES
8050	150	50	431			POSITIVE	A2(1482) B49(24176)	120	373			POSITIVE	No class II DSA	32	149	YES
8083	150	70	307	184),B*49		POSITIVE		140	313			POSITIVE				YES
8103	150	152	151	1.2		POSITIVE	B*49(5640)	468	496	1.7		NEGATIVE	No class II DSA	103,56	159,8	NO
8111	150	32	287			POSITIVE	B49 (22300) A2 (1600)	40	325			POSITIVE	No class II DSA	259	279	YES

Single Antigen

Table 12. Summary of Single Antigen results for Serum #147

Class I							
*** Serum 147 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A2	13	100%	27299	26554	4039	20048	34162
A68	13	100%	24757	25096	3328	20055	31439
A69	13	100%	24591	24671	3610	18690	31710
B57	13	100%	22891	20826	5000	10518	26523
B58	13	100%	19923	17994	4434	9398	22362
B38	13	100%	15299	13800	4076	6140	18756
A24	13	100%	14359	13206	4574	4803	19357
A3	13	100%	10957	9973	3736	3332	15802
B53	13	100%	10374	9047	2686	4052	12318
B77	13	100%	9931	8984	2305	4665	12474
B51	13	100%	8970	7699	3322	892	11619
B59	13	100%	8407	7206	2103	3138	9468
B52	13	100%	2450	2294	663	957	3011
A11	12	92%	20600	19083	5293	9148	24941
B54	12	92%	16443	15025	4134	7445	19494
B35	12	92%	13687	12106	3829	5155	16781
B18	12	92%	13303	11268	4659	3102	17003
B64	12	92%	9643	8385	3143	2744	12197
B42	12	92%	8617	8076	3649	2057	13370
B41	12	92%	7573	6745	3051	1275	10197
B55	12	92%	7224	6366	2883	1492	10040
B56	12	92%	7093	6455	3144	1451	10948
B50	12	92%	6877	6241	2898	1710	10755
B62	12	92%	6661	6339	3046	1701	11383
B61	12	92%	6576	5940	2965	1163	10347
B65	12	92%	5887	5324	2108	1565	8057
B45	12	92%	5285	4880	2420	981	8704
A23	12	92%	4703	4310	1978	1120	7015
A36	12	92%	4254	4516	2206	790	7961
B60	12	92%	4073	3942	1994	1071	7116
A43	12	92%	3386	3658	1895	1335	6879
A34	12	92%	2881	2581	968	904	3878

Class II							
*** Serum 147 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ7	13	100%	21965	21217	7058	10025	37223
DQ8	13	100%	19690	19971	6375	8197	33259
DQ9	13	100%	19595	18965	6677	7924	32842
DR4	13	100%	9863	10455	4009	3369	20081
DR15	13	100%	7543	7688	3430	2534	15718
DR14	13	100%	7323	7339	3287	2597	15245
DR11	13	100%	7237	7207	2634	2497	13183
DR1	13	100%	7230	7109	3221	2118	13889
DR52	13	100%	6981	7459	3201	2865	15345
DR13	13	100%	6969	7227	3900	2438	18806
DQ6	13	100%	6761	8132	5330	1547	20192
DR16	13	100%	6256	6185	2717	2054	12595
DR17	12	92%	6149	6417	2174	2481	11176
DR9	12	92%	2788	2938	1449	1077	6156
DR51	12	92%	2679	2754	1436	851	6051
DR18	11	84%	6953	7356	2405	3874	13351
DR10	11	84%	2801	3014	1337	922	6138
DR103	10	76%	1471	1559	551	567	2375
DPw2	9	69%	2555	2835	1060	946	5014
DP18	7	53%	2298	2406	843	1448	4259
DP28	6	46%	1640	1765	536	1226	2711
DP10	5	38%	1693	2005	756	1219	3327
DPw4	4	30%	2544	2602	1238	943	4380
DP402	4	30%	2277	2345	529	1756	3070
DQA1*06	2	15%	17405	17405	7380	10025	24785
DQA1*05	2	15%	16907	16907	7246	9661	24153
DR1403	2	15%	3908	3907	622	3286	4529
DR3	2	15%	3407	3406	926	2481	4332

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 12. Summary of Single Antigen results for Serum #147 - cont.

Class I							
*** Serum 147 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B8	12	92%	17782	15382	4834	7018	20323
B67	12	92%	12680	10934	4737	2759	16688
B75	12	92%	12522	11844	3494	5593	16470
B71	12	92%	10647	9576	2768	3942	13324
B76	12	92%	7471	6765	3218	1840	12322
B72	12	92%	7112	6524	3134	1707	11462
B78	12	92%	6683	5985	2609	1554	9451
B7	12	92%	6014	5472	2688	1187	9554
B82	12	92%	5449	5097	2152	1762	8195
B81	12	92%	3122	3116	1591	1047	5961
B39	11	84%	18947	17031	4688	8107	21373
B73	11	84%	4062	3359	1328	853	4860
B48	11	84%	4023	3575	1833	769	6274
A25	11	84%	2587	2730	1105	949	4388
B63	11	84%	2491	2225	811	602	3271
A33	10	76%	2830	2759	968	1210	3973
A1	9	69%	2010	2057	596	758	2805
Cw9	8	61%	3015	2486	916	704	3226
B46	8	61%	2246	2214	516	1311	2968
B27	7	53%	7134	6499	2532	2090	10069
A66	7	53%	2056	2382	891	1042	3641
B2708	6	46%	4747	5596	3385	2090	11137
B49	6	46%	1855	1730	349	1213	2088
Bw6	5	38%	11755	13391	4962	7205	19651
A29	5	38%	2555	2144	818	1091	3173
A203	4	30%	21453	21905	1805	19895	24821
A2403	4	30%	8254	9796	4461	5603	17074
A1101	3	23%	10269	13679	6211	8374	22395
A1102	3	23%	9223	13683	6361	9148	22679
Cw10	3	23%	1648	1526	209	1232	1698
B37	3	23%	1366	1228	255	870	1448
B3901	2	15%	9931	9931	1824	8107	11755
B14	2	15%	3149	3148	405	2744	3553
A32	2	15%	2026	2026	145	1881	2171
B7801	2	15%	1896	1896	352	1544	2248

Table 13. Summary of Single Antigen results for Serum #148

Class I							
*** Serum 148 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A25	13	100%	20207	19035	10349	5543	45976
A26	13	100%	14293	14734	8773	3875	38293
A43	13	100%	13574	12982	7575	3136	32714
A2	12	92%	5139	5663	3664	854	15273
A11	11	84%	10986	12564	7450	2832	31077
A66	11	84%	10302	12478	8284	3793	34440
B45	11	84%	3825	4143	2344	1033	10485
B76	11	84%	3805	3967	2389	76	9965
B44	11	84%	3699	4046	2456	886	10737
B57	10	76%	3555	3660	2202	669	9053
B58	10	76%	2263	2291	1226	513	5129
A34	9	69%	2916	3530	2022	1640	8624
B82	9	69%	2180	2292	1108	584	4890
A1	8	61%	2080	1924	775	869	3398
A68	7	53%	1831	2350	1642	1015	5823
A69	6	46%	1927	2823	1692	1233	5469
A6601	3	23%	4353	9139	7169	3793	19273
A1102	2	15%	9464	9463	6533	2931	15996
A1101	2	15%	9370	9370	6040	3330	15410
A203	2	15%	3810	3810	3028	782	6838
A36	2	15%	1779	1779	376	1403	2155
Bw4	1	7%	5709	5709	0	5709	5709
A3	1	7%	3330	3330	0	3330	3330
B54	1	7%	2770	2770	0	2770	2770
A6602	1	7%	2667	2667	0	2667	2667
B73	1	7%	1440	1440	0	1440	1440
Cw7	1	7%	1101	1101	0	1101	1101
A80	1	7%	1018	1018	0	1018	1018
B15	1	7%	957	957	0	957	957
Cw17	1	7%	786	786	0	786	786
B8201	1	7%	584	584	0	584	584

Class II							
*** Serum 148 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR4	13	100%	5418	5568	2003	1491	8173
DR53	13	100%	3584	3309	1435	851	5150
DQ2	1	7%	1297	1297	-	1297	1297

Blue = DSA against cell #145 only
Gold = DSA against cell #146 only
Green = DSA against cell #145 and #146

Table 14. Summary of Single Antigen results for Serum #149

Class I							
*** Serum 149 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B13	13	100%	23901	21579	6333	9173	32223
B47	13	100%	11802	10932	3711	3602	15658
B62	13	100%	4771	4370	1931	854	6823
B38	13	100%	3531	3291	1386	771	5288
B60	12	92%	17664	15910	6046	4954	26227
B61	12	92%	17621	15804	6072	4965	23836
B7	12	92%	17374	15815	5802	5493	22439
B27	12	92%	16213	14405	5528	3417	20822
B81	12	92%	15506	14303	5240	5104	23169
B48	12	92%	15110	13101	5906	3028	20822
B73	12	92%	11338	10178	4192	2789	15043
B67	12	92%	6060	5556	2540	974	8723
Cw2	11	84%	4580	4037	1737	919	6388
B41	11	84%	4389	3983	1517	985	5791
B39	11	84%	4358	4033	1709	822	5940
B42	11	84%	3969	3704	1497	953	5648
B8	11	84%	3808	3301	1171	1066	4870
B55	11	84%	3357	3145	1326	890	4886
B75	11	84%	3038	2649	1063	708	4316
B76	11	84%	2960	3043	1222	791	4910
B72	11	84%	2859	2696	1104	687	4112
B50	10	76%	2671	2498	1000	562	3835
A66	9	69%	2808	2571	922	1354	3774
Cw17	9	69%	2138	1806	627	620	2481
B77	9	69%	2057	2004	467	1086	2511
B49	9	69%	2020	2128	619	1118	2890
B56	8	61%	2478	2617	578	1638	3347
B71	7	53%	1673	1749	512	947	2401
B54	5	38%	1602	1679	374	1140	2222
Bw6	4	30%	15293	14555	5245	7188	20448
B2708	4	30%	9367	11226	6176	5231	20941
B18	4	30%	1618	1651	269	1345	2027
B64	4	30%	1449	1471	212	1215	1774
B35	4	30%	1446	1539	263	1304	1964
B59	4	30%	1425	1414	269	1052	1755

Class II							
*** Serum 149 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR7	13	100%	13915	12571	4651	3705	18556
DP9	13	100%	10630	9437	4047	2566	14931
DP17	13	100%	9904	9125	3999	2476	14560
DPw2	13	100%	9616	8901	3975	2399	13922
DPw3	13	100%	9447	8745	3779	2396	13736
DP14	13	100%	9128	8630	3648	2574	13848
DPw6	13	100%	8987	8374	3610	2510	13441
DP18	13	100%	8090	7867	3495	2034	12691
DP28	13	100%	6776	6553	2862	1582	11048
DPw1	13	100%	5574	5333	2458	1304	8514
DP11	13	100%	5444	5223	2413	1181	8530
DP19	13	100%	4767	4287	1892	1028	6896
DP13	13	100%	4571	4307	1910	1186	6922
DR11	13	100%	4126	4095	1819	1252	7028
DPw5	12	92%	5871	5977	2371	1431	9212
DR53	12	92%	4089	3773	1428	1147	5630
DP10	11	84%	10436	10463	3425	2672	15121
DP20	11	84%	9617	9599	3170	2671	13586
DR9	11	84%	2219	2132	763	713	3205
DP402	7	53%	8299	8099	2985	3233	12627
DPw4	6	46%	5708	5869	3417	2036	9812
DPA1*04	3	23%	8494	6803	3767	1582	10333
DPA1*03	3	23%	7922	7219	3462	2671	11064
DPA1*02	2	15%	7467	7467	4431	3036	11898
DP26	1	7%	6344	6344	-	6344	6344
DPA1*01	1	7%	2790	2790	-	2790	2790
DP401	1	7%	1582	1582	-	1582	1582

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 15. Summary of Single Antigen results for Serum #150

Class I							
*** Serum 150 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B49	13	100%	21539	20165	6627	8809	29319
B50	13	100%	21319	20052	6596	9010	29995
B72	13	100%	20234	18776	6763	7631	28943
B62	13	100%	19885	17423	6258	6844	27947
B35	13	100%	18954	17311	6270	6940	27253
B53	13	100%	18214	16740	6065	6793	26442
B45	13	100%	17622	15985	6259	5155	25193
B71	13	100%	17428	16078	5705	5944	24494
B51	13	100%	17409	15523	6338	3977	25252
B56	13	100%	17202	15608	6193	5106	23746
B41	13	100%	17118	15035	6041	4482	23400
B78	13	100%	16541	14473	5651	5021	22945
B13	13	100%	16325	15064	5970	4812	24694
B60	13	100%	16155	14591	5822	5203	22533
B61	13	100%	15761	14510	5943	4468	23064
B44	13	100%	15441	14312	5265	5728	21878
B75	13	100%	14368	13459	5217	4957	22130
B63	13	100%	14181	12983	4954	5101	20576
B47	13	100%	13322	12113	4779	4576	19475
B52	13	100%	13049	11864	4604	4519	20083
B77	13	100%	12534	11701	4216	4801	19199
B76	13	100%	12338	11574	5219	3192	20400
B18	13	100%	11450	10170	4806	2445	18189
B38	13	100%	10532	9830	4657	2579	17885
B57	13	100%	10298	9472	4257	2624	17029
B58	13	100%	10099	9388	3964	3319	16391
B48	13	100%	9805	9199	5327	1056	18878
B59	13	100%	7468	7242	3658	1687	15046
B55	13	100%	7000	6461	3253	1256	13065
B46	13	100%	6089	6009	2885	1157	10880
B37	13	100%	5243	5775	3155	1814	13119
B64	13	100%	3843	3560	1796	894	7246
B39	12	92%	6265	6730	3524	1522	12998
B54	12	92%	4335	4299	2018	901	8411
B8	12	92%	2412	2457	1187	798	5184

Class I							
*** Serum 150 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A24	11	84%	3176	3218	1557	787	6891
B67	11	84%	4118	4166	1664	1039	8004
Cw10	11	84%	2584	2752	1307	800	5509
A23	10	76%	2417	2738	894	1774	4808
Cw4	10	76%	2366	2776	829	1918	4048
Cw9	10	76%	2692	2877	1188	897	5233
A69	9	69%	2059	2101	681	1127	3749
A2	8	61%	1811	1966	547	1338	3184
B65	8	61%	1690	1819	811	645	3460
A68	5	38%	1110	1104	62	1001	1197
B42	4	30%	1259	1631	782	1036	2971
B3901	3	23%	1750	1752	189	1522	1985
A2403	2	15%	2743	2742	1793	950	4535
B7801	2	15%	5541	5540	520	5021	6060
B82	2	15%	1213	1212	95	1118	1307
Cw1	2	15%	1220	1220	171	1049	1391
Cw14	2	15%	1211	1211	135	1076	1346
Cw15	2	15%	1303	1302	173	1130	1475
Cw5	2	15%	1136	1136	62	1074	1198

Blue = DSA against cell #145 only
 Gold = DSA against cell #146 only
 Green = DSA against cell #145 and #146

Class II							
*** Serum 150 ***							
11 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR17	11	100%	3422	3217	1145	789	5135
DR18	11	100%	3171	3050	1089	764	5004
DR52	10	90%	2181	2247	829	751	3866
DR13	7	63%	1434	1599	399	1145	2354
DR14	4	36%	1106	1085	49	1001	1127
DQ2	2	18%	1266	1266	80	1186	1346

Table 16a. Individual laboratory results for Serum #147 - class I by One Lambda Single Antigen

**** Serum 147 ****																											
Ctr	A2	A24	A3	A68	A69	B38	B51	B52	B53	B57	B58	B59	B77	A11	A23	A34	A36	A43	B18	B35	B41	B42	B45	B50	B54	B55	
230	30665	17744	15802	28582	27222	17368	9282	2965	10748	25562	22362	9130	10319	24754		3068											
792	23543	11622	7268	22266	21207	10621	6633	1510	6414	17911	14639	5342	6560	15961	2957	1931	4120	3234	7817	8728	4755	5635	2893	3655	11569	4214	
1426	29496	16556	12597	26734	28148	18756	9232	2837	12318	24838	21811	9468	12474	23382	6335	2964	5355	3726	17003	16781	10158	12051	7938	9564	19494	10040	
2400	24513	15740	11655	24001	24591	15217	8155	2880	10490	22487	20681	8407	9931	20473	5384	3389	7013	6579	13219	13401	8611	9379	5999	7107	16326	7937	
3224	27299	18189	13643	26483	26098	16272	10927	2983	10906	23983	20757	8521	10469	23293	6410	3845	7716	6252	14178	14740	9767	11652	6724	8578	17962	9026	
3753	28699	12863	9419	26282	26301	13572	7273	2150	9550	21956	18500	7226	9084	20726	3976	2064	3744	2341	10584	12884	5969	7262	4289	5306	16015	5778	
5214	24738	14359	12525	24757	24430	16811	11619	3011	11268	22891	21528	8846	11075		7015	3291	5625	4206	16877	15719	10197	13370	8704	10755	19088	9832	
8001	30772	14802	10957	29228	27787	15299	9723	2450	9906	23614	19923	7757	9149	22901	4705	2798	4388	3537	13387	13972	7737	8798	5711	7171	16560	7411	
8050	27672	12845	9148	24385	23977	16889	8970	2266	10374	23024	19273	8650	10623	19378	4701	1728	3401	1482	13746	14287	7409	8436	4858	6646	17532	7037	
8083	34162	19357	13254	31439	31710	16658	11282	2621	11146	26523	22071	8737	10143	24941	5938	3878	7961	6879	15266	15345	9541	11615	6720	9050	19124	8570	
8103	22211	5603	3332	21030	20405	6643	4324	1360	4394	11802	10355	3810	4665	9148	1354	1114	2008	1606	4745	5732	2554	2860	1722	2072	7445	2295	
Avg	27615	14516	10873	25926	25625	14919	8856	2458	9774	22236	19264	7809	9499	20496	4878	2734	5133	3984	12682	13159	7670	9106	5556	6990	16112	7214	
Std Dev.S	3614	3827	3448	3070	3214	3494	2177	585	2324	4122	3676	1744	2171	4836	1745	904	1966	1993	3918	3396	2560	3244	2171	2705	3813	2490	
MFI																											
%CV	13%	26%	32%	12%	13%	23%	25%	24%	24%	19%	19%	22%	23%	24%	36%	33%	38%	50%	31%	26%	33%	36%	39%	39%	24%	35%	

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 16b. Individual laboratory results for Serum #147 - class I by Lifecodes-Immucor Single Antigen

**** Serum 147 ****																											
Ctr	A2	A24	A3	A68	A69	B38	B51	B52	B53	B57	B58	B59	B77	A11	A23	A34	A36	A43	B18	B35	B41	B42	B45	B50	B54	B55	
3808	20048	4803	3491	20055	18690	6140	892	957	4052	10518	9398	3138	4934	10269	1120		790	1335	3102	5155	1275	2057	981	1710	8284	1492	
8029	21386	7207	6559	21009	20161	9159	1781	1844	6045	15629	12625	4649	7366	13780	1830	904	2080	2721	5296	8539	2972	3807	2032	3287	10901	2761	
Avg	20717	6005	5025	20532	19426	7650	1337	1401	5049	13074	11012	3894	6150	12025	1475	-	1435	2028	4199	6847	2124	2932	1507	2499	9593	2127	
Std Dev.S	946	1700	2169	675	1040	2135	629	627	1409	3614	2282	1068	1720	2483	502	-	912	980	1551	2393	1200	1237	743	1115	1850	897	
MFI																											
%CV	5%	28%	43%	3%	5%	28%	47%	45%	28%	28%	21%	27%	28%	21%	34%	-	64%	48%	37%	35%	57%	42%	49%	45%	19%	42%	

Table 16a. Individual laboratory results for Serum #147 - class I by One Lambda Single Antigen, cont.

**** Serum 147 ****																							
Ctr	B56	B60	B61	B62	B64	B65	B67	B7	B71	B72	B75	B76	B78	B8	B81	B82	A25	B39	B48	B63	B73	Other	
230																	3819			3271		A66,A1,A33,Bw6	One Lambda
792	3826	2187	3721	3615	5738	3387	7698	3202	6271	3795	9092	3876	3926	11719	1508	3061	2080	12856	1737		1947	B27,A33	OneLambda
1426	10557	6626	9617	10126	11909	7483	16157	8821	13324	10250	14914	10987	8837	20323	5961	8182	2587	21373	6255	2971	4860	A66,B49,B27,A1>	One Lambda
2400	7549	4981	7024	7405	9955	7141	13093	6376	11117	7540	12577	7811	7775	17515	3380	6068	3881	18947	4371	2893	4213	A66,B27,A29,A33>	One Lambda
3224	9482	5438	8623	8723	10862	7197	14980	7495	11377	9179	14962	8103	8106	18813	4083	6624	4068	19651	4576	2606	4408	A66,B49,A1,A29>	One Lambda
3753	5759	2730	4809	5770	7904	5113	10697	4852	9252	5841	11100	6386	5462	16184	2303	4530	1882	17882	2243	1751	3136	A66,A1,A33,B46>	One Lambda
5214	10948	7116	10347	11383	12197	8057	16688	9554	12367	11462	16470	12322	9451	19829	5876	8195	2790	20725	6274	2660	4545	A203,B49,A1,A33>	One Lambda
8001	7240	4437	7125	6823	9556	5807	12720	6353	10177	7508	14311	7897	6819	18099	3438	5914	2187	18743	4023	2315	3396	A66,B49,B27,A1>	One Lambda
8050	6945	3708	6127	6499	9730	5967	12640	5675	11162	6715	12466	7130	6546	18048	2863	4983	1405	19973	3110	2045	4062	B49,B27,A1,A33>	One Lambda
8083	8821	5730	8310	8876	11184	6753	15090	7968	11717	9233	15247	9268	8230	20117	3859	6843	4388	20751	4821	2491	4248	A66,B49,B27,A1>	One Lambda
8103	2192	1280	1811	2093	3553	2452	3948	1806	3942	2242	5593	2265	2248	7193	1067	2049	949	8107	1156	602	1287	Cw4,A203,B40,B15>	One lambda
Avg	7332	4423	6751	7131	9259	5936	12371	6210	10071	7377	12673	7605	6740	16784	3434	5645	2731	17901	3857	2361	3610		
Std																							
Dev.S	2823	1927	2688	2844	2779	1824	3993	2435	2891	2861	3324	2999	2277	4202	1629	2024	1159	4199	1773	761	1178		
MFI																							
%CV	38%	44%	40%	40%	30%	31%	32%	39%	29%	39%	26%	39%	34%	25%	47%	36%	42%	23%	46%	32%	33%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 16b. Individual laboratory results for Serum #147 - class I by Lifecodes-Immucor Single Antigen, cont.

**** Serum 147 ****																							
Ctr	B56	B60	B61	B62	B64	B65	B67	B7	B71	B72	B75	B76	B78	B8	B81	B82	A25	B39	B48	B63	B73	Other	
3808	1451	1071	1163	1701	2744	1565	2759	1187	6084	1707	5998	1840	1554	7018	1047	1762		8341				A203,B40,B703,B14 >	Immucor
8029	2694	2004	2612	3055	5294	2972	4743	2380	8131	2818	9405	3300	2874	9728	2015	2954			769	874	853	A203,B703,A1,B37 >	Lifecodes
Avg	2073	1538	1888	2378	4019	2269	3751	1784	7108	2263	7702	2570	2214	8373	1531	2358	-	-	-	-	-		
Std																							
Dev.S	879	660	1025	957	1803	995	1403	844	1447	786	2409	1032	933	1916	684	843	-	-	-	-	-		
MFI																							
%CV	42%	43%	54%	40%	45%	44%	37%	47%	20%	35%	31%	40%	42%	23%	45%	36%	-	-	-	-	-		

Table 17a. Individual laboratory results for Serum #148 - class I by One Lambda Single Antigen

**** Serum 148 ****																			
Ctr	A25	A26	A43	A2	A11	A66	B44	B45	B76	B57	B58	A34	B82	A1	A68	A69	A6601	Other	
230	27310	21157	18765	7564	18449	11853	5282	4919	5442	3912	2612	4386	2597	2238					One Lambda
792	14281	10730	9303	3204	8567	10302	2200	2039	1868										One Lambda
1426	21429	15532	13574	5080	10830	9175	4043	4538	4501	3402	2144	2153	1979	1921	1081	1233			One Lambda
2400	17060	13137	13592	7547	14061	14858	2823	3786	4278	5512	3336	2916	2559		5823	5469		B54,A36	One Lambda
3224	23029	19268	16611	7317	16297	18436	5004	4867	3805	3748	2558	3514	2644	2247	1831	1941		A36,A80,B73,Cw7	One Lambda
3753	17098	11832	10289	3441	9307	6687	2149	2286	2264	1640	1045	1781							One Lambda
5214	23021	19303	16998	6988			4321	4630	4812	3707	2381	4142	2180	2364	1910	1913	19273	A203,A1101,A1102,A6602	One Lambda
8001	20207	15464	14218	5198	12729	15969	3364	3171	2991	2339	1563	2622	1479	1275	1179	1494			One Lambda
8050	20673	14293	12217	4392	10986	7747	3699	3825	3644	2624	1635	1640	1723	1085	1015				One Lambda
8083	45976	38293	32714	15273	31077	34440	10737	10485	9965	9053	5129	8624	4890	3398	3612	4892			One Lambda
8103	5543	3875	3136	1106	2832	3793	886	1033	76	669	513		584	869			3793	B15,Cw17,B8201	One lambda
Avg	21421	16626	14674	6101	13514	13326	4046	4144	3968	3661	2292	3531	2293	1925	2350	2824	11533		
Std																			
Dev.S	9928	8629	7356	3685	7538	8666	2576	2459	2506	2321	1292	2144	1175	829	1774	1854	10946		
MFI																			
%CV	46%	52%	50%	60%	56%	65%	64%	59%	63%	63%	56%	61%	51%	43%	75%	66%	95%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 17b. Individual laboratory results for Serum #148 - class I by Lifecodes-Immucor Single Antigen

**** Serum 148 ****																			
Ctr	A25	A26	A43	A2	A11	A66	B44	B45	B76	B57	B58	A34	B82	A1	A68	A69	A6601	Other	
3808	6128	4392	3767	854													4353	A203,A3,A1101,A1102	Immucor
8029	5709	4269	3583		3072	4006												Bw4	Lifecodes
Avg	5919	4331	3675	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Std																			
Dev.S	296	87	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MFI																			
%CV	5%	2%	4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 18a. Individual laboratory results for Serum #149 - class I by One Lambda Single Antigen

**** Serum 149 ****																											
Ctr	B13	B38	B47	B62	B27	B48	B60	B61	B67	B7	B73	B81	B39	B41	B42	B55	B72	B75	B76	B8	Cw2	B50	A66	B49	B77	Cw17	B56
230	27272	5288	14743	5154	18992																	3774	2678	2359			
792	18242	2334	7846	2975	11613	10713	12221	12345	4168	12141	7584	10547	2819	2829	2420	2142	1732	1851	1947	2371	2569		1591				
1426	25514	4843	14380	6558	19825	18384	21141	20837	7978	21302	14415	18501	5882	5603	5389	4552	3712	3295	4828	4458	6388	3835	3720	2784	2429	2481	3275
2400	23040	3610	11422	4771	15234	14342	17601	16792	6042	16080	11185	14914	4261	4590	3777	3503	3325	3054	2960	4000	4193	2362	3366			2309	2285
3224	24613	4338	12873	6722	18666	16988	18826	20332	8235	20448	13023	16913	5645	5480	5190	4886	4112	3788	2735	4870	5394	3344		2645	2511	2138	3347
3753	22660	2829	9287	3729	15416	12394	15281	16524	5242	16978	10362	13726	3619	2981	2991	2423	2004	1767	2837	2921	3450	1838	1873	1344	1417		1638
5214	23901	4638	14959	6823		19272	21018	21215	8723	21569	14617	19829	5940	5791	5648	4856	3986	4316	4910	4220	5759	3640		2890	2397	2212	3245
8001	24313	3440	11802	4680	17009	15877	17726	18450	6078	17770	11491	16098	4358	4163	3969	3057	2675	3038	3321	3224	4580	2562	2808	1670	1767	2119	2192
8050	23985	4209	12072	5180	17408	16484	18843	19578	6935	19658	12900	16515	5145	4389	4028	3357	2859	2393	4021	3897	4585	2890	1573	2011	2021	1150	2369
8083	32223	3531	15658	5761	20822	20822	26227	23836	7941	22439	15043	23169	4774	5058	4833	3823	3402	3543	3522	3808	5397	2780	3087	2020	2057	2140	2587
8103	10597	936	3602	1180	5231	4665	4954	5270	1690	5493	3266	5104	1107	985	953	890	687	708	791	1066	1177	562				620	
Avg	23305	3636	11695	4867	16022	14994	17384	17518	6303	17388	11389	15532	4355	4187	3920	3349	2849	2775	3187	3484	4349	2646	2724	2255	2120	1896	2617
Std																											
Dev.S	5397	1253	3614	1721	4632	4749	5730	5333	2175	5206	3643	5011	1519	1519	1474	1281	1097	1090	1254	1127	1581	1003	924	573	381	651	618
MFI																											
%CV	23%	34%	31%	35%	29%	32%	33%	30%	34%	30%	32%	32%	35%	36%	38%	38%	39%	39%	39%	32%	36%	38%	34%	25%	18%	34%	24%

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 18b. Individual laboratory results for Serum #149 - class I by Lifecodes-Immucor Single Antigen

**** Serum 149 ****																											
Ctr	B13	B38	B47	B62	B27	B48	B60	B61	B67	B7	B73	B81	B39	B41	B42	B55	B72	B75	B76	B8	Cw2	B50	A66	B49	B77	Cw17	B56
3808	9173	771	4893	854	3417	3028	5998	4965	974	5536	2789	5614	822														
8029	14998	2019	8580	2429	9238	4254	11094	9511	2675	10371	5465	10713		1951	1547	1111	1166	1395	1602	1476	919	1171	1354	1118	1086	1090	
Avg	12086	1395	6737	1642	6328	3641	8546	7238	1825	7954	4127	8164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Std																											
Dev.S	4119	882	2607	1114	4116	867	3603	3215	1203	3419	1892	3606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MFI																											
%CV	34%	63%	39%	68%	65%	24%	42%	44%	66%	43%	46%	44%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18a. Individual laboratory results for Serum #149 - class I by One Lambda Single Antigen, cont.

**** Serum 149 ****												
Ctr	B71	B54	B18	B2708	B35	B45	B59	B64	Bw6	B2705	Other	
230									7188			One Lambda
792												One Lambda
1426	2401	2222	2027		1964	1822	1568	1774			B78,B52,B82,B65	One Lambda
2400												One Lambda
3224	2241	1948	1778		1555	1153	1755	1551	20448		B78,B52,B82,B65>	One Lambda
3753	1165	1140										One Lambda
5214	2162			20941						19030	A6602	One Lambda
8001	1673	1486	1345		1304	1218	1052	1215	18450			One Lambda
8050	1657	1602	1457		1336	1360	1282	1347				One Lambda
8083												One Lambda
8103				5231						4138	B40,B15,B8101,B3901	One lambda
Avg	1883	1680	1652	13086	1540	1388	1414	1472	15362	11584		
Std												
Dev.S	466	419	310	11109	304	302	310	244	7149	10530		
MFI												
%CV	25%	25%	19%	85%	20%	22%	22%	17%	47%	91%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 18b. Individual laboratory results for Serum #149 - class I by Lifecodes-Immucor Single Antigen, cont.

**** Serum 149 ****												
Ctr	B71	B54	B18	B2708	B35	B45	B59	B64	Bw6	B2705	Other	
3808				6598						5000	B703,B8101	Immucor
8029	947			12136					12136		B703,B37,Bw4,B3901	Lifecodes
Avg	-	-	-	9367	-	-	-	-	-	-		
Std												
Dev.S	-	-	-	3916	-	-	-	-	-	-		
MFI												
%CV	-	-	-	42%	-	-	-	-	-	-		

Table 19a. Individual laboratory results for Serum #150 - class I by One Lambda Single Antigen

**** Serum 150 ****																								
Ctr	B13	B18	B35	B37	B38	B41	B44	B45	B46	B47	B48	B49	B50	B51	B52	B53	B55	B56	B57	B58	B59	B60	B61	B62
230	20556	14597	23866	8477	14323	20630	19869	21890	8344	17512	18878	27421	27007	21252	16299	22202	8601	21977	12931	12270	10355	20932	20290	22246
792	12752	8068	14229	5243	7723	12737	11728	13491	4725	9828	7475	17325	17364	13476	10147	13722	5302	13412	7573	7724	6016	12416	11941	15035
1426	19025	13240	22592	6122	13077	19207	18252	20629	9086	14688	12258	25712	25556	18634	14758	21336	8064	20389	12796	12769	9016	18966	18324	21856
2400	16325	11726	18954	8462	11363	17118	15441	17622	7804	13322	10428	21539	20445	17011	14506	18813	8460	17202	10507	10099	9085	16155	15761	19988
3224	16161	10617	16502	4928	9365	15261	14059	15363	5352	12407	8047	21152	21319	17630	10521	17442	6885	15116	9844	8911	7468	13901	14686	17346
3753	14153	7798	16939	2667	7830	14932	13778	16196	5697	10890	6158	20939	20784	15050	10665	16558	4940	15862	8193	8317	5189	13036	14137	16573
5214	20772	16014	22243	8370	15432	20968	19967	21086	8173	17109	13981	23574	23518	21868	15880	22193	9530	21382	14130	13785	10435	20681	20431	22503
8001	17988	11639	20042	6498	11334	18076	16750	19605	6089	14690	10991	23147	23077	18493	13654	19452	7000	18368	10773	11231	7847	17580	17771	19885
8050	16726	11450	19917	5148	10532	17706	16279	19196	7071	13470	9805	24176	23602	17409	13049	18214	7084	19036	10298	10325	7449	17348	17430	20788
8083	24694	18189	27253	13119	17885	23400	21878	25193	10880	19475	16489	29319	29995	25252	20083	26442	13065	23746	17029	16391	15046	22533	23064	27947
8103	6347	3300	6940	1980	2958	5732	5728	6537	2396	4576	2941	8809	9227	6893	4960	7104	2346	5836	3078	3440	2682	5459	5337	6844
Avg	16864	11513	19043	6456	11075	16888	15794	17892	6874	13452	10677	22101	21990	17543	13138	18498	7389	17484	10650	10478	8235	16273	16288	19183
Std																								
Dev.S	4815	4139	5439	3101	4134	4783	4509	4993	2338	4108	4613	5505	5447	4801	3991	5071	2760	4968	3691	3455	3216	4882	4827	5364
MFI																								
%CV	29%	36%	29%	48%	37%	28%	29%	28%	34%	31%	43%	25%	25%	27%	30%	27%	37%	28%	35%	33%	39%	30%	30%	28%

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 19b. Individual laboratory results for Serum #150 - class I by Lifecodes-Immucor Single Antigen

**** Serum 150 ****																								
Ctr	B13	B18	B35	B37	B38	B41	B44	B45	B46	B47	B48	B49	B50	B51	B52	B53	B55	B56	B57	B58	B59	B60	B61	B62
3808	4812	2445	7144	1814	2579	4482	5899	5155	1157	4686	1056	9413	9010	3977	4519	6793	1256	5106	2624	3319	1687	5203	4468	7545
8029	5532	3137	8426	2254	3401	5209	6429	5847	1343	4819	1090	9631	9774	4865	5200	7349	1472	5473	3372	3474	1877	5479	4998	7951
Avg	5172	2791	7785	2034	2990	4846	6164	5501	1250	4753	1073	9522	9392	4421	4860	7071	1364	5290	2998	3397	1782	5341	4733	7748
Std																								
Dev.S	509	489	907	311	581	514	375	489	132	94	24	154	540	628	482	393	153	260	529	110	134	195	375	287
MFI																								
%CV	10%	18%	12%	15%	19%	11%	6%	9%	11%	2%	2%	2%	6%	14%	10%	6%	11%	5%	18%	3%	8%	4%	8%	4%

Table 19a. Individual laboratory results for Serum #150 - class I by One Lambda Single Antigen, cont.

**** Serum 150 ****																									
Ctr	B63	B64	B71	B72	B75	B76	B77	B78	B39	B54	B8	A24	B67	Cw10	A23	Cw4	Cw9	A69	A2	B65	A68	B42	B3901	Other	
230	18256	4779	23539	25935	18347	17664	15578	20261	12980	6267	2838	4616	4865		3613			2059	2272					B4005	One Lambda
792	10617	2718	13163	15856	10715	9452	9388	11997	4523	3049	1824	2333	2826	2107	1774	1918	1858								One Lambda
1426	17231	5294	19876	23825	16949	14876	14800	17759	8379	4765	3348	1951	5074	3937	2185	4048	4300	1921	1677	2276	1197	1158		A43,Cw1,Cw5>	One Lambda
2400	14181	3843	17428	20234	14870	13651	13183	16657	7354	4999	2791	3369	4162	3050	2731	2443	2924	2200							One Lambda
3224	12194	3417	16319	19096	13463	9863	11898	13861	5154	4344	1840	3692	3971	2423	2515	1993	2310	2001	1908	1325	1111	1359			One Lambda
3753	12254	2752	14918	19062	12546	10238	10173	14293	4427	3188	1639	2656	2864	2027	2042	3084	2164	1455	1338	1163	1001				One Lambda
5214	17752	5293	21251	23222	19386	17286	16007	20593	8917	6032	3602	4023	5142	4067	3400	2243	3703	2286	2159	2306				A203,A2403	One Lambda
8001	14627	3963	17943	21712	15737	12338	13107	16694	6367	4175	2704	3176	3765	2782	2319	2288	2638	2112	1714	1835	1110	1036			One Lambda
8050	15188	3873	18267	22725	14368	13105	12534	16541	6162	4326	2120	1911	4118	2584	1993	3792	2746	1127	1482	1545	1102			Cw1,Cw5,Cw14>	One Lambda
8083	20576	7246	24494	28943	22130	20400	19199	22945	12998	8411	5184	6891	8004	5509	4808	3997	5233	3749	3184	3460		2971		A25	One Lambda
8103	5101	1131	5944	7805	5763	4359	4801	6060	1985	1133	798		1039	994		1963	897			645			1985	B40,B15,B14>	One Lambda
4480	14362	4028	17558	20765	14934	13021	12788	16151	7204	4608	2608	3462	4166	2948	2738	2777	2877	2101	1967	1819	1104	1631	1985		
3150	4280	1622	5160	5584	4450	4517	3829	4624	3455	1905	1180	1497	1745	1274	942	874	1253	722	585	867	70	903	-		
70%	30%	40%	29%	27%	30%	35%	30%	29%	48%	41%	45%	43%	42%	43%	34%	31%	44%	34%	30%	48%	6%	55%	-		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 19b. Individual laboratory results for Serum #150 - class I by Lifecodes-Immucor Single Antigen, cont.

**** Serum 150 ****																										
Ctr	B63	B64	B71	B72	B75	B76	B77	B78	B39	B54	B8	A24	B67	Cw10	A23	Cw4	Cw9	A69	A2	B65	A68	B42	B3901	Other		
3808	5254	894	7668	7631	4957	3192	5577	5021	1522														1522	B82,B7,B703,B14>	Immucor	
8029	5552	1084	8205	8050	5739	4040	5877	5478		901	802	787		800									1750	B82,B703,A2403	Lifecodes	
Avg	5403	989	7937	7841	5348	3616	5727	5250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1636		
Std Dev.S	211	134	380	296	553	600	212	323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161		
MFI																										
%CV	4%	14%	5%	4%	10%	17%	4%	6%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10%			

Table 20a. Individual laboratory results for Serum #147- class II by One Lambda Single Antigen

**** Serum 147 ****																					
Ctr	DQ6	DQ7	DQ8	DQ9	DR1	DR11	DR13	DR14	DR15	DR16	DR4	DR52	DR17	DR51	DR9	DR10	DR18	DR103	DPw2	DP18	DP28
230	12516	25650	24943	24356	10285	10018	8525	7564	10508	8576	12029	9398	8694	3133	3810	4006	9876	2063			
792	4031	17721	16848	15869	4387	4678	4498	5093	4694	3661	7546	5010	3855		1609		3874				
1426	7726	23506	22015	21628	9037	7611	8166	8206	9040	7215	10584	8186	7035	3169	3490	3516	7873	2375	3322	2298	1425
2400	6761	20587	19543	19595	6774	7334	6969	7323	7543	6349	9863	6981	6218	2508	2838	2820	7132		2555	2119	
3224	12301	24785	23495	22632	7728	7941	7686	9414	7813	6256	12446	8549	6553	3144	2737	2707	6953	1509	3086	2370	1854
3753	4853	20170	18784	17749	6392	5801	6022	6009	6630	5163	8593	5975	5031	2103	2281	2432	5906	1325	2235		
5214	15123	24637	23962	23462	10535	9835	8830	11013	11270	8840	15599	11193	8302	4724	4974	3918	7845	2286	3621	2636	2136
8001	9642	26002	24477	22190	7445	6999	8390	8810	8826	6993	11135	8435	5865	2850	2984	2801	6707	1170	2321	1718	1240
8050	4922	21965	19690	18943	7230	7237	5801	6705	7284	5784	9771	6134	6080	2148	2197	2534	6202	1432	2416	1448	1226
8083	20192	37223	33259	32842	13889	13183	18806	15245	15718	12595	20081	15345	11176	6051	6156	6138	13351		5014	4259	2711
8103	3856	10025	8197	7924	2118	2497	2438	2597	2534	2054	3369	2865	2481	915	1077	922		567			
Avg	9266	22934	21383	20654	7802	7558	7830	7998	8351	6681	11001	8006	6481	3075	3105	3179	7572	1591	3071	2407	1765
Std Dev.S	5266	6599	6183	6122	3157	2837	4132	3289	3470	2785	4309	3325	2370	1431	1467	1361	2550	615	933	910	587
MFI																					
%CV	57%	29%	29%	30%	40%	38%	53%	41%	42%	42%	39%	42%	37%	47%	47%	43%	34%	39%	30%	38%	33%

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 20b. Individual laboratory results for Serum #147 - class II by Lifecodes-Immucor Single Antigen

**** Serum 147 ****																					
Ctr	DQ6	DQ7	DQ8	DQ9	DR1	DR11	DR13	DR14	DR15	DR16	DR4	DR52	DR17	DR51	DR9	DR10	DR18	DR103	DPw2	DP18	DP28
3808	1547	10914	10862	8953	2631	4598	3179	2924	3273	2791	6469	3656		851				1017			
8029	2253	12642	13552	10409	3974	5965	4645	4516	4817	4132	8437	5249	5721	1463	1105	1366	5200	1853	946		
Avg	1900	11778	12207	9681	3303	5282	3912	3720	4045	3462	7453	4453	-	1157	-	-	-	1435	-	-	-
Std Dev.S	499	1222	1902	1030	950	967	1037	1126	1092	948	1392	1126	-	433	-	-	-	591	-	-	-
MFI																					
%CV	26%	10%	16%	11%	29%	18%	26%	30%	27%	27%	19%	25%	-	37%	-	-	-	41%	-	-	-

Table 20a. Individual laboratory results for Serum #147 - class II by One Lambda Single Antigen, cont.

**** Serum 147 ****						
Ctr	DQ6	DP10	DP402	DPw4	Other	
230	12516					One Lambda
792	4031					One Lambda
1426	7726	2326		2872		One Lambda
2400	6761			2216		One Lambda
3224	12301	1693	2623		DQA1*05, DQA1*06	One Lambda
3753	4853					One Lambda
5214	15123		3070			One Lambda
8001	9642	1463	1756			One Lambda
8050	4922	1219	1931			One Lambda
8083	20192	3327		4380		One Lambda
8103	3856				DR3,DQ3,DQA1*01, DQA1*06 >	One Lambda
Avg	9266	2006	2345	3156		
Std Dev.S	5266	846	611	1110		
MFI						
%CV	57%	42%	26%	35%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 20b. Individual laboratory results for Serum #147 - class II by Lifecodes-Immucor Single Antigen, cont.

**** Serum 147 ****						
Ctr	DQ6	DP10	DP402	DPw4	Other	
3808	1547				DR3,DR1403	Immucor
8029	2253			943	DR1403	Lifecodes
Avg	1900	-	-	-		
Std Dev.S	499	-	-	-		
MFI						
%CV	26%	-	-	-		

Table 21a. Individual laboratory results for Serum #148 - class II by One Lambda Single Antigen

**** Serum 148 ****				
Ctr	DR4	DR53	Other	
230	7437	5150		One Lambda
792	4771	2465		One Lambda
1426	5418	4473		One Lambda
2400	6475	3584		One Lambda
3224	7942	4280	DQ2	One Lambda
3753	4150	2830		One Lambda
5214	7833	4938		One Lambda
8001	6374	3493		One Lambda
8050	5365	3783		One Lambda
8083	8173	4764		One Lambda
8103	1491	957		One Lambda
Avg	5948	3702		
Std Dev.S	2006	1248		
MFI				
%CV	34%	34%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 21b. Individual laboratory results for Serum #148 - class II by Lifecodes-Immucor Single Antigen

**** Serum 148 ****				
Ctr	DR4	DR53	Other	
3808	2589	851		Immucor
8029	4366	1449		Lifecodes
Avg	3478	1150		
Std Dev.S	1257	423		
MFI				
%CV	36%	37%		

Table 22a. Individual laboratory results for Serum #149 - class II by One Lambda Single Antigen

**** Serum 149 ****																										
Ctr	DP11	DP13	DP14	DP17	DP18	DP19	DP28	DP9	DPw1	DPw2	DPw3	DPw6	DR11	DR7	DPw5	DR53	DP10	DP20	DR9	DP402	DPw4	DPA1*03	DPA1*04	Other		
230	8105	6551	13848	14560	11860	6896	9791	14931	8514	13922	13524	13191	6478	18556	8681	5482	15121	13526	3205			7922	10333	DP26	One Lambda	
792	3236	2844	5502	5732	5558	2603	4468	6254	3323	5671	6019	5389	2931	10108	3844	2505	5877	5298		5058						One Lambda
1426	6879	5320	10936	12006	9130	5794	7432	12321	7037	11334	10808	10507	4137	14292	7212	4348	12086	10993	2333		9812					One Lambda
2400	5444	4754	9702	9904	8090	4892	6811	10647	5565	9565	9633	8987	4770	13915	5812	3629	10436	9355	2366		8182					One Lambda
3224	6464	5321	10436	11354	10842	5129	9287	11898	6636	11070	11742	10477	6070	15149	7531	4537	10996	11064	2219		9684	11064	8494	DPA1*02	One Lambda	
3753	5296	4114	9126	10117	7705	4443	6141	9822	5574	9616	8984	8762	3615	13333	5565	3830	10337	8914	2150	8299						One Lambda
5214	8031	6853	13123	13481	12691	6755	11048	13968	8393	13836	13736	13441	7028	15970	9212	5148	13472	13586	2616	12627						One Lambda
8001	5878	4571	9117	9548	8673	3945	6776	9717	5291	8978	8841	8442	3748	13148	5557	3407	9756	8392	1807	7640						One Lambda
8050	5224	4368	9128	9873	7840	4767	6355	10630	5630	10422	9447	9235	4126	16227	5929	4357	10265	9617	2017	8899						One Lambda
8083	8530	6922	12042	13242	12169	6036	9783	13163	8406	13062	12276	11711	5731	17772	8612	5630	14082	12179	3191	10939						One Lambda
8103	1181	1331	2574	2827	2705	1028	1582	3036	1716	2499	2753	2654	1252	5611		1264	2672	2671	713		2036	2671	1582	DP401>	One Lambda	
Avg	5843	4814	9594	10240	8842	4753	7225	10581	6008	9998	9797	9345	4535	14007	6796	4012	10464	9600	2262	8910	7429	7219	6803			
Std																										
Dev.S	2190	1700	3252	3443	3007	1753	2716	3447	2141	3449	3255	3186	1702	3632	1728	1302	3592	3325	713	2637	3670	4240	4614			
MFI																										
%CV	37%	35%	34%	34%	34%	37%	38%	33%	36%	34%	33%	34%	38%	26%	25%	32%	34%	35%	32%	30%	49%	59%	68%			

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 22b. Individual laboratory results for Serum #149 - class II by Lifecodes-Immucor Single Antigen

**** Serum 149 ****																									
Ctr	DP11	DP13	DP14	DP17	DP18	DP19	DP28	DP9	DPw1	DPw2	DPw3	DPw6	DR11	DR7	DPw5	DR53	DP10	DP20	DR9	DP402	DPw4	DPA1*03	DPA1*04	Other	
3808	2261	1862	3965	3517	2980	2075	3357	3737	1945	3343	3534	3559	1976	5646	2346	1147			843	3233	3233				Immucor
8029	1382	1186	2694	2476	2034	1369	2369	2566	1304	2399	2396	2510	1375	3705	1431						2271				Lifecodes
Avg	1822	1524	3330	2997	2507	1722	2863	3152	1625	2871	2965	3035	1676	4676	1889	-	-	-	-	-	2752	-	-		
Std																									
Dev.S	622	478	899	736	669	499	699	828	453	668	805	742	425	1372	647	-	-	-	-	-	680	-	-		
MFI																									
%CV	34%	31%	27%	25%	27%	29%	24%	26%	28%	23%	27%	24%	25%	29%	34%	-	-	-	-	-	25%	-	-		

Table 23a. Individual laboratory results for Serum #150 - class II by One Lambda Single Antigen

**** Serum 150 ****							
Ctr	DR17	DR18	DR52	DR13	DR14	Other	
230	5135	5004	2272	2041			One Lambda
792	1990	1938					One Lambda
1426	3529	3457	1941	1426	1108	DQ2	One Lambda
2400	3316	3067	2624				One Lambda
3224	3422	3210	2756	1456	1104	DR11,DR12,D	One Lambda
3753	2573	2398	1247	1145	1001		One Lambda
5214	3971	3768	2911				One Lambda
8001	2622	2563	2090	1341			One Lambda
8050	3484	3171	2016	1434	1127	DQ5	One Lambda
8083	4557	4220	3866	2354			One Lambda
8103	Neg						One Lambda
Avg	3460	3280	2414	1600	1085		
Std Dev.S	940	899	740	431	57		
MFI							
%CV	27%	27%	31%	27%	5%		

Blue = DSA against cell #145 only

Gold = DSA against cell #146 only

Green = DSA against cell #145 and #146

Table 23b. Individual laboratory results for Serum #150 - class II by Lifecodes-Immucor Single Antigen

**** Serum 150 ****							
Ctr	DR17	DR18	DR52	DR13	DR14	Other	
3808			751			DR3	Immucor
8029	789	764					Lifecodes
Avg	-	-	-	-	-		
Std Dev.S	-	-	-	-	-		
MFI							
%CV	-	-	-	-	-		

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Table 24. Individual Virtual crossmatch results for Serum #149 vs Donor# V1

Donor #V1 HLA genotype: A*02:01-A*29:02-B*44:03-B*51:13-C*15:02-C*16:01-DRB1*04:04-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQA1*03:01-DQB1*02:02-DQB1*03:02-DPA1*01:03-DPA1*02:01-DPB1*04:02-DPB1*11:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	149	79%	Negative	no Class I DSA	Positive	DR7 (18556) DR53 (5482) DP402 (12752) DPA1*02 (10286)	Unacceptable	
792	149	92	Negative	no Class I DSA	Positive	DR7 (10108) DR53 (2505) DP11 (3236) DP402 (5058)	Unacceptable	
1426	149	98%	Negative	no Class I DSA	Positive	DR7 (14292) DR53 (4349) DPw4 (9812) DP11 (6879)	Unacceptable	
1461	149	23	Negative	no Class I DSA	Positive	DR7 (3804) DR53 (606) DPw4 (2218) DP11 (1349)	Unacceptable	
2400	149	92%	Negative	no Class I DSA	Positive	DR7 (13802) DR53 (3492) DPw4 (8010) DP11 (5284)	Unacceptable	B Cell XM Positive
3224	149	98%	Negative	no Class I DSA	Positive	DR7 (15149) DR53 (4537) DP11 (6464) DP402 (9684) DPA1*02 (11898)	Unacceptable	B Cell XM Positive; CLASS 2 Unacceptable Present
3632	149	92	Negative	no Class I DSA	Positive	DR7 (13306) DR53 (3004) DP11 (4830) DP402 (8799)	Unacceptable	No class I DSA was detected. Please note: The donor specific antigen HLA-B*51:13 was not present on the panel tested; however, B*51:01 and B*51:02 tested negative. Class II DSA detected. Antibody binding against multiple DP shared epitopes.
3753	149	92.87%	Negative	no Class I DSA	Positive	DR7 (13333) DR53 (3830) DP11 (5296) DP402 (8299)	Unacceptable	No HLA Class I antibodies were detected.
3808	149		Negative	no Class I DSA	Positive	DR7 (5646) DR53 (1147) DP11 (2261) DP402 (3233)	Unacceptable	Class II DSA
3966	149	91%	Positive	no Class I DSA	Positive	DR7 (13975) DR53 (4053) DPw4 (8243) DP11 (5137) DPA1*02 (8281)	Unacceptable	
8001	149	98	Negative	no Class I DSA	Positive	DR7 (13148) DR53 (3407) DP11 (3801) DP402 (7640)	Unacceptable	B*51:13 is not included in the LSAB panel
8029	149	32	Negative	no Class I DSA	Positive	DR7 (3705) DPw4 (2271) DP11 (1382)	INTERMEDIATE RISK	-
8050	149	92.557	Negative	no Class I DSA	Positive	DR7 (16227) DR53 (4357) DP11 (5224) DP402 (8899)	Unacceptable	
8080	149	96	Negative	no Class I DSA	Positive	DR7 (15477) DR53 (8791) DP11 (6777) DP402 (8731)	Unacceptable	B Cell Prediction Positive
8083	149	92.8	Negative	no Class I DSA	Positive	DR7 (17772) DR53 (5630) DPw4 (10939) DP11 (8530)	Unacceptable	Possible DSA to class II antibodies
8103	149	37	Negative	no Class I DSA	Positive	DR7 (5611) DR53 (1264) DPw2 (2499) DP11 (1181) DPA1*01 (2790) DPA1*02 (3036)	Unacceptable Borderline	DRB1*07 MFI greater than 5000
8111	149	75	Negative	no Class I DSA	Positive	DR7 (14900) DR53 (3900) DPw4 (8500) DP11 (5300)	Unacceptable	

Table 25. Individual Virtual crossmatch results for Serum #149 vs Donor# V2

Donor #V2 HLA genotype: A*02:01-A*02:02-B*38:01-B*53:01-C*04:01-C*12:03-DRB1*04:11-DRB1*08:06-DRB4*01:03-DQA1*01:02-DQA1*03:01-DQB1*03:02-DQB1*06:02-DPA1*01:03-DPA1*02:02-DPB1*03:01-DPB1*05:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	149	79	Positive	B38 (5288)	Positive	DR53 (5482) DPw3 (13524) DPw5 (8681) DPA1*02 (10063)	Unacceptable	
792	149	92	Positive	B38 (2334)	Positive	DR53 (2505) DPw3 (5125) DPw5 (2998)	Unacceptable	
1426	149	98%	Positive	B38 (4843)	Positive	DR53 (4657) DPw3 (10808) DPw5 (7213)	Unacceptable	
1461	149	23	Positive	B38 (704)	Positive	DR53 (606) DPw3 (2203) DPw5 (1312)	Unacceptable	
2400	149	92%	Positive	B38 (3574)	Positive	DR53 (3765) DPw3 (9629) DPw5 (5465)	Unacceptable	
3224	149	98%	Positive	B38 (4338)	Positive	DR53 (4537) DPw3 (11742) DPw5 (7531) DPA1*02 (10996)	Unacceptable	
3632	149	92	Positive	B38 (2439)	Positive	DR53 (3228) DPw3 (9075) DPw5 (4687)	Unacceptable	Class I DSA detected. Please note: The donor-specific antigen HLA-A*02:02 is not present on the panel tested; however, serologically equivalents A2(A*02:01,02:06) tested negative. Class II DSA detected. Antibody binding against multiple DP shared epitopes.
3753	149	92.87%	Negative	B38 (2829)	Positive	DR53 (3830) DPw3 (8984) DPw5 (5565)	Unacceptable	
3808	149		Borderline	B38 (771)	Positive	DPw3 (3534) DPw5 (2346)	Unacceptable	
3966	149	91%	Positive	B38 (2266)	Positive	DR53 (4053) DPw3 (9540) DPw5 (5918) DPA1*01 (7418) DPA1*02 (6144)	Unacceptable	
8001	149	98	Positive	B38 (3440)	Positive	DPw3 (8841) DPw5 (5557)	Unacceptable	A*02:02 is not included in the LSAB panel; DRB1*04:11 and DRB1*08:06 are not included in the LSAB panel
8029	149	32	Positive	B38 (2019)	Positive	DPw3 (2396) DPw5 (1431)	INTERMEDIATE RISK	-
8050	149	92.557	Positive	B38 (4209)	Positive	DR53 (4357) DPw3 (9447) DPw5 (5929)	Unacceptable	
8080	149	96	Positive	B38 (3874)	Positive	DR53 (4676) DPw3 (9052) DPw5 (5736)	Unacceptable	
8083	149	92.8	Positive	B38 (3531)	Positive	DR53 (5630) DPw3 (11698) DPw5 (8612)	Unacceptable	
8103	149	37	Borderline	B38 (936)	Positive	DR53 (1264) DPw3 (2753) DPA1*01 (2499) DPA1*02 (3036)	Borderline	Low MFI on class I and II
8111	149	75	Positive	B38 (3800)	Positive	DR53 (3900) DPw3 (9600) DPw5 (5700)	Unacceptable	

Table 26. Individual Virtual crossmatch results for Serum #149 vs Donor# V3

Donor #V3 HLA genotype: A*11:01-A*24:02-B*39:01-B*40:01-C*07:02-DRB1*09:01-DRB1*15:02-DRB4*01:03-DRB5*01:02-DQA1*01:01-DQA1*03:02-DQB1*03:03-DQB1*05:01-DPA1*02:02-DPB1*01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	149	79	Positive	B60 (22435) B39 (6583)	Positive	DR9 (3205) DR53 (5482) DPw1 (8514) DPA1*02 (10063)	Unacceptable	
792	149	92	Positive	B60 (12221) B39 (2819)	Positive	DR53 (2505) DPw1 (3323)	Unacceptable	
1426	149	98%	Positive	B60 (21141) B39 (5882)	Positive	DR9 (2211) DR53 (4657) DPw1 (7037)	Unacceptable	
1461	149	23	Positive	B60 (5745) B3901 (727)	Positive	DR9 (571) DR53 (606) DPw1 (1205)	Unacceptable	
2400	149	92%	Positive	B60 (17521) B39 (4218)	Positive	DR9 (2098) DR53 (3765) DPw1 (5338)	Unacceptable	
3224	149	98%	Positive	B60 (18826) B39 (5645) Bw6 (20448)	Positive	DR9 (2219) DR53 (4537) DPw1 (6636) DPA1*02 (10996)	Unacceptable	
3632	149	92	Positive	B60 (14551) B39 (3833)	Positive	DR9 (1209) DR53 (3228) DPw1 (5117)	Unacceptable	Please note: The donor-specific antigen HLA-DRB5*01:02 is not present on the panel tested; however, serologically equivalent DRB5*01:01 tested negative. Class I DSA detected.
3753	149	92.87%	Positive	B60 (15281) B39 (3619)	Positive	DR9 (2150) DR53 (3830) DPw1 (5574)	Unacceptable	
3808	149		Positive	B60 (5998) B39 (822)	Positive	DR9 (843) DPw1 (1945)	Unacceptable	weak Class II DSA but Class I DSA present
3966	149	91%	Positive	B60 (15133) B39 (3785)	Positive	DR9 (1734) DR53 (4053) DPw1 (5541) DPA1*02 (6144)	Unacceptable	
8001	149	98	Positive	B40 (17726) B39 (4358)	Positive	DR9 (1677) DR53 (3407) DPw1 (5291) DPA1*02 (9756)	Unacceptable	DRB5*01:02 is not included in the LSAB panel
8029	149	32	Positive	B60 (11094) B3901 (2205)	Positive	DPw1 (1304)	Unacceptable	-
8050	149	92.557	Positive	B60 (18843) B39 (5145)	Positive	DR9 (2017) DR53 (4357) DPw1 (5630)	Unacceptable	
8080	149	96	Positive	B60 (16845) B39 (4214)	Positive	DR9 (2516) DR53 (4676) DPw1 (11144)	Unacceptable	
8083	149	92.8	Positive	B60 (26227) B39 (4774)	Positive	DR9 (2629) DR53 (5630) DPw1 (8406)	Unacceptable	DSA to class I antibodies
8103	149	37	Positive	B40 (5270) B39 (1107)	Positive	DR9 (713) DR53 (1264) DPw1 (1716) DPA1*02 (2672)	Unacceptable	Positive class I and class II
8111	149	75	Positive	B60 (17376) B39 (4700)	Positive	DR9 (2081) DR53 (3900) DPw1 (5500)	Unacceptable	

Table 27. Individual Virtual crossmatch results for Serum #150 vs Donor# V1

Donor #V1 HLA genotype: A*02:01-A*29:02-B*44:03-B*51:13-C*15:02-C*16:01-DRB1*04:04-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQA1*03:01-DQB1*02:02-DQB1*03:02-DPA1*01:03-DPA1*02:01-DPB1*04:02-DPB1*11:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
713	150	98%	Positive	B44 (19869)	Negative	no class II DSA	Unacceptable	
792	150	98	Positive	B44 (11728) B51 (13476)	Positive	no class II DSA	Unacceptable	No B*51:13 bead on panel; No Class II DSA
1426	150	100%	Positive	A2 (1873) B44 (18407) B51 (18633) Cw15 (1475)	Positive	no class II DSA	Unacceptable	
1461	150	44	Positive	B44 (5210) B51 (4337)	Positive	no class II DSA	Unacceptable	
2400	150	99%	Positive	A2 (1836) B44 (15975) B51 (16965)	Positive	no class II DSA	Unacceptable	Positive due to Class I reactivity.
3224	150	100%	Positive	A2 (1908) B44 (14059) B51 (14504)	Positive	DQ2 (1346)	Unacceptable	
3632	150	97	Positive	A2 (1392) B44 (16099) B51 (18058)	Positive	no class II DSA	Unacceptable	Class I DSA detected. Please note: The donor specific antigen HLA-B*51:13 was not present on the panel tested; however, B*51:01 and B*51:02 tested positive. No Class II DSA detected. Low level DR52-associated reactivity observed, not relevant for this donor.
3753	150	99.55%	Positive	A2 (1338) B44 (13778) B51 (15050)	Positive	no class II DSA	Unacceptable	No HLA Class II antibodies were detected.
3808	150		Positive	B44 (5899) B51 (3977)	NT	no class II DSA	Unacceptable	No Class II DSA but could be positive due to Class I DSA
3966	150	99%	Positive	B44 (12991) B51 (14556)	Positive	DQ2 (1072)	Unacceptable	No bead B*51:13 in SAB panel
8001	150	100	Positive	A2 (1714) B44 (16750) Cw15 (802)	Positive	DQ2 (553)	Unacceptable	B*51:13 is not included in the LSAB panel
8029	150	43	Positive	B44 (6429)	Positive	no class II DSA	Unacceptable	-
8050	150	99.556	Positive	A2 (1482) B44 (16279) B51 (17409) Cw15 (1130)	Positive	no class II DSA	Unacceptable	
8080	150	99	Positive	A2 (2268) B44 (16337) B51 (18419)	Positive	no class II DSA	Unacceptable	Patient has Class I DSA
8083	150	99.54	Positive	A2 (3184) B44 (21878)	Positive	no class II DSA	Unacceptable	DSA to class I antibodies
8103	150	48	Positive	B44 (5728) B51 (6893)	Negative	no class II DSA	Unacceptable	
8111	150	91	Positive	A2 (1500) B44 (15200) B51 (17300)	Positive	DQ2 (1000)	Unacceptable	

Table 28. Individual Virtual crossmatch results for Serum #150 vs Donor# V2

Donor #V2 HLA genotype: A*02:01-A*02:02-B*38:01-B*53:01-C*04:01-C*12:03-DRB1*04:11-DRB1*08:06-DRB4*01:03-DQA1*01:02-DQA1*03:01-DQB1*03:02-DQB1*06:02-DPA1*01:03-DPA1*02:02-DPB1*03:01-DPB1*05:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	150	98	Positive	A2 (2272) B53 (22202) B38 (14323)	Negative	no class II DSA	Unacceptable	
792	150	98	Positive	Cw4 (1918) B53 (13722) B38 (7723)	Positive	no class II DSA	Unacceptable	
1426	150	100%	Positive	Cw4 (4048) A2 (1873) B53 (21336) B38 (13077)	Positive	DQ6(1193)	Unacceptable	
1461	150	44	Positive	B53 (6562) B38 (3060)	Positive	no class II DSA	Unacceptable	
2400	150	99%	Positive	Cw4 (2348) A2 (1836) B53 (18720) B38 (11326)	Positive	no class II DSA	Unacceptable	Positive due to Class I reactivity.
3224	150	100%	Positive	Cw4 (1993) A2 (1908) B53 (17442) B38 (9365)	Positive	no class II DSA	Unacceptable	
3632	150	97	Positive	Cw4 (2128) A2 (1276) B53 (18711) B38 (11431)	Positive	no class II DSA	Unacceptable	No class I DSA detected. Please note: The donor-specific antigen HLA-A*02:02 is not present on the panel tested; however, serologically equivalents A2(A*02:01,02:06) tested positive. No Class II DSA detected. Please note: The donor-specific antigen HLA-DRB1*04:11 and 08:06 were not present on the panel tested; however, serologically equivalents DRB1*08:01 and DR4(DRB1*04:01,04:02,04:03,04:04,04:05) tested negative.
3753	150	99.55%	Positive	Cw4 (3084) A2 (1338) B53 (16558) B38 (7830)	Positive	no class II DSA	Unacceptable	No HLA Class II antibodies were detected.
3808	150		Positive	B53 (6793) B38 (2579)	NT	no class II DSA	Unacceptable	No Class II DSA but could be positive due to Class I DSA
3966	150	99%	Positive	Cw4 (2588) B53 (13474) B38 (7422)	Positive	no class II DSA	Unacceptable	
8001	150	100	Positive	Cw4 (2288) A2 (1714) B53 (19452) B38 (11334)	Positive	no class II DSA	Unacceptable	A*02:02 is not included in the LSAB panel; DRB1*04:11 and DRB1*08:06 are not included in the LSAB panel
8029	150	43	Positive	B53 (7349) B38 (3401)	Positive	no class II DSA	Unacceptable	
8050	150	99.556	Positive	Cw4 (3792) A2 (1482) B53 (18214) B38 (10532)	Positive	no class II DSA	Unacceptable	
8080	150	99	Positive	Cw4 (3523) A2 (4536) B53 (18930) B38 (11011)	Positive	no class II DSA	Unacceptable	Patient has Class I DSA
8083	150	99.54	Positive	Cw4 (3997) A2 (3184) B53 (26442) B38 (17885)	Positive	no class II DSA	Unacceptable	DSA to class I antibodies
8103	150	48	Positive	Cw4 (1963) B53 (7104) B38 (2958)	Negative	no class II DSA	Unacceptable	
8111	150	91	Positive	Cw4 (3098) A2 (1500) B53 (17600) B38 (10900)	Positive	no class II DSA	Unacceptable	

Table 29. Individual Virtual crossmatch results for Serum #150 vs Donor# V3

Donor #V3 HLA genotype: A*11:01-A*24:02-B*39:01-B*40:01-C*07:02-DRB1*09:01-DRB1*15:02-DRB4*01:03-DRB5*01:02-DQA1*01:01-DQA1*03:02-DQB1*03:03-DQB1*05:01-DPA1*02:02-
DPB1*01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	150	98	Positive	A24 (4616) B60 (20932) B39 (12980)	Negative	no class II DSA	Unacceptable	
792	150	98	Positive	A24 (2013) B60 (12416) B39 (4523)	Positive	no class II DSA	Unacceptable	
1426	150	100%	Positive	A24 (1779) B60 (18966) B39 (8379)	Positive	no class II DSA	Unacceptable	
1461	150	44	Positive	A24 (720) B60 (5220) B3901 (1562)	Positive	no class II DSA	Unacceptable	
2400	150	99%	Positive	A24 (3105) B60 (16075) B39 (7311)	Positive	no class II DSA	Unacceptable	No Class II DSA. Positive due to Class I reactivity.
3224	150	100%	Positive	A24 (3692) B60 (13901) B39 (5154)	Positive	no class II DSA	Unacceptable	
3632	150	97	Positive	A24 (2673) B60 (13931) B39 (7542)	Positive	no class II DSA	Unacceptable	Class I DSA detected. No Class II DSA detected. Low level DR52-associated reactivity observed, not relevant for this donor. The donor-specific antigen HLA-DRB5*01:02 is not present on the panel tested; however, serologically equivalent DRB5*01:01 tested negative.
3753	150	99.55%	Positive	A24 (2656) B60 (13036) B39 (4427)	Positive	no class II DSA	Unacceptable	No HLA Class II antibodies were detected.
3808	150		Positive	A24 (771) B60 (5203) B39 (1522)	NT	no class II DSA	Unacceptable	No Class II DSA but could be positive due to Class I DSA
3966	150	99%	Positive	A24 (3157) B60 (13543) B39 (5766)	Positive	DQ5 (1377)	Unacceptable	
8001	150	100	Positive	A24 (2655) B40 (17580) B39 (6367)	Positive	no class II DSA	Unacceptable	DRB5*01:02 is not included in the LSAB panel
8029	150	43	Borderline	A24 (787) B3901 (1750)	Borderline	no class II DSA	LOW RISK	No donor specific class II anti HLA antibodies
8050	150	99.556	Positive	A24 (1911) B60 (17348) B39 (6162)	Positive	no class II DSA	Unacceptable	
8080	150	99	Positive	A24 (3696) B60 (16610) B39 (6406)	Positive	no class II DSA	Unacceptable	Patient has Class I DSA
8083	150	99.54	Positive	A24 (5968) B60 (22533) B39 (12998)	Positive	no class II DSA	Unacceptable	DSA to class I antibodies
8103	150	48	Positive	B40 (5459) B39 (1985)	Negative	no class II DSA	Unacceptable	
8111	150	91	Positive	A24 (3200) B60 (16039) B39 (6100)	Positive	no class II DSA	Unacceptable	Allele specific DQB1*05:02 but donor is DQB1*05:01

Table 30 : Individual Cutoff values and Pretreatment - Exchange 25

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera Pretreatment	
230	A	2000	DRB1	2000	One Lambda	Single Antigen	None	
	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	FBS/EDTA	
	B	1500	DRB3/4/5	1500				
	C	1500	DQA1	1500				
	Class I			DQB1				1500
				DPB1				1500
				Class II				1500
1426	A	1000	DRB1	1000	One Lambda	LabScreen Class II Sir	DTBA	
	B	1000	DRB3/4/5	1000				
	C	1000	DQA1	1000				
	Class I			DQB1				1000
				DPB1				1000
				Class II				1000
2400	A	2000	DRB1	2000	One Lambda	Single Antigen	EDTA	
	B	2000	DRB3/4/5	2000				
	C	2000	DQA1	2000				
	Class I			DQB1				2000
				DPB1				2000
				Class II				2000
3224	A	1000	DRB1	1000	One Lambda	Single Antigen	EDTA	
	B	1000	DRB3/4/5	1000				
	C	1000	DQA1	1000				
	Class I			DQB1				1000
				DPB1				1000
				Class II				1000
3753	A	1000	DRB1	1000	One Lambda	Single Antigen	DTT	
	B	1000	DRB3/4/5	1000				
	C	2000	DQA1	1000				
	Class I			DQB1				1000
				DPB1				2000
				Class II				1000
3808	A		DRB1		Immucor	Single Antigen	None	
	B		DRB3/4/5					
	C		DQA1					
	Class I	750		DQB1				
				DPB1				
				Class II				750

Table 30 : Individual Cutoff values and Pretreatment - Exchange 25

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera Pretreatment
5214	A	2000	DRB1	2000	One Lambda	Single Antigen	FCS+EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
8001	A		DRB1		One Lambda	Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	1000	DQB1				
			DPB1				
			Class II	1000			
8029	A	500	DRB1	500	lifecodes	Single Antigen	None
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I	59	DQB1	500			
			DPB1	500			
			Class II	50			
8050	A	1000	DRB1	1000	One Lamda	Single Antigen	DTT
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
8083	A	2000	DRB1		One Lambda	Single Antigen	EDTA
	B	2000	DRB3/4/5				
	C	2000	DQA1				
	Class I	2000	DQB1				
			DPB1				
			Class II	2000			
8103	A	500	DRB1	500	One lambda	Single Antigen	DTT
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I	500	DQB1	500			
			DPB1	500			
			Class II	500			