

Report of the 31st Single Antigen, Flow and Virtual Crossmatch Exchange

June 26, 2024

Cells	181-182
Serum	183-186

In this study, virtual donor V2 and serum 180 (patient 2) from Exchange 30 (September 2023) are re-examined as cell 181 and serum 183. A comparison of virtual crossmatch predictions (VXM) (V2 vs. serum 180 against the physical flow crossmatch (FXM) (**cell 181 vs. serum 183**) are summarized in **Part 1** of this report. **Part 2** examines the Luminex single antigen

(SAB) data for serum sample nos. **183 - 186**. **Part 3** summarizes the FXM results for **cells 181 and 182** against the 4 sera. Finally, in **Part 4**, the VXM predictions for 3 potential donors (V1 - V3) against serum 185 and serum 186 are evaluated.

Part 1

Physical Flow Cytometric Crossmatch vs. Virtual Crossmatch

Direct comparisons of VXM predictions with physical FXM outcomes are shown in Tables 1a – 1c. Seventeen labs submitted virtual crossmatch predictions in Exchange 30. Among them, 13 labs reported back physical FXM results in Exchange 31 (Table 1a). For donor V2 vs. serum 180, 12 of the 13 labs predicted the expected T/B-cell FXM to be positive, with each reporting A23 (14658) as a DSA. A number of labs (n = 8) assigned DP402

(1558) as a DSA as well. In this present study, the same 12 labs reported the physical T/B-cell FXM for cell 181 vs. serum 183 as positive, in agreement with predictions (Table 1b). Interestingly, 1 lab which predicted the expected B-cell FXM to be negative reported the physical B-cell FXM as negative as well.

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

Exchange 030					Exchange 031				
Virtual Crossmatch - Donor V2 vs. Serum 180					Physical Flow Crossmatch - Cell 181 vs. Serum 183				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V2	180	13	POS (13)	POS (12) NEG (1)	181	183	13	POS (13)	POS (12) NEG (1)

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

		T-cell Virtual XM (Exchange 30)					B-cell Virtual XM (Exchange 30)		
		+	-	∅			+	-	∅
Physical T-cell FXM (Exchange 31)	+	12			Physical B-cell FXM (Exchange 31)	+	12		
	-		1			-		1	
	∅					∅			

+/- = positive/negative

∅ = borderline/not typed

n = number of labs

The reporting of DSA and DSA strength was consistent across the 2 studies (Table 1c). In Exchange 31, all 13 labs reported anti-A23 (13627) reactivity against cell 181. In addition, a number of labs (n = 5) once again

reported DP4(DP402) (1356) as a DSA as well. The remainder of the labs indicated no class II DSA were present.

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

Cell #181 HLA genotype: A*01:01:01-A*23:01:01-B*42:01:01-B*50:01:01-C*06:02:01-C*17:01:01/DRB1*03:02:01-DRB1*07:01:01-DRB3*01:01:02-DRB4*01:03:01-DQA1*02:01:01-DQA1*04:01:01-DQB1*02:02-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*01:01:02- DPB1*04:02:01

Exchange 030					Exchange 031				
Virtual Crossmatch - Donor V2 vs. Serum 180 (Patient 2)					Physical Flow Crossmatch - Cell 181 vs. Serum 183				
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	A23(22206)	Positive	No class II DSA	230	Positive	A23	Positive	No class II DSA
792	Positive	A23(10926)	Positive	No class II DSA	792	Positive	A23(13627)	Positive	No class II DSA
1426	Positive	A23(14970)	Positive	DPw1(1251) DPw4(1528)	14262	Positive	A*23:01(13292)	Positive	DPA1*01:03, DPB1*04:02(1426)
2400	Positive	A23(16550)	Positive	DPw4(1139)	2400	Positive	A*23:01(13676)	Positive	DPB1*01:01(1154) DPB1*04:02(2233)
3224	Positive	A23(12764)	Positive	DP402(998)	3224	Positive		Positive	
3753	Positive	A23(16471)	Positive	No class II DSA	3753	Positive	A23(12696)	Positive	No class II DSA
3808	Positive	A23(6175)	Positive	DP402(1149)	3808	Positive	A*23:01(7302)	Positive	No class II DSA
3966	Positive	A23(15216)	Positive	DPw4(1344) DPA1*01(3039) DPA1*02(6530)	3966	Positive		Positive	
8001	Positive	A23(14345)	Positive	DP402(1527) DQA1*04(742)	8001	Positive	A23(14180)	Positive	DPB1*04:02(1367), DPB1*01:01(1043)
8050	Positive	A23(17353)	Positive	DPw1(1478) DP402(1571)	8050	Positive	A23(12094)	Positive	DPB1*04:02(1015)
8083	Positive	A23(17376)	Positive	No class II DSA	8083	Positive	A*23:01(16311)	Positive	No class II DSA
8103	Positive	A24(5547) B53(870) A23(5047) B35(1220) A2403(2429)	Negative	DPw3(1644) DPw6(1648) DP9(1757) DP17(1450) DP14(1559) DP20(1575) DQA1*03(4735) DQA1*05(5448) DQA1*06(5129)	8103	Positive	A*23:01(7808), C*17:01(664)	Negative	No class II DSA
8111	Positive	A23(17300)	Positive	DPw1(1500) DPw4(1900)	8111	Positive	A23(13800)	Positive	DPB1*04:02(2150)

Part 2

Class I and class II Luminex single antigen results for serum samples 183 - 186 are summarized in Tables 12 - 15. Individual listing of results for

each participating laboratory are listed in Tables 16 – 23. Pretreatment and cutoff values are listed in Table 30.

Antibody Identification

Serum 183: This sample was previously examined as serum 180 in Exchange 30. As shown below, the reporting of antibodies and antibody strength was consistent across the 2 studies.

Exchange 30 Class I		Exchange 31 Class I		Exchange 30 Class II		Exchange 31 Class II	
*** Serum 180 ***		*** Serum 183 ***		*** Serum 180 ***		*** Serum 183 ***	
Antigen	Median	Antigen	Median	Antigen	Median	Antigen	Median
A23	14658	A23	13627	DQ7	14799	DQ7	15747
A24	13154	A24	12279	DQ8	13622	DQ8	13803
B35	2549	B35	2525	DQ9	13119	DQ9	13473
B53	1775	B53	2138	DPw3	7065	DPw3	6830
B51	1223	B51	1182	DPw6	6934	DPw6	6895
A2403	3328	A2403	4130	DP9	6908	DP9	6705
B78	641	B78	754	DP17	6459	DP17	6177
B75	508	B75	531	DP14	6162	DP14	5989
Bw4	9006	Bw4	8035	DP20	6779	DP20	6599
Bw6	1326	Bw6	1129	DPw2	1592	DPw2	1417
B8	748	B8	564	DP18	1460	DP18	1370
B7801	472	B7801	656	DR11	1451	DR11	1511
B71	645	Cw17	664	DP28	1346	DP28	1234

Strong class I/II reactivity was detected in this sample, as $\geq 90\%$ of labs assigned reactivity to A23, A24, and B35. In addition, $\geq 90\%$ of labs reported reactivity to DQ7, DQ8, DQ9, DP6, DP3, DP9, DP17, and DP14.

Anti-A23 (13627) and DP4(DP402) (1359) reactivity was reported against cell 181. Against cell 182, all 16 labs indicated there were no class I DSA present. Labs were mixed, however, in the reporting of class II DSA. Eight labs assigned DQA1*05 (3075) as a DSA, while the remainder indicated no class II DSA were present.

*(median MFI by SAB)

Genotypes of cells provided by UCLA

Cell 181 (Black): A*01:01:01-A*23:01:01-B*42:01:01-B*50:01:01-C*06:02:01-C*17:01:01/DRB1*03:02:01-DRB1*07:01:01-DRB3*01:01:02-DRB4*01:03:01-DQA1*02:01:01-DQA1*04:01:01-DQB1*02:02-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*01:01:02-DPB1*04:02:01

Serum 184: This sample was reported as strongly positive to a number of C-locus and DP-locus specificities, including reactivity to Cw18 (11200), Cw5 (10948), Cw6 (8110), DR13 (21546), DR8 (19777), DR11 (18831), and DR14 (18036). Each was reported by 100% of labs.

Multiple DSA (Cw6, Cw17, A23, DR18, and DR52) were reported against cell 181. Respective MFI's for each were 8110, 4259, 1269, 17183, and 7289. Against cell 182, 6 labs reported weak anti-B8 (1028) reactivity, while the remainder reported no class I DSA were present. Labs were in agreement in the reporting of class II DSA, with labs reporting anti-DR17 (16155), -DR52 (7289), and -DR51 (8868) reactivity against the cell. Anti-DQ2 (3468) and DQA1*05 (13291) reactivity was reported by a few labs.

Serum 185: Strong class I reactivity was detected in this sample, with $\geq 90\%$ of labs reporting reactivity to a number of 1C, 5C, and 7C specificities, including A29, A1, A36, B56, B35, B71, B75, B55, B53, and A43. Each was reported with a MFI strength of > 10000 MFI. For class II, 100% of labs reported reactivity to DR13 (6700), DR9 (6592), DR11(6306), DR8 (4945), and DR17 (4629).

Multiple DSA (A1, B42, B50, DR18, and DR53) with MFI's ranging from 3333 to 20150 were reported against cell 181 by all labs. In addition, a few labs also reported anti-DR52 (2451) reactivity against the cell. Against cell 182, anti-A1, -B62, -Cw9, -A31, -DR17, and -DR52 reactivity was reported, with MFI values ranging from 2012 to 20150.

Serum 186: This sample was reported as positive to a number of 5C, 7C, 8C, and 12C specificities, including B60, B41, B45, B49, B50, B72, B44, B61, B38, and B64. Each was reported by 100% of labs, with MFI's ranging from 2838 to 10375. No class II antibodies were detected in this sample.

Labs reported anti-B50 (8887) reactivity against cell 181. Against cell 182, anti-B62 (8157) and -B8 (2178) reactivity was reported. Several labs also reported anti-Cw9 (1207) reactivity against the cell.

Cell 182 (Caucasian/Asian): A*01:01:01-A*31:01:02G-B*08:01:01-B*15:01:01-C*03:03:01-C*07:01:01-DRB1*03:01:01-DRB1*15:01:01G-DRB3*01:01:02G-DRB5*01:01:01G-DQA1*01:02:01-DQA1*05:01:01-DQB1*02:01:01G-DQB1*05:03:01G-DPA1*02:01:02-DPA1*02:02:02-DPB1*01:01:01G-DPB1*02:02:01

Conclusion:

Good agreement (> 90%) was achieved in the reporting of class I and II antibodies across all 4 sera. In each case, class I antibodies of > 10000 MFI and class II antibodies of > 6000 MFI were present.

A total of 17 labs submitted single antigen data for samples 183 - 186. Each of the 17 labs shared the kit type and pretreatment method used for testing. For kit type (Figure 1), 15 labs (88%) noted using One Lambda's LABScreen Single Antigen kit; among them, 2 labs specified using the LAB-

Screen ExPlex kit. The remaining 2 labs (12%) used kits from Immucor.

For serum pretreatment (Figure 2), 8 labs indicated they treated the sera with EDTA prior to testing. This is up from 7 labs in the previous study. Three labs treated with DTT, 2 labs used a combination of FBS/FCS with EDTA, and 1 lab used absorption. The remaining 3 labs indicated the sera was untreated prior to testing.

Figure 1. Kit Information breakdown

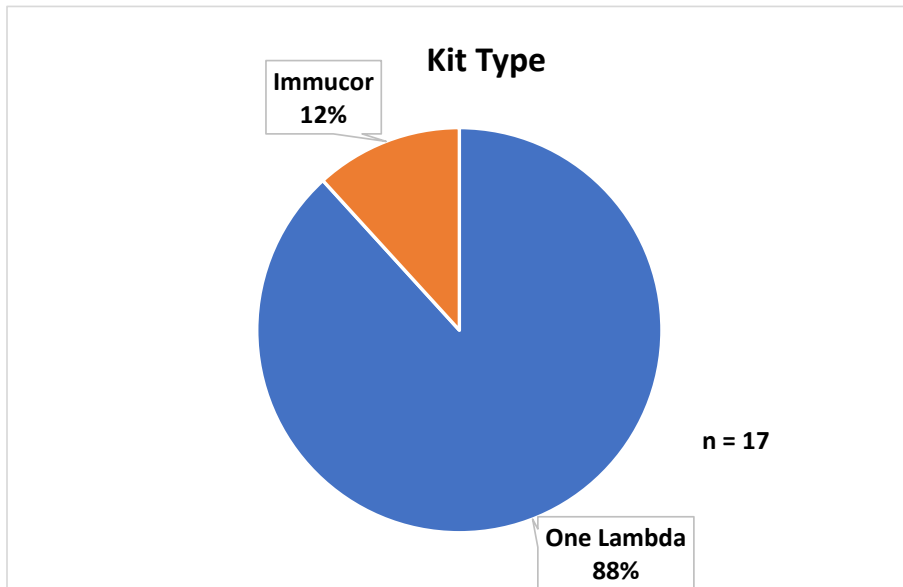
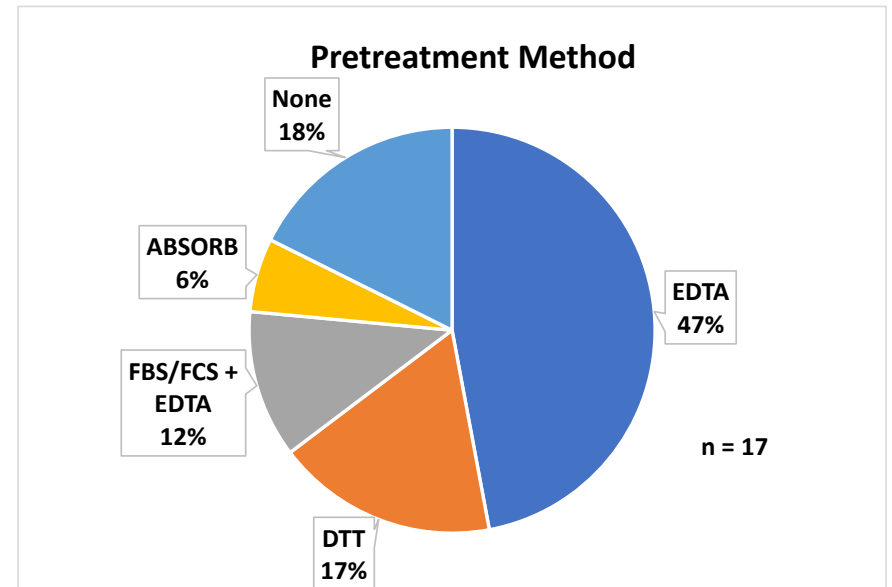


Figure 2. Sera pretreatment breakdown



Part 3

Flow cytometric crossmatch results for cell 181 and cell 182 against serum samples 183 - 186 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 181. For this cell, $\geq 80\%$ agreement was achieved for all 8 T/B-cell FXM. In each case, class I DSA of > 7800 MFI were present. Several discrepancies were observed for cell 181 vs. 184. Thirteen labs reported a positive T-cell FXM, 2 labs reported borderline results, and 1 lab reported it as negative in the presence of DSA at the C-locus (Cw6, Cw17).

Cell 182. For this cell, $\geq 80\%$ agreement was achieved for 7 of 8 T/B-cell FXM. In the case of the positive FXM, DSA of > 7600 MFI were present. No agreement, however, was achieved for the B-cell FXM of this cell against serum 183. Nine labs reported it as negative, 5 labs reported it as positive, and 1 lab reported borderline results in the presence of a single DSA (DQA1*05, 3075 MFI).

Table 2. Summary of Flow crossmatch results for Cell #181- #182 vs. Serum #183 - #186

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
181	183	16	POS(16)	POS(15) NEG(1)	182	183	16	NEG(14) POS(2)	POS(5) NEG(9) Borderline(1) NT(1)
181	184	16	POS(13) NEG(1) Borderline(2)	POS(16)	182	184	16	NEG(16)	POS(16)
181	185	16	POS(16)	POS(16)	182	185	16	POS(16)	POS(16)
181	186	16	POS(16)	POS(15) NEG(1)	182	186	16	POS(16)	POS(15) NEG(1)

consensus $< 80\%$

Conclusion:

Good agreement ($\geq 80\%$) was achieved for all 8 T-cell FXM. In the case of the positive FXM, class I DSA > 7000 MFI were reported. For cell 181 vs. serum 184, multiple DSA (Cw6 , Cw17) with respective MFI of 8110 and 4259 were reported. Despite this, 2 labs reported the positivity as moderate, 2 labs reported it as borderline, and 1 lab reported it as negative. This once again shows the sensitivity of the FXM can be variable in the presence of low expression DSA.

Good agreement ($\geq 80\%$) was achieved for 7 of 8 B-cell FXM. All 7 were reported as positive in the presence of class I or class II DSA of > 7000 MFI. By contrast, for cell 182 vs. serum 183, labs were split in the reporting of FXM outcome and in the reporting of DSA. Five labs reported a positive B-cell FXM and 1 lab reported it as borderline. All 6 labs reported DQA1*05 (3075) as a DSA, along with 2 labs reporting the B-cell FXM as negative. The remaining 7 labs which reported the FXM as negative indicated no DSA were present.

Part 4

Virtual XM predictions for each virtual donor (V1 - V3) against serum samples 185 and 186 are summarized in Table 3 and individual laboratory

predictions 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 challenges. In the case of the positive predictions, class I DSA of > 7700 MFI were present.

For virtual **B-cell predictions** of the expected B-cell FXM, $\geq 80\%$ agreement was also achieved for all 6 challenges. Each was reported as positive in the presence of class I DSA of > 7700 MFI.

Table 3. Summary of Virtual Crossmatch Predictions (Serum #185 - #186 vs. Donors V1 - V3)

Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction
V1	185	17	POS(17)	POS(16) NEG(1)	V2	185	17	POS(16) NEG(1)	POS(16) NEG(1)
V1	186	17	POS(17)	POS(14) NEG(3)	V2	186	17	POS(14) NEG(3)	POS(14) NEG(3)
Donor no.			T-cell Prediction	B-cell Prediction					
V3	185	17	POS(16) Borderline(1)	POS(16) Borderline(1)					
V3	186	16	POS(14) NEG(2)	POS(13) NEG(3)					

DSA Identification

Patient 1 (Serum 185)

Patient's fictional case history: This individual is a 35-year-old female being evaluated for her first transplant. Patient has had 1 prior pregnancy. The HLA type of the child is A*11:01-A*68:01-B*40:06-B*53:01-C*08:01-C*04:01-DRB1*01:02-DRB1*08:04-DQA1*01:02-DQA1*03:01-DQB1*04:02-DQB1*05:01-DPA1*02:01-DPA1*01:03-DPB1*01:01-DPB1*02:01. The patient's HLA type was as follows:

A*11:01 A*24:02	B*40:06 B*44:03	C*08:01 C*16:01			
DRB1*01:02 DRB1*16:01	DRB5*02:02:01G	DQA1*02:01 DQA1*01:02	DQB1*03:02 DQB1*05:01	DPA1*02:01	DPB1*01:01 DPB1*17:01

Labs reported the presence of multiple DSA (B35, Cw4, DR11, DR52) against **donor V1**. Respective MFI values for each were 11525, 1329, 6306, and 2451. In addition, 9 labs reported A31 (2012) as a DSA as well. All 17 labs predict the expected T-cell FXM for this donor-patient pair to be positive in the presence of strong class I DSA. For B-cell predictions, 16 labs predict the expected B-cell FXM to be positive. One lab predicting it to be negative noted low MFI for class II.

Multiple DSA (B55, B62, DR12, DR52, DR53) were reported against **donor V2**. Respective MFI values for each were 10898, 7628, 2911, 2451, and 3333. Additional anti-A34 (1767) reactivity was also reported against the donor by 7 labs. Sixteen labs predict the expected T/B-FXM to be positive. One lab predicting the physical T/B-cell FXM to be borderline reported DSA with low MFI values.

Strong anti-B35 (11525) reactivity was report against **donor V3**. In addition various labs reported anti-A2 (2273), -B57 (1750), -Cw4 (1329), -DR13 (6700), and -DR52 (2451) reactivity against the donor as well. For virtual predictions, 16 labs predict the expected physical T/B FXM to be positive, while 1 lab predicts borderline results due to low MFI.

Virtual Donors – HLA genotype

Donor 1 (V1): A*23:01:01-A*31:01:02-B*35:01:01-B*44:03:01-C*04:01:01/
DRB1*11:01:01-DRB1*15:01:01-DRB3*02:02:01-DRB5*01:01:01-DQA1*01:02-
DQA1*05:05-DQB1*03:01:01G-DQB1*06:02:01G-DPA1*01:03-DPB1*03:01:01G-
DPB1*04:01:01G

Donor 2 (V2): A*11:01:01-A*34:01:01-B*15:35-B*55:02:01-C*01:02:01-C*07:02:01-
DRB1*04:05:01-DRB1*12:02:01-DRB3*03:01:03-DRB4*01:03:01-DQA1*03:03:01,
DQA1*06:01:01-DQB1*03:01:01-DQB1*04:02:01-DPA1*02:02-DPB1*01:01:01-
DPB1*05:01:01

Donor 3 (V3): A*02:01:01-A*03:01:01-B*35:03:01-B*57:03:01-C*04:01:01-
C*07:01:02-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQB1*06:04:01-
DPA1*01:05-DPB1*04:01:01

Patient 2 (Serum 186)

Patient's fictional case history: This individual is a 50-year-old male being evaluated for his first transplant. The patient's HLA type was as follows:

A*29:02 A*30:02	B*07:02 B*58:01	C*07:02			
DRB1*03:01 DRB1*15:03	DRB3*02:02:01G DRB5*01:01	DQA1*01:02 DQA1*05:01	DQB1*06:02 DQB1*02:01	DPA1*01:03 DPA1*02:02	DPB1*01:01 DPB1*02:02

Reported DSA against **donor V1** were B35 (7706) and B44 (8759). No class II DSA were reported. All 17 labs predict the expected T-cell FXM to be positive. For the B-cell FXM, 14 labs predict the expected B-cell FXM to be positive due to class I DSA. Three labs predict it to be negative. As a reminder, both class I and class II DSA should be taken into consideration when predicting the expected physical B-cell FXM, as B-cells express both class I and class II antigens.

No consensus was achieved in the reporting of DSA against **donor V2**. Twelve labs reported B62 (8157) as a DSA, 1 lab reported B15, and 3 labs indicated there were no class I DSA present. The variability in the reporting of DSA was likely due to the fact the donor's B*15:35 is not represented on the Luminex single antigen bead panel. No class II DSA were reported. As the reporting of DSA was mixed, so were physical crossmatch predictions. Labs (n = 14) which reported the presence of a DSA predict the physical T/B-cell FXM to be positive. Labs (n = 3) which indicated there were no DSA present, predict the expect T/B-cell FXM to be negative.

Variability was also observed in the reporting of DSA against **donor V3**. Among the 16 labs that submitted results for this virtual donor pair, 13 of them reported B35 (7706) as a DSA, while 3 labs indicated no class I DSA were present. Several labs noted the donor's B*35:03 is not represented on the Luminex single antigen bead panel. No class II DSA were reported. Virtual crossmatch predictions were also mixed among labs. The 13 labs which reported B35 as a DSA predict both the expected T-cell and the expected B-cell FXM to be positive. The 3 labs which indicated no class I or II DSA were present, predict the physical T/B-cell FXM to be negative.

Conclusion

For **serum 185**, $\geq 80\%$ agreement was achieved among labs in the reporting of virtual crossmatch predictions against donors V1 - V3. In each case, the expected T/B-cell FXM is predicted to be positive in the presence of DSA of > 10000 MFI. One lab reporting DSA of low MFI accounted for the discrepancies observed in predictions.

For **serum 186** against all 3 virtual donors, $\geq 80\%$ agreement was achieved among labs with respect to virtual crossmatch predictions. Each was reported as positive in the presence of class I DSA of > 7700 MFI.

A number of discrepancies were observed among the predictions. As this serum was class II negative, 3 labs predicted the expected B-cell FXM to be positive against donor V1 despite reporting B35 (7706) and B44 (8759) as DSA. In the case of donor V2 and V3, each donor carried an allele (B*15:35 and B*35:03, respectively) not represented on the single antigen bead panel. As such, the antigen was not reported as a DSA by some labs and the expected T/B-cell FXM was predicted to be negative.

NEXT MAILING DATE: September 11, 2024

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Flow Cytometric Crossmatch

Cell #181 HLA genotype: A*01:01:01-A*23:01:01-B*42:01:01-B*50:01:01-C*06:02:01-C*17:01:01/DRB1*03:02:01-DRB1*07:01:01-DRB3*01:01:02-DRB4*01:03:01-DQA1*02:01:01-DQA1*04:01:01-DQB1*02:02-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*01:01:02- DPB1*04:02:01

Table 4. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #183

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	183	5.7	10			Positive	A23	5.4	23.6			Positive	Positive due to Class I	3.71	2.34	YES
615	183	356	150			Positive	A*23:01(12419)	315	220			Positive	DPB1*04:02(1752) DPB1*01:01(1195) DQA1*04:01(822)	268	243	YES
792	183	57	155			Positive	A23(13627)	107	169			Positive	No class II DSA	261	336	YES
2400	183	48	299	NA	NA	Positive	A*23:01(13676)	64	286	NA	NA	Positive	DPB1*01:01(1154) DPB1*04:02(2233)	304	349	YES
3224	183		245			Positive			166			Positive				YES
3753	183	50	212			Positive	A23(12696)	100	230			Positive	No class II DSA	278	383	YES
3808	183	347	211			Positive	A*23:01(7302)	489	105			Positive moderate	No class II DSA	278	377	YES
3966	183	20	213			Positive		50	190			Positive		188	327	NO
5130	183	75	465.8			Positive	A*23:01(16249)	85	460.9			Positive	DQA1*02:01(15108); DPA1*01:03(9579); DPA1*02:01(9575)	308	266	YES
5214	183	19	86		21284	Positive	A23(31,540)	28	78		28942	Positive	DPB1*04:02(2,567)	257	273	YES
8001	183	50	286			Positive	A23(14180)	100	197			Positive	DPB1*04:02(1367), DPB1*01:01(1043)	211	368	YES
8050	183	50	224			Positive	A23(12094)	120	167			Positive	DPB1*04:02(1015)	66	151	YES
8083	183	74	192			Positive	A*23:01(16311)	108	320			Positive	No class II DSA			YES
8103	183	279	30.7	1.2	128.5	Positive	A*23:01(7808), C*17:01(664)	6995		1.7	235.5	Negative	No class II DSA	97.8	312.8	NO
8111	183	76	684			Positive	A23(13800)	114	761			Positive	DPB1*04:02(2150) DPA1*01:03, DPB1*04:02(1426 MFI)	190	235	YES
14262	183	67	247			Positive	A*23:01(13292 MFI)	82	252			Positive		264	312	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #184

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	184	5.7	6.5			Positive	A23,Cw6,Cw17	5.4	63.6			Positive	DR18,DR52	3.71	2.34	YES
615	184	356	56			Positive moderate	A*23:01(1220) C*06:02(7073) C*17:01(3930)	315	369			Positive Strong	DRB1*03:02(14914) DQA1*04:01(5680) DRB3*01:01(2530)	268	243	YES
792	184	57	148			Positive	Cw6(9337), Cw17(4588)	107	374			Positive	DR18(17002), DQ4(6308), DR52(2522)	261	336	YES
2400	184	48	211	NA	NA	Positive	A*23:01(1414) C*06:02(7828) C*17:01(5015)	64	436			Positive	DRB1*03:02(17364) DRB3*01:01(2962) DQA1*04:01/ DQB1*04:02(7408)	304	349	YES
3224	184		138			Positive			331			Positive				YES
3753	184	50	152			Positive	A23(1277), C6(10761), C17(5123)	100	339			Positive	DQA1*04(5117), DR18(20316), DR52(5910)	278	383	YES
3808	184	347	110			Positive moderate	C*06:02(3666); C*17:01(2061)	489	210			Positive	DRB1*03:02(12625), DQA1*04:01(6465), DRB3*01:01(2151)	278	377	YES
3966	184	20	193			Positive		50	293			Positive		188	327	NO
5130	184	75	399.4			Borderline	C*17:01(6007)	85	623.9			Positive	DRB1*03:02(15924); DQB1*04:02(5036); DQA1*04:01(5036) ; DQA1*02:01(2166)	308	266	YES
5214	184	19	63		8697	Positive	A23(3,155), C6(21,014), C17(11,140)	28	116		120344	Positive	DR18(37,372), DRB3*01(4,955), DQA1*04:01(10,661- 13,113)	257	273	YES
8001	184	50	210			Positive	A23(1260), Cw6(9264), Cw17(4648)	100	350			Positive	DR18(17502), DRB3*01:01(2297), DQA1*04:01(5701)	211	368	YES
8050	184	50	144			Positive	Cw6(7019) Cw17(2622)	120	275			Positive	DR18(17632) DR52(5581) DQA1*04(5268)	66	151	YES
8083	184	74	-7			Negative	C*06:02(9954), C*17:01(4973)	108	142			Positive	DRB1*03:02(18)(18565), DR52(01:01)(2805), DQA1*04:01(6057)			YES
8103	184	279	2.2	1.2	100	Borderline	A*23:01(775), C*06:02(4384), C*17:01(2378)	6995	100.2	1.7	413	Positive	DRB1*03:01(6359), DRB3*01:01(1093), DQA1*04:01(2141)	97.8	312.8	NO

Table 5. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #184, cont.

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
8111	184	76	346			Positive	A23(1130), C*17(3100), Cw6(8250)	114	2569			Positive	DR52(10800), DQA1*04:01(4800)	190	235	YES
14262	184	67	180			Positive	C*17:01(2416 MFI), C*06:02(5275 MFI)	82	399			Positive	DQA1*04:01, DQB1*04:02(5473 MFI), DRB1*03:02(11297 MFI), DRB3*01:01(1565 MFI)	264	312	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #185

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	185	5.7	15			Positive	A1,B42,B50	5.4	28.3			Positive	DR18,DR52,DR53	3.71	2.34	YES
615	185	356	210			Positive	A*01:01(17932) A*23:01(1514) B*50:01(8616) B*42:01(8530)	315	300			Positive Strong	DRB1*03:02(5972) DRB4*01:03(4769) DRB3*01:01(1419)	268	243	YES
792	185	57	253			Positive	A1(20480), B42(7872), B50(7440)	107	278			Positive	DR18(4600), DR53(3074)	261	336	YES
2400	185	48	357	NA	NA	Positive	A*01:01(19639) A*23:01(1358) B*42:01(8163) B*50:01(7834)	64	359	NA	NA	Positive	DRB1*07:01(1613) DRB1*03:02(5088) DRB3*01:01(1803) DRB4*01:03(3323)	304	349	YES
3224	185		273			Positive			225			Positive				YES
3753	185	50	245			Positive	A23(1165), A1(21976), B42(7544), B50(6990)	100	283			Positive	DR18(5154), DR52(2142), DR53(3689)	278	383	YES
3808	185	347	305			Positive strong	A*01:01(9248), B*50:01(3106), B*42:01(1763)	489	202			Positive	DRB1*03:02(2474), DRB4*01:01(1143)	278	377	YES
3966	185	20	320			Positive		50	321			Positive		188	327	NO
5130	185	75	528			Positive	A*01:01(20721); B*42:01(8137); B*50:01(6849)	85	635.8			Positive	DRB1*03:02(4968); DRB4*01:03(3584)	308	266	YES
5214	185	19	92		26693	Positive	A1(40,226), A23(2,869), B42(18,146), B50(19,316)	28	93		51463	Positive	DR18(12,089), DR7(3,298), DRB3*01(3,581), DRB4*01:03(9,423), DQA04:01(1,114- 1,206)	257	273	YES
8001	185	50	317			Positive	A1(19689), B42(7514), B50(6899)	100	295			Positive	DR18(5133), DR7(1197), DRB3*01:01(1470), DRB4*01:03(3508)	211	368	YES
8050	185	50	268			Positive	A1(7725) B42(4571) B50(4640)	120	213			Positive	DR18(3518) DR52(1558) DR53(2675)	66	151	YES
8083	185	74	177			Positive	A*01:01(23839), A*23:01(1320), B*42:01(9614), B*50:01(8060)	108	141			Positive	DRB1*07:01(1415), DRB1*03:02(18)(5426), DRB4*01:03(53)(4456)			YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #185, cont.

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
8103	185	279	50.7	1.2	148.5	Positive	A*01:01(12167), A*23:01(1080), B*42:01(5259), B*50:01(5621), C*17:01(1384)	6995	63.7	1.7	376.5	Positive	DRB1*03:02(1653), DRB3*01:01(650), DRB4*01:03(937)	97.8	312.8	NO
8111	185	76	1380			Positive	A1(20000), A23(1450), B42(8200), B50(7300)	114	2159			Positive	DR18(4900), DR7(1150)	190	235	YES
14262	185	67	297			Positive	A*01:01(15951 MFI), B*42:01(6578 MFI), B*50:01(6296 MFI)	82	315			Positive	DRB1*03:02(2614 MFI), DRB4*01:03(3013 MFI)	264	312	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #181 vs. Serum #186

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	186	5.7	16.2			Positive	B50	5.4	24.5			Positive	No class II DSA	3.71	2.34	YES
615	186	356	199			Positive	B*50:01	315	242			Positive	No class II DSA	268	243	YES
792	186	57	251			Positive	B50(8853)	107	243			Positive	No class II DSA	261	336	YES
2400	186	48	342	NA	NA	Positive	B*50:01(8928)	64	315	NA	NA	Positive	No class II DSA	304	349	YES
3224	186		296			Positive			203			Positive	No class II DSA			YES
3753	186	50	301			Positive	B50(9659)	100	274			Positive	No class II DSA	278	383	YES
3808	186	347	293			Positive strong	B*50:01(5850)	489	159			Positive moderate	No class II DSA	278	377	YES
3966	186	20	269			Positive		50	269			Positive		188	327	NO
5130	186	75	545			Positive	B*50:01(8887)	85	608			Positive	No class II DSA	308	266	YES
5214	186	19	97		33196	Positive	B50(22,186)	28	87		39989	Positive	No class II DSA	257	273	YES
8001	186	50	343			Positive	B50(10443)	100	250			Positive	No class II DSA	211	368	YES
8050	186	50	321			Positive	B50(8946)	120	231			Positive	No class II DSA	66	151	YES
8083	186	74	213			Positive	B*50:01(9908)	108	341			Positive	No class II DSA			YES
8103	186	279	168.7	1.2	266.5	Positive	B*50:01(6845)	6995	12.2	1.7	325	Negative	No class II DSA	97.8	312.8	NO
8111	186	76	619			Positive	B50(7360)	114	661			Positive	No class II DSA	190	235	YES
14262	186	67	298			Positive	B*50:01(6822 MFI)	82	279			Positive	No class II DSA	264	312	YES

Cell #182 HLA genotype: A*01:01:01-A*31:01:02G-B*08:01:01-B*15:01:01-C*03:03:01-C*07:01:01/DRB1*03:01:01-DRB1*15:01:01G-DRB3*01:01:02G-DRB5*01:01:01G-DQA1*01:02:01-DQA1*05:01:01-DQB1*02:01:01G-DQB1*05:03:01G-DPA1*02:01:02-DPA1*02:02:02-DPB1*01:01:01G-DPB1*02:02:01

Table 8. Individual Flow crossmatch results and DSA reported for Cell #182 vs. Serum #183

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	183	5.95	0			Negative	No Class I DSA	5.71	0			Negative	No Class II DSA	3.95	2.71	YES
615	183	356	-72			Negative	No Class I DSA	313				NT	No Class II DSA	268	240	YES
792	183	57	52			Negative	No Class I DSA	107	56			Negative	No Class II DSA	256	295	YES
2400	183	48	59	NA	NA	Positive	No Class I DSA	64	74	NA	NA	Positive	DQA1*05:01/ DQB1*02:01(2764) DPB1*01:01(1154) DPB1*02:02(2091)	298	373	YES
3224	183					Negative						Negative				YES
3753	183	50	50			Negative	No Class I DSA	100	0			Negative	No Class II DSA	243	282	YES
3808	183	331	-27			Negative	No Class I DSA	486	-74			Negative	No Class II DSA	262	374	YES
3966	183	20	18			Negative		50	25			Negative		194	319	NO
5130	183	75	258.5			Negative	No Class I DSA	85	376.5			Borderline	DQA1*05:01(2743)	238.8	335	YES
5214	183	19	10		579	Negative	No Class I DSA	28	25		2867	Positive	DQA1*05:01(4,175)	264	275	YES
8001	183	50	55			Positive	No Class I DSA	100	61			Negative	DQA1*05:01(2228)	210	311	YES
8050	183	50	15			Negative	No Class I DSA	120	6			Negative	DQA1*05:01(1877)	91	142	YES
8083	183	74	-86			Negative	No Class I DSA	108	-151			Negative	No Class I DSA			YES
8103	183	370		1.2	84.85	Negative	No Class I DSA	5512	41.5	1.7	271	Positive	DQA1*05:01(1256)	96	229.5	NO
8111	183	76	38			Negative	No Class I DSA	114	224			Positive	DQA1*05:01(2000), DP2(5000),DP1(1100)	250	342	YES
14262	183	67	36.2			Negative	No Class I DSA	82	86.8			Positive	DQA1*05:01, DQB1*02:01(1852 MFI)	264	289	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #182 vs. Serum #184

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	184	5.95	0			Negative	No Class I DSA	5.71	84.4			Positive	DR17	3.95	2.71	YES
615	184	356	-87			Negative	B*08(929)	313	412			Positive Strong	DRB1*03:01(15010) DQA1*05:01(12909) DRB3*01:01(2530) DRB5*01:01(9424)	268	240	YES
792	184	57	34			Negative	No Class I DSA	107	436			Positive	DR17(16155), DQ2(14000), DR51(9672), DR52(2522)	256	295	YES
2400	184	48	30	NA	NA	Negative	B*08:01(1506)	64	471	NA	NA	Positive	DRB1*03:01(16323) DRB3*01:01(2962) DRB5*01:01(11169) DQA1*05:01/ DQB1*02:01(17275)	298	373	YES
3224	184					Negative	No Class I DSA		390			Positive				YES
3753	184	50	5			Negative	No Class I DSA	100	479			Positive	DQA1*05(10465 MFI), DR52(5910), DRB5*01:01(6071), DR17(19521)	243	282	YES
3808	184	331	-57			Negative	No Class I DSA	486	284			Positive	DRB1*03:01(10940), DQA1*05:01(9191), DQB1*02:01(1737), DRB3*01:01(2151), DRB5*01:01(2593)	262	374	YES
3966	184	20	2			Negative		50	316			Positive		194	319	NO
5130	184	75	247.1			Negative	No Class I DSA	85	726.9			Positive	DQA1*05:01(12470); DQB1*02:01(12470); DRB5*01:01(6981); DRB3*01:01(2354)	238.8	335	YES
5214	184	19	-2		-83	Negative	B8(2156)	28	125		186086	Positive	DR17/03:01(37,461), DRB3*01(4,955), DRB5*01(19,586), DQA1*05:01(31,513)	264	275	YES
8001	184	50	10			Negative	No Class I DSA	100	434			Positive	DR17(16689), DRB3*01:01(2297), DRB5*01:01(9338), DQA1*05:01(13691)	210	311	YES
8050	184	50	0			Negative	B8(1038)	120	290			Positive	DR17(16423) DR52(5581) DR51 (DRB5*01:01,8311) DQA1*05(13291)	91	142	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #182 vs. Serum #184, cont.

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	184	74	-3			Negative	No Class I DSA	108	284			Positive	DRB1*03:01(17)(18340), DRB3*01:01(52)(2805), DRB5*01:01(51)(11140). DQA1*05:01(17062)			YES
8103	184	370		1.2	92.5	Negative	B*08:01(728)	5512	1.5	1.7	231	Positive	DRB1*03:01(6359), DRB3*01:01(1093), DRB5*01:01(3141), DQA1*05:01(7195)	96	229.5	NO
8111	184	76	0			Negative	B8(1000)	114	16923			Positive	DR17(14500), DR52(10800), DRB5*01:01(7900), DQA1*05:01(12650)	250	342	YES
14262	184	67	-8.5			Negative	No Class I DSA	82	479			Positive	DQB1*02:01(12316), DRB1*03:01(11200), DRB5*01:01(7223), DRB3*01:01(1565)	264	289	YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #182 vs. Serum #185

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	185	5.95	8.55			Positive	A1,A31,B62	5.71	17.4			Positive	DR17,DR52	3.95	2.71	YES
615	185	356	128			Positive Mod	A*01:01(17932) A*31:01(2420) B*15:01(8447) C*03:03(3680)	313	238			Positive	DRB1*03:01(5411) DQB1*02:01(1579) DRB3*1419)	268	240	YES
792	185	57	197			Positive	A1(20480), B62(8328), Cw9(3678), A31(2069)	107	242			Positive	DR17(4138)	256	295	YES
2400	185	48	274	NA	NA	Positive	A*01:01(19639) A*31:01(2184) B*15:01(7627) C*03:03(3418)	64	293	NA	NA	Positive	DRB1*03:01(4655) DRB3*01:01(1803) DQB1*05:03(3457)	298	373	YES
3224	185		202			Positive			201			Positive				YES
3753	185	50	209			Positive	A1(21976), A31(1632), B62(7599), C9(2697)	100	321			Positive	DR17(4630), DR52(2142)	243	282	YES
3808	185	331	272			Positive strong	A*01:01(9248), B*15:01(2785)	486	538			Positive Strong	DRB1*03:01(2120)	262	374	YES
3966	185	20	256			Positive		50	287			Positive		194	319	NO
5130	185	75	457.7			Positive	A*01:01(20721); C*03:03(4247)	85	550.6			Positive	DRB1*03:01(4785)	238.8	335	YES
5214	185	19	65		12598	Positive	A1(40,226), A31(4,397), B62/15:01(18,771), C9/03:03(6,373)	28	88		45944	Positive	DR17/03:01(11,030), DRB3*01(3,581), DQB1*02:01 (1,206-2,766)	264	275	YES
8001	185	50	242			Positive	A1(19689), A31(1704), B*15:01(7628), Cw9(3600)	100	298			Positive	DR17(4629), DRB3*01:01(1470)	210	311	YES
8050	185	50	166			Positive	A1(7725) B62(4358)	120	158			Positive	DR17(3320) DR52(1558)	91	142	YES
8083	185	74	218			Positive	A*01:01(23839), A*31:01(2205), B*15:01(62)(9192)	108	303			Positive	DRB1*03:01(17)(4943)			YES
8103	185	370	50.5	1.2	140.5	Positive	A*01:01(12167), A*31:01(1548), B*15:01(5340), C*03:03(3441)	5512	101.5	1.7	331	Positive	DRB1*03:01(1355), DRB3*01:01(650)	96	229.5	NO
8111	185	76	919			Positive	A1(20000),A31(1900), B62(8200),Cw9(4100)	114	4374			Positive	DR17(4400), DRB3*01:01(1200)	250	342	YES
14262	185	67	221			Positive	A*01:01(15951 MFI), A*31:01(1237 MFI), B*15:01(6272 MFI), C*03:03(2692 MFI)	82	225			Positive	DRB1*03:01(2442 MFI)	264	289	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #182 vs. Serum #186

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	186	5.95	8.95			Positive	B8,B62	5.71	10.7			Positive	No Class II DSA	3.95	2.71	YES
615	186	356	124			Positive Moderate	B*08(2205) B*15:01(6881) Cw9(752)	313	176			Positive Moderate	No Class II DSA	268	240	YES
792	186	57	172			Positive	B62(8157),B8(2402)	107	164			Positive	No Class II DSA	256	295	YES
2400	186	48	256	NA	NA	Positive	B*08:01(2695) B*15:01(7717) C*03:03(1114)	64	225	NA	NA	Positive	No Class II DSA	298	373	YES
3224	186		212			Positive			107			Positive				YES
3753	186	50	257			Positive	B62(8950), B8(2140)	100	239			Positive	No Class II DSA	243	282	YES
3808	186	331	301			Positive strong	B*15:01(3638), B*08:01(924)	486	167			Positive	No Class II DSA	262	374	YES
3966	186	20	197			Positive		50	248			Positive		194	319	NO
5130	186	75	467.4			Positive	B*15:01(8630)	85	517.2			Positive	No Class II DSA	238.8	335	YES
5214	186	19	74		17508	Positive	B8(5,849), B62/15:01(20,922), C9/03:03(1,990)	28	70		22588	Positive	No Class II DSA	264	275	YES
8001	186	50	248			Positive	B8(2989), B*15:01(10082), Cw9(1354)	100	221			Positive	No Class II DSA	210	311	YES
8050	186	50	202			Positive	B8(1960) B62(7489)	120	147			Positive	No Class II DSA	91	142	YES
8083	186	74	159			Positive	B*08:01(2702), B*15:01(62)(9500), C*03:03(09)(1312)	108	216			Positive	No Class II DSA			YES
8103	186	370	41	1.2	137	Positive	B*08:01(1900), B*15:01(5956), C*03:03(1102)	5512	12.5	1.7	242	Negative	No Class II DSA	96	229.5	NO
8111	186	76	1579			Positive	B62(7000),B8(1000)	114	2613			Positive	No Class II DSA	250	342	YES
14262	186	67	230			Positive	B*15:01(6064 MFI), B*08:01(1565 MFI)	82	225			Positive	No Class II DSA	264	289	YES

Luminex Single Antigen

Table 12. Summary of Single Antigen results for Serum #183

Class I							
*** Serum 183 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A23	17	100%	13627	14166	5416	7302	31540
A24	17	100%	12279	12630	5890	7033	33814
B35	16	94%	2525	2935	1344	1129	6859
B53	14	82%	2138	2103	595	1136	3047
B51	10	58%	1182	1322	371	903	2164
A2403	4	23%	4130	6797	5450	2769	16161
B78	4	23%	754	950	404	656	1639
Bw4	1	5%	8035	8035	-	8035	8035
Bw6	1	5%	1129	1129	-	1129	1129
Cw17	1	5%	664	664	-	664	664
B7801	1	5%	656	656	-	656	656
B8	1	5%	564	564	-	564	564
B75	1	5%	531	531	-	531	531

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Class II							
*** Serum 183 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ7	17	100%	15747	15432	6483	4960	34521
DQ8	17	100%	13803	13782	5834	5698	32102
DQ9	17	100%	13473	13376	5705	4071	30098
DPw6	17	100%	6895	7111	2764	2313	14097
DPw3	17	100%	6830	7115	2817	1840	13764
DP9	16	94%	6705	6739	2586	2565	13378
DP17	16	94%	6177	6257	2491	2190	12528
DP14	16	94%	5989	5977	2261	2249	11859
DP20	14	82%	6599	6971	2179	2386	12588
DP10	11	64%	1810	1787	631	606	3161
DQA1*05	9	52%	3075	6189	5755	1800	17364
DR11	8	47%	1511	1705	640	874	2975
DPw2	6	35%	1417	1485	398	844	2150
DP402	6	35%	1397	1443	268	1015	1800
DPw4	2	11%	1320	1319	433	887	1752
DP18	6	35%	1370	1352	277	845	1700
DP28	6	35%	1234	1303	305	814	1750
DP11	4	23%	1124	1126	85	1028	1229
DQA1*06	3	17%	15060	13087	4262	7168	17033
DPw1	3	17%	1043	1079	84	1000	1195
DQA1*03	2	11%	10420	10420	3692	6728	14112
DPw5	2	11%	638	637	103	535	740
DQ3	1	5%	7349	7349	-	7349	7349
DQ2	1	5%	2099	2099	-	2099	2099
DR9	1	5%	883	883	-	883	883
DP19	1	5%	877	877	-	877	877
DQA1*04	1	5%	822	822	-	822	822
DP13	1	5%	773	773	-	773	773
DQ4	1	5%	677	677	-	677	677

Table 13. Summary of Single Antigen results for Serum #184

Class I							
*** Serum 184 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
Cw18	17	100%	11200	10574	5167	2787	26641
Cw5	17	100%	10948	11304	5701	3641	31280
Cw6	17	100%	8110	8470	4089	2627	21014
Cw15	17	100%	7732	7942	4334	2044	22615
B35	17	100%	6480	6793	2798	2726	15577
Cw2	17	100%	6162	6119	2985	2086	15297
B53	17	100%	5378	5510	2122	2542	11058
B65	17	100%	4957	5189	2152	2013	10552
B51	17	100%	4389	4725	2022	2205	11547
Cw4	17	100%	4367	4600	2128	1117	10491
Cw17	17	100%	4259	4275	2147	1824	11140
B64	17	100%	4042	4315	1993	1456	10255
B18	17	100%	2838	3089	1394	998	6970
B78	16	94%	2681	2811	833	1602	4804
A23	10	58%	1269	1435	684	690	3155
A24	9	52%	1074	1296	818	793	3559
B8	7	41%	1038	1132	484	553	2156
A2403	4	23%	978	1192	617	621	2193
B75	4	23%	724	775	159	618	1035
Cw8	3	17%	6801	7245	3192	3577	11357
B7801	3	17%	1606	3042	2034	1602	5918
Cw16	2	11%	9568	9567	2650	6918	12217
B39	1	5%	4559	4559	-	4559	4559
Cw403	1	5%	3802	3802	-	3802	3802
B14	1	5%	3009	3009	-	3009	3009
Bw6	1	5%	2726	2726	-	2726	2726
Bw4	1	5%	2688	2688	-	2688	2688
B15	1	5%	618	618	-	618	618
B71	1	5%	582	582	-	582	582
B59	1	5%	541	541	-	541	541
B77	1	5%	538	538	-	538	538
B58	1	5%	515	515	-	515	515
A32	1	5%	506	506	-	506	506
B54	1	5%	506	506	-	506	506
Cw7	1	5%	505	505	-	505	505

Class II							
*** Serum 184 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR13	17	100%	21546	21340	7594	8944	47414
DR8	17	100%	19777	19521	7257	8786	44610
DR11	17	100%	18831	19498	6977	8388	43639
DR14	17	100%	18036	18133	6543	7522	40737
DR12	17	100%	16515	16880	6325	7614	38595
DR17	17	100%	16155	16462	6189	6359	37461
DR18	16	94%	17183	17578	5726	11297	37672
DR103	16	94%	15276	15928	5690	6344	33375
DR52	16	94%	7289	9726	5845	3826	28300
DR16	16	94%	5325	5456	2661	1601	13405
DQ7	15	88%	11262	12086	5611	6073	29277
DQA1*05	13	76%	13291	14576	5673	7195	31513
DQA1*04	13	76%	6093	6245	2453	2141	13113
DR51	12	70%	8868	7907	3101	2593	11737
DR4	11	64%	3392	3288	1276	1216	5525
DQA1*06	9	52%	10894	11135	4756	5138	22182
DQ2	3	17%	3468	6401	5419	1737	14000
DR1403	2	11%	12234	12233	643	11591	12876
DR1404	2	11%	11977	11977	511	11466	12488
DQ4	2	11%	7756	7756	1448	6308	9204
DQ9	1	5%	8507	8507	-	8507	8507
DR3	1	5%	7501	7501	-	7501	7501
DQ3	1	5%	6565	6565	-	6565	6565
DR1	1	5%	5691	5691	-	5691	5691
DQ6	1	5%	2225	2225	-	2225	2225

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 14. Summary of Single Antigen results for Serum #185

Class I							
*** Serum 185 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A29	17	100%	24796	24750	8229	11313	49693
A1	17	100%	20150	19311	7396	7725	40226
A36	17	100%	17974	17546	6704	6483	37618
B56	17	100%	13281	12745	5480	3864	29059
B35	17	100%	11525	11715	5246	3613	27355
B71	17	100%	11192	10782	4940	3011	24739
B75	17	100%	11124	10834	5332	3258	27794
B55	17	100%	10898	10665	4556	2717	23853
B53	17	100%	10268	10078	4355	3513	22781
A43	17	100%	10243	9552	3995	2323	19535
B49	17	100%	9384	9268	4212	3285	22947
A80	17	100%	8136	7996	3635	1358	18109
B42	17	100%	7872	7780	3602	1763	18146
B62	17	100%	7628	7786	3448	2785	18771
B77	17	100%	7234	7470	3407	3003	19133
B50	17	100%	6990	7462	3511	2590	19316
B67	17	100%	6990	7225	3249	1686	16143
B72	17	100%	6654	6804	3222	2299	16669
B63	17	100%	5916	5906	2784	1909	15199
A30	16	94%	9347	8865	4469	895	22451
A26	16	94%	7256	7094	3225	2029	16460
B54	16	94%	3417	3505	1355	1180	7307
B46	16	94%	3402	3362	1164	1374	6714
B7	16	94%	2969	3026	1254	899	6671
B51	15	88%	9551	8987	4976	862	22846
Cw9	15	88%	3678	3813	1156	1293	6373
A74	15	88%	2200	2357	940	673	5116
B78	14	82%	2810	2614	650	1155	3735
A33	14	82%	2219	2256	848	601	4689
A2	13	76%	2273	2343	892	811	4865
B81	13	76%	2201	2207	591	756	3385
A69	13	76%	1950	1977	714	851	3972
B82	12	70%	2711	2723	832	942	4203
A31	12	70%	2012	2009	853	692	4397
A68	12	70%	1771	1907	845	663	4238
A34	12	70%	1767	2011	849	667	4092
B58	11	64%	1863	1876	614	1132	3575

Class I							
*** Serum 185 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
Cw10	10	58%	2093	2091	607	983	3022
B57	10	58%	1750	1674	349	778	2080
B37	10	58%	1557	1430	365	594	1844
Cw4	10	58%	1329	1425	397	971	2209
B59	9	52%	1934	1783	540	545	2414
B41	8	47%	1590	1691	570	908	3005
A23	8	47%	1417	1460	619	569	2869
B39	6	35%	1319	1339	166	1125	1642
B52	6	35%	1161	1212	349	709	1889

Class II							
*** Serum 185 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR13	17	100%	6700	6800	3433	2257	17541
DR9	17	100%	6592	6391	3758	1356	18979
DR11	17	100%	6306	6476	3154	2099	15951
DR8	17	100%	4945	4754	2409	1418	12261
DR17	17	100%	4629	4525	2206	1355	11030
DR14	16	94%	8164	8611	4329	3184	22257
DR18	16	94%	5094	5167	2257	2474	12089
DR53	16	94%	3333	3579	1985	937	9423
DR12	16	94%	2911	2962	1664	1061	8091
DR52	16	94%	2451	2752	1664	851	8184
DR10	15	88%	2859	2959	1427	811	7074
DR7	6	35%	1362	1661	739	1197	3298
DQ2	4	23%	1709	1681	472	1000	2308
DQ5	4	23%	1564	1814	1016	673	3457
DR1404	2	11%	2965	2964	2	2963	2966
DR1403	2	11%	2114	2113	152	1962	2265
DR3	1	5%	1653	1653	-	1653	1653
DQ6	1	5%	577	577	-	577	577

Blue = DSA against cell #181 only
 Gold = DSA against cell #182 only
 Green = DSA against cell #181 and #182

Table 15. Summary of Single Antigen results for Serum #186

Class I							
*** Serum 186 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B60	17	100%	10375	10805	4480	5421	26763
B41	17	100%	10021	10420	4402	5622	26245
B45	17	100%	9800	10164	4268	5228	25497
B49	17	100%	9068	9371	3856	4875	23174
B50	17	100%	8887	9270	3540	5750	22186
B72	17	100%	8827	9060	3897	4476	22563
B44	17	100%	8759	8665	3510	5425	21103
B61	17	100%	8464	8739	4069	4078	23363
B71	17	100%	8455	8612	3556	3677	19551
B13	17	100%	8365	8703	4063	3575	22837
B62	17	100%	8157	8330	3590	3638	20922
B35	17	100%	7706	7836	3553	2709	20291
B18	17	100%	6873	7189	3369	2765	19054
B48	17	100%	6746	6717	3432	1241	18035
B76	17	100%	6668	7353	3204	3635	18605
B75	17	100%	5987	6357	3066	2300	17064
B53	17	100%	5835	6082	2431	2817	14509
B47	17	100%	5652	6482	2874	4400	17527
B38	17	100%	5324	5872	2587	3150	15303
B51	17	100%	5214	5732	2598	2663	15203
B77	17	100%	3676	4191	1970	2414	11665
B59	17	100%	3448	3743	1612	1530	9160
B52	17	100%	3365	3434	1354	1735	8163
B37	17	100%	3200	3581	1467	1697	8491
B64	17	100%	2838	3169	1527	1429	8833
B78	16	94%	6754	6738	1240	4244	8937
B8	16	94%	2178	2364	1041	924	5849
B39	15	88%	5375	5626	1777	2162	8985
B65	8	47%	1137	1175	491	648	2312
B82	7	41%	1271	1240	367	727	1889
B3901	4	23%	3554	5902	4922	2162	14341
Cw9	4	23%	1207	1130	238	752	1354
Cw10	4	23%	859	863	257	594	1144
B4005	3	17%	8033	8759	1138	7880	10366
B7801	2	11%	11499	11498	6256	5243	17754
B703	2	11%	1510	1510	142	1368	1652
B56	2	11%	1353	1352	804	549	2156

Class II							
*** Serum 186 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
NEG	17	100%	-	-	-	-	-

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 16a. Individual laboratory results for Serum #183 - class I by One Lambda Single Antigen

**** Serum 183 ****									
Ctr	A23	A24	B35	B53	B51	A2403	B78	Other	Manufacturer
230	20340	14990	5142	2642					One Lambda
615	12419	13329	2285	1548	1252		673	B75	One Lambda
792	13627	12279	2458	2121					One Lambda
2400	13751	11779	2806						One Lambda
3224	16071	13935	2557	2378	1163				One Lambda
3632	11250	12446	2782						One Lambda
3753	12696	7691	3282	3047	1866		1639		One Lambda
5130	16249	14973	6859	2718					One Lambda
5214	31540	33814	4037	2784	2164	16161			One Lambda
8001	14180	12322	2493	2155	1153				One Lambda
8050	12094	8643	2092	1439	1113				One Lambda
8083	16311	14765	2777	2637	1370				One Lambda
8103	7808	8694	1820	1374	1045	4700	656	B7801,Cw17	One Lambda
8111	14000	9800	2300	1950	1200				One Lambda
14262	13292	10182	2155	1526					One Lambda
Avg	15042	13309	3056	2178	1370	10431	989		
Std Dev.S	5350	6155	1347	574	384	8104	563		
MFI									
%CV	36%	46%	44%	26%	28%	78%	57%		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 16b. Individual laboratory results for Serum #183 - class I by Immucor

**** Serum 183 ****									
Ctr	A23	A24	B35	B53	B51	A2403	B78	Other	Manufacturer
3808	7302	7033				2769			Immucor
8029	7893	8035	1129	1136	903	3559	834	B8,Bw4,Bw6	Immucor
Avg	7598	7534	-	-	-	3164	-		
Std Dev.S									
Dev.S	418	709	-	-	-	559	-		
MFI									
%CV	6%	9%	-	-	-	18%	-		

Table 17a. Individual laboratory results for Serum #184 - class I by One Lambda Single Antigen

**** Serum 184 ****																					
Ctr	B18	B35	B51	B53	B64	B65	Cw15	Cw17	Cw18	Cw2	Cw4	Cw5	Cw6	B78	A23	A24	B8	A2403	B75	Other	
230	5512	9539	6446	8440	7279	8696	10253	5705	11587	6790	7828	14100	12048	4804	2150					B39,Cw8,Cw16	One Lambda
615	2838	5878	4345	4266	3937	4208	7673	3930	9534	5070	3630	11381	7073	2413	1220	1348	929		762		One Lambda
792	3627	7598	5529	6528	5029	6606	7883	4588	11515	7055	5103	10948	9337	3637							One Lambda
2400	3532	7093	4937	5378	4741	4957	8552	5015	9900	6162	4367	12689	7828	3191							One Lambda
3224	2696	6480	4375	5523	4033	5541	8498	4259	11335	6934	4797	11046	8110	2809	1130	957					One Lambda
3632	2921	6139	4504	4372	3370	3436	6228	2743	7685	4046	3244	10759	5720	2761						Cw8,Cw16	One Lambda
3753	2318	6489	3823	5438	4042	5431	8989	5123	13824	7649	5304	10567	10761	2337	1277						One Lambda
5130	3752	8285	5046	7569	5191	6922	9915	6007	13911	8911	6362	12763	11462	3977							One Lambda
5214	6970	15577	11547	11058	10255	10552	22615	11140	26641	15297	10491	31280	21014		3155	3559	2156	2193		B7801	One Lambda
8001	2867	6878	4734	6132	4092	5695	7732	4648	11528	6720	4987	10666	9264	2859	1260	1074					One Lambda
8050	2613	6335	4389	4442	4395	4372	7213	2622	9804	4512	3151	11597	7019	2339			1038				One Lambda
8083	3599	8102	5502	7093	4587	6186	8578	4973	12952	7752	5243	11278	9954	3554	1398	1154	1324	1207	1035		One Lambda
8103	1565	4012	2791	2909	2706	3009	4153	2378	5176	3272	3152	7560	4384	1606	775	824	728	621	618	B7801,B14,B15	One Lambda
8111	2650	5600	3700	4650	3700	4900	7300	3250	11200	5750	4200	9850	8450	2600	1300	1100	1200				One Lambda
14262	2602	5899	4167	4651	3036	3385	5011	2416	6985	3425	2304	8209	5275	2546							One Lambda
Avg	3337	7327	5056	5897	4693	5593	8706	4586	11572	6623	4944	12313	9180	2960	1518	1431	1229	1340	805		
Std Dev.S	1338	2629	1993	2027	1877	2034	4182	2171	4832	2916	2075	5496	3959	812	712	952	499	794	212		
MFI																					
%CV	40%	36%	39%	34%	40%	36%	48%	47%	42%	44%	42%	45%	43%	27%	47%	67%	41%	59%	26%		

Blue = DSA against cell #181 only
 Gold = DSA against cell #182 only
 Green = DSA against cell #181 and #182

Table 17b. Individual laboratory results for Serum #184 - class I by Immucor

**** Serum 184 ****																					
Ctr	B18	B35	B51	B53	B64	B65	Cw15	Cw17	Cw18	Cw2	Cw4	Cw5	Cw6	B78	A23	A24	B8	A2403	B75	Other	
3808	998	2856	2205	2542	1509	2308	2390	2061	3397	2604	1117	3843	3666	1602		793				B7801,Cw403	Immucor
8029	1453	2726	2296	2688	1456	2013	2044	1824	2787	2086	2931	3641	2627	1947	690	855	553	749	685	B54,A32,B77,B58 >	Immucor
Avg	1226	2791	2251	2615	1483	2161	2217	1943	3092	2345	2024	3742	3147	1775		824					
Std Dev.S																					
Dev.S	322	92	64	103	37	209	245	168	431	366	1283	143	735	244		44					
MFI																					
%CV	26%	3%	3%	4%	3%	10%	11%	9%	14%	16%	63%	4%	23%	14%		5%					

Table 18a. Individual laboratory results for Serum #185 - class I by One Lambda Single Antigen

**** Serum 185 ****																									
Ctr	A1	A29	A36	A43	A80	B35	B42	B49	B50	B53	B55	B56	B62	B63	B67	B71	B72	B75	B77	A26	A30	B46	B54	B7	A74
230	24358	27937	23445	12632	12417	17238	11555	12423	10456	14666	14033	17217	9916	7426	11503	16617	10728	14100	10067	6273	9618	4322	5201	4498	3596
615	17932	21221	16450	9915	8931	12412	8531	9887	8616	10018	11208	13289	8447	6891	7883	10661	7427	12109	8819	8015	10190	3803	3822	3328	2580
792	20480	24796	18039	10243	7652	10926	7872	9384	7440	10268	11168	13281	8328	5559	7499	11552	7029	11498	6872	7094	9741	3354	3840	2989	2203
2400	19639	25118	18820	9581	7605	11288	8163	8595	7834	9056	10857	12117	7627	5916	7683	9378	6067	10180	7678	7619	6490	3535	3810	3223	2304
3224	23469	27818	19314	12140	8136	13133	9968	11226	8294	12593	13388	15706	9796	6929	9100	13459	8444	13732	8447	8739	11212	3594	4112	3672	2228
3632	21956	28532	21188	9249	7939	11525	6815	7961	6350	7894	10570	11737	7034	5266	6824	10307	5821	11307	6255	7358	9799	3015	3160	2346	2145
3753	21976	29233	17974	11621	8527	12665	7544	9650	6990	11748	10898	14532	7599	5946	6662	12495	6606	9434	7361	8720	6685	2618	2556	2528	1923
5130	20721	24113	17683	10883	9078	14491	8137	9499	6849	11183	11695	13942	8106	5985	6990	11983	6846	12135	7234		10766	2919	3051	2948	2181
5214	40226	49693	37618	19535	18109	27355	18146	22947	19316	22781	23853	29059	18771	15199	16143	24739	16669	27794	19133	16460	22451	6714	7307	6671	5116
8001	19689	26984	16942	10425	8261	11501	7514	9208	6899	10546	10663	12330	7628	5463	6591	11192	6654	11124	7298	7153	9075	3098	2891	2589	2068
8050	7725	21061	6483	4475	4820	6900	4571	5372	4640	5688	6695	7949	4358	3155	4323	5969	3374	5494	4518	3501	4396	1457	1538	1329	
8083	23839	29815	21138	11899	8966	14064	9614	10870	8060	12330	12808	15323	9192	6585	8545	13004	8034	13658	8098	8718	11610	3892	3870	3380	2570
8103	12167	14711	11001	6308	6703	6880	5259	6548	5621	6762	7554	7981	5340	4835	5016	6712	4875	7403	5562	4903	6676	3784	3334	2533	1554
8111	20150	24000	18000	10600	8700	11600	8300	9700	7500	10700	11400	13700	8300	6200	8100	11250	7200	9750	6900	7750	6650	3450	3500	3150	2200
14262	15951	20514	14362	8128	7255	9482	6578	7555	6296	7809	9022	10308	6272	5037	6487	7737	5125	7674	6184	7094	5597	2876	2913	2337	2016
Avg	20685	26370	18564	10509	8873	12764	8571	10055	8077	10936	11721	13898	8448	6426	7957	11804	7393	11826	8028	7814	9397	3495	3660	3168	2477
Std Dev.S	7017	7622	6712	3323	3008	4838	3171	3988	3393	4041	3882	4935	3234	2637	2820	4487	3073	5056	3355	2888	4240	1116	1299	1205	886
MFI																									
%CV	34%	29%	36%	32%	34%	38%	37%	40%	42%	37%	33%	36%	38%	41%	35%	38%	42%	43%	42%	37%	45%	32%	35%	38%	36%

Blue = DSA against cell #181 only
 Gold = DSA against cell #182 only
 Green = DSA against cell #181 and #182

Table 18b. Individual laboratory results for Serum #185 - class I by Immucor

**** Serum 185 ****																									
Ctr	A1	A29	A36	A43	A80	B35	B42	B49	B50	B53	B55	B56	B62	B63	B67	B71	B72	B75	B77	A26	A30	B46	B54	B7	A74
3808	9248	13895	10826	2323	1358	4093	1763	3447	3106	3778	2717	4335	2785	2114	1686	3238	2475	3533	3574	2029					
8029	8774	11313	9013	2428	1490	3613	1931	3285	2590	3513	2784	3864	2878	1909	1801	3011	2299	3258	3003	2086	895	1374	1180	899	673
Avg	9011	12604	9920	2376	1424	3853	1847	3366	2848	3646	2751	4100	2832	2012	1744	3125	2387	3396	3289	2058	-	-	-	-	-
Std Dev.S																									
MFI	335	1826	1282	74	93	339	119	115	365	187	47	333	66	145	81	161	124	194	404	40	-	-	-	-	-
%CV	4%	14%	13%	3%	7%	9%	6%	3%	13%	5%	2%	8%	2%	7%	5%	5%	5%	6%	12%	2%	-	-	-	-	-

Table 18a. Individual laboratory results for Serum #185 - class I by One Lambda Single Antigen, cont.

**** Serum 185 ****																												
Ctr	B51	Cw9	A33	B78	A2	A69	B81	A31	A34	A68	B82	B58	B37	B57	Cw10	Cw4	B59	A23	B41	B39	B52	A24	A66	B76	B38	Other		
230	13081	5299	2779	3735	2720	2506	3385		3086	2630	4203															B4005,B48	One Lambda	
615	10167	3680	2435	2945	2570	2056	2591	2420	2347	2111	2517	2014	1522	1756	1822	1002	1440	1514	1696	1431	1151	1621	1601	1172	1252	B2708,Cw1>	One Lambda	
792	9551	3678	2235	2901	2473	1880	2201	2069	1834	1741	3238	1889	1625	2080	2416	1552	1934										One Lambda	
2400	8480	3418	2327	3009	2426		2508	2184			2410																One Lambda	
3224	11560	4793	2541	3326	2273	2303	2727	2023	2262	2052	3351	1798	1844	1912	2763	1410	2414	1566	1580	1315	1254		1418			B2708	One Lambda	
3632	7658	3272	2202	2334																							B4005,B48	One Lambda
3753	10580	2697	1712	1583	1978	1772	1920	1632	1586	1626	2593	1473	1392	1728		2209	1579	1165										One Lambda
5130		4247		2386		1962	1979																				B4005	One Lambda
5214	22846	6373	4689		4865	3972		4397	4092	4238		3575			3022			2869	3005			3006					B7801,B8201>	One Lambda
8001	9780	3600	1985	2219	2121	1712	2104	1704	1679	1496	2717	1512	1293	1565	2085	1258	1609											One Lambda
8050	5565																											One Lambda
8083	11231	4465	2546	3032	2680	2086	2469	2205	2085	1874	3227	1863	1591	1930	2622	1204	2111	1320	1344	1125	1170		1358	1086			One Lambda	
8103	6267	3441	1878	2819	2043	1436	2104	1548	1448	1493	2704	2128	1646	1744	1774	2074	2273	1080	1942	1642	1889	1010	888	1112	1681	B2708,B7801>	One Lambda	
8111	3000	4250	2000	2800	2150	1950	2300	2000	1700	1800	3300	1950	1800	1850	2100	1400	2150	1600	1600	1200	1100	1000	1350	1350			One Lambda	
14262	4181	2692	1662	2358	1349	1226	1650	1237	1351	1169	1479	1312	1000	1403	1329	1176			1454	1323					1104		One Lambda	
Avg	9568	3993	2384	2727	2471	2072	2328	2129	2134	2021	2885	1951	1524	1774	2215	1476	1939	1588	1803	1339	1313	1659	1323	1180	1346			
Std																												
Dev.S	4810	1009	770	549	842	691	454	826	817	829	697	627	263	202	539	410	358	599	563	182	327	944	263	119	300			
MFI																												
%CV	50%	25%	32%	20%	34%	33%	19%	39%	38%	41%	24%	32%	17%	11%	24%	28%	18%	38%	31%	14%	25%	57%	20%	10%	22%			

Blue = DSA against cell #181 only
 Gold = DSA against cell #182 only
 Green = DSA against cell #181 and #182

Table 18b. Individual laboratory results for Serum #185 - class I by Immucor, cont.

**** Serum 185 ****																											
Ctr	B51	Cw9	A33	B78	A2	A69	B81	A31	A34	A68	B82	B58	B37	B57	Cw10	Cw4	B59	A23	B41	B39	B52	A24	A66	B76	B38	Other	
3808																											Immucor
8029	862	1293	601	1155	811	851	756	692	667	663	942	1132	594	778	983	971	545	569	908		709	688		584	533	Cw15,Cw18>	Immucor
Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Std																											
Dev.S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MFI																											
%CV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 19a. Individual laboratory results for Serum #186 - class I by One Lambda Single Antigen

**** Serum 186 ****																									
Ctr	B13	B18	B35	B37	B38	B41	B44	B45	B47	B48	B49	B50	B51	B52	B53	B59	B60	B61	B62	B64	B71	B72	B75	B76	B77
230	8365	9073	8903	2181	7445	12668	9718	12387	6128	8239	10577	10718	5896	4055	7288	4066	12971	10035	9174	3581	12051	11818	7409	9251	4579
615	7607	6557	6907	2968	5012	8936	7054	8738	6061	6035	7997	7822	5261	2681	4583	2967	9367	8133	6881	3151	6320	7199	5937	5751	3676
792	9070	6734	7176	3908	5084	9860	8759	9601	5642	6614	9325	8853	5214	3422	5877	3939	10528	8464	8157	2727	8455	8892	6214	7379	3489
2400	7444	7363	7712	4194	5881	10429	7001	10068	7228	6999	8736	8928	5773	3216	5517	3322	10709	8120	7717	3624	7218	7413	5768	6755	4629
3224	9756	6873	8067	3746	5324	10209	8991	9010	5454	6851	9643	8785	5849	3619	6566	4043	10375	9079	8478	2880	8863	9602	6515	6668	3590
3632	9351	7168	8862	3865	5870	10474	9018	10933	7149	7222	9068	9689	7373	3512	5835	3448	10008	8865	8705	3717	10510	8827	7284	7223	4724
3753	8793	6970	7706	3393	5540	10842	9266	10824	5652	7016	9995	9659	4661	3369	6470	4168	11543	8580	8950	2604	9054	9459	5987	8321	3857
5130	9571	7118	7782	3113	6606	9997	9274	9800	5448	6746	9167	8887	5177	3365	6420	3732	9948	8862	8630	2615	10185	9159	6850	5765	3542
5214	22837	19054	20291	8491	15303	26245	21103	25497	17527	18035	23174	22186	15203	8163	14509	9160	26763	23363	20922	8833	19551	22563	17064	18605	11665
8001	10696	8658	9065	4632	6487	11741	10511	11127	6557	8136	11209	10443	6103	4100	7453	4996	12598	10376	10082	3261	10525	11004	7515	9173	4474
8050	6982	6283	6937	2815	4908	10021	6923	10059	6580	6082	8365	8946	4728	2518	4767	2967	10495	7773	7489	2838	6870	7842	5107	6537	3751
8083	10582	7989	8926	4678	6242	11256	10094	10843	6290	7789	10607	9908	6387	4070	7045	4586	12119	9762	9500	3066	10096	10441	7462	8547	4130
8103	6961	4805	5737	2790	4355	6886	6095	7243	5337	4860	6136	6845	4921	3203	4754	3048	7297	6040	5956	2783	5188	6181	5042	5541	3597
8111	6400	6000	6400	3200	4500	8300	6800	7600	4400	5700	7550	7500	4100	2850	4900	3300	8800	6550	7100	2350	7350	7450	4400	5800	2900
14262	6147	5418	6403	2919	4515	7978	5695	8107	5516	5273	7105	6822	4613	2293	4563	2543	8750	6236	6064	2491	5878	6813	4343	5953	3312
Avg	9371	7738	8458	3793	6205	11056	9087	10789	6731	7440	9910	9733	6084	3629	6436	4019	11485	9349	8920	3368	9208	9644	6860	7818	4394
Std																									
Dev.S	3998	3322	3432	1481	2666	4455	3653	4308	3077	3089	3922	3642	2655	1369	2446	1569	4490	4088	3532	1569	3479	3916	3018	3239	2080
MFI																									
%CV	43%	43%	41%	39%	43%	40%	40%	40%	46%	42%	40%	37%	44%	38%	38%	39%	39%	44%	40%	47%	38%	41%	44%	41%	47%

Blue = DSA against cell #181 only
 Gold = DSA against cell #182 only
 Green = DSA against cell #181 and #182

Table 19b. Individual laboratory results for Serum #186 - class I by Immucor

**** Serum 186 ****																									
Ctr	B13	B18	B35	B37	B38	B41	B44	B45	B47	B48	B49	B50	B51	B52	B53	B59	B60	B61	B62	B64	B71	B72	B75	B76	B77
3808	3575	2765	2709	1697	3150	5622	5425	5228	4441	1241	4875	5850	2663	1735	2817	1530	5421	4078	3638	1429	3677	4476	2300	3635	2414
8029	3820	3392	3636	2292	3602	5684	5594	5734	4798	1357	5778	5750	3535	2220	4043	1826	6002	4249	4178	1935	4625	4881	2885	4112	2921
Avg	3698	3079	3173	1995	3376	5653	5510	5481	4620	1299	5327	5800	3099	1978	3430	1678	5712	4164	3908	1682	4151	4679	2593	3874	2668
Std																									
Dev.S	173	443	655	421	320	44	120	358	252	82	639	71	617	343	867	209	411	121	382	358	670	286	414	337	359
MFI																									
%CV	5%	14%	21%	21%	9%	1%	2%	7%	5%	6%	12%	1%	20%	17%	25%	12%	7%	3%	10%	21%	16%	6%	16%	9%	13%

Table 19a. Individual laboratory results for Serum #186 - class I by One Lambda Single Antigen, cont.

**** Serum 186 ****										
Ctr	B78	B8	B39	B65	B82	B3901	Cw10	Cw9	Other	
230	8937	2020	8985						B4005,B55,B56	
615	6110	2205	4876	817	780		622	752	A6601,B54,B55,B56 >	
792	7094	2402	5148							
2400	6855	2695	5533							
3224	7516	2420	5551	1075	1271					
3632	8125	2635	8206						B4005	
3753	6653	2140	5375							
5130	7046		8648						B4005	
5214		5849		2312		14341			B7801	
8001	7987	2989	6485	1383	1434		1144	1354		
8050	6120	1960	4631							
8083	8497	2702	5979	1199	1889		1095	1312	A66	
8103	5243	1900	4138	1210	1335	4138		1102	B7801,B8201,B14,Cw3 >	
8111	6100	2150	4500		1250					
14262	6021	1565	4180							
Avg	7022	2545	5874	1333	1327	9240	954	1130		
Std										
Dev.S	1077	1024	1629	515	357	7215	288	275		
MFI										
%CV	15%	40%	28%	39%	27%	78%	30%	24%		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 19b. Individual laboratory results for Serum #186 - class I by Immucor, cont.

**** Serum 186 ****										
Ctr	B78	B8	B39	B65	B82	B3901	Cw10	Cw9	Other	
3808	4244	924	2162	648		2162			B7,B703	
8029	5261	1276		757	727	2970	594		B703,A26,Bw4,Bw6	
Avg	4753	1100	-	703	-	2566	-	-		
Std										
Dev.S	719	249	-	77	-	571	-	-		
MFI										
%CV	15%	23%	-	11%	-	22%	-	-		

Table 20a. Individual laboratory results for Serum #183 - class II by One Lambda Single Antigen

**** Serum 183 ****																			
Ctr	DPw3	DPw6	DQ7	DQ8	DQ9	DP14	DP17	DP9	DP20	DP10	DQA1*05	DR11	DP18	DP28	DP402	DPw2	DP11	Other	Manufacturer
230	11872	10972	18966	17092	18263							2474							One Lambda
615	7304	7284	15602	14112	13255	6117	6739	7090	6737	1810	15602	1654	1602	1607	1752	1741	1229	DQA1*06,DPw1,DPw4,DPw5 >	One Lambda
792	6690	6895	15747	13803	13596	5918	6121	6657	6460									DQ2	One Lambda
2400	7557	7547	16104	12978	13473	6963	7255	7552	7474	2220	2607								One Lambda
3224	7867	7821	17364	15037	14667	6747	7091	7615	7291	1536	17364	1422	1402	1179	1302	1451	1190	DQA1*06	One Lambda
3632	5584	5692	15492	13385	12738	4624	5152	5203	5093										One Lambda
3753	8761	8404	16538	14270	14912	7617	8194	8721	8449	2028	3075								One Lambda
5130	9267	9493	19677	17988	17405	8251	8880	9575	8862	2264									One Lambda
5214	13764	14097	34521	32102	30098	11859	12528	13378	12588	3161	4175	2975							One Lambda
8001	6830	6880	17315	15136	13717	5928	6233	6753	6440	1495		1347	1337	1211	1367	1342	1057	DPw1	One Lambda
8050	6224	6055	12905	11099	11387	5485	5827	6239	6054	1211	1877				1015				One Lambda
8083	8344	8497	19499	17302	15891	7181	7800	8058	7765										One Lambda
8103	1840	2313	7308	6434	4071	2249	2190	2565	2386	606	7349							DR9,DQ3,DQA1*06,DQA1*03	One Lambda
8111	6200	6550	12600	10850	11900	6050	5350	6400	6400	1900	1800	1600	1700	1750	1800	2150		DPw1	One Lambda
14262	5468	5464	11860	10309	10948	4847	5310	5788	5600	1426	1852	1300	1228	1257	1426	1382	1028		One Lambda
Avg	7571	7598	16767	14793	14421	6417	6762	7257	6971	1787	6189	1825	1454	1401	1444	1613	1126		
Std Dev.S	2779	2665	5898	5655	5431	2149	2327	2428	2262	662	6104	644	194	260	294	338	98		
MFI																			
%CV	37%	35%	35%	38%	38%	33%	34%	33%	32%	37%	99%	35%	13%	19%	20%	21%	9%		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 20b. Individual laboratory results for Serum #183 - class II by Immucor

**** Serum 183 ****																			
Ctr	DPw3	DPw6	DQ7	DQ8	DQ9	DP14	DP17	DP9	DP20	DP10	DQA1*05	DR11	DP18	DP28	DP402	DPw2	DP11	Other	Manufacturer
3808	3324	3102	4960	5698	4777	2654	2254	2647											Immucor
8029	4064	3828	5888	6703	6304	3147	3201	3597				874	845	814		844		DQ4,DPw4,DPw5	Immucor
Avg	3694	3465	5424	6201	5541	2901	2728	3122	-	-	-	-	-	-	-	-	-	-	
Std Dev.S	523	513	656	711	1080	349	670	672	-	-	-	-	-	-	-	-	-	-	
MFI																			
%CV	14%	15%	12%	11%	19%	12%	25%	22%	-	-	-	-	-	-	-	-	-	-	

Table 21a. Individual laboratory results for Serum #184 - class II by One Lambda Single Antigen

**** Serum 184 ****																		Manufacturer
Ctr	DR11	DR12	DR13	DR14	DR17	DR8	DR103	DR16	DR18	DR52	DQ7	DQA1*04	DQA1*05	DR51	DR4	DQA1*06	Other	Manufacturer
230	22253	20002	22259	18901	19943	19891	20643		19909	6455	9125	7762	16264	11737		13581		One Lambda
615	17378	15074	19219	16286	15010	17282	14304	6041	14914	12136	11823	5680	12909	9424	3392	9523		One Lambda
792	18831	16816	21333	18339	16155	19875	16033	6083	17002	12040	13704			9672	3413		DQ2,DQ4	One Lambda
2400	19151	17732	21546	17934	16323	20359	16348	7087	17364	6001	9558	6821	15881	11169	4998			One Lambda
3224	20760	18623	23380	19620	17822	21497	17594	7002	17573	13529	14771	6093	14771			10985		One Lambda
3632	18515	16515	21549	16369	14294	18912	15090	6436	14705	10549	15974	6331	16639	10228	3949	10894		One Lambda
3753	22481	17394	23986	20906	19521	22601	14281	2844	20316	5910	7476	5117	10465	6071	1216			One Lambda
5130	18599	16456	20141	18036	15767	18600	14408	5179	15924									One Lambda
5214	43639	38595	47414	40737	37461	44610	33375	13405	37672	28300	29277	13113	31513			22182		One Lambda
8001	19870	17483	21611	18665	16689	19777	16539	5471	17502	12752	13170							One Lambda
8050	19976	16341	21945	18672	16423	20103	15462	4348	17632	5581	8014	5268	13291	8311	2385	10174		One Lambda
8083	22119	19764	24513	20864	18340	22304	19391	7195	18565	13973	16212	7603	17062	11140	4018	12457		One Lambda
8103	8388	7614	8944	7522	6359	8786		2091		3826	6073	2141	7195	3141	1382	5285	DR1,DR3,DQ3	One Lambda
8111	16050	14200	19250	15800	14700	17350	14500	5000	14700	5000	7850	4000	12000					One Lambda
14262	13598	11700	15787	12490	11200	14176	12459	3896	11297	4992	7009	4803	12316	7223	2867			One Lambda
Avg	20107	17621	22192	18743	17067	20408	17173	5863	18220	10075	12145	6228	15026	8812	3069	11885		
Std																		
Dev.S	7462	6598	7957	6971	6561	7535	5136	2671	6065	6401	6023	2666	5932	2689	1245	4827		
MFI																		
%CV	37%	37%	36%	37%	38%	37%	30%	46%	33%	64%	50%	43%	39%	31%	41%	41%		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 21b. Individual laboratory results for Serum #184 - class II by Immucor

**** Serum 184 ****																		Manufacturer
Ctr	DR11	DR12	DR13	DR14	DR17	DR8	DR103	DR16	DR18	DR52	DQ7	DQA1*04	DQA1*05	DR51	DR4	DQA1*06	Other	Manufacturer
3808	14351	10770	14051	13476	10940	12544	6344	1601	12625	6823		6465	9191	2593	3026	5138	DQ2,DR1403,DR1404	Immucor
8029	15516	11885	15859	13649	12916	13203	8080	3623	13559	7755	11262			4178	5525		DQ2,DQ4,DR1403,DR1404 >	Immucor
Avg	14934	11328	14955	13563	11928	12874	7212	2612	13092	7289	-	-	-	3386	4276	-		
Std																		
Dev.S	824	788	1278	122	1397	466	1228	1430	660	659	-	-	-	1121	1767	-		
MFI																		
%CV	6%	7%	9%	1%	12%	4%	17%	55%	5%	9%	-	-	-	33%	41%	-		

Table 22a. Individual laboratory results for Serum #185 - class II by One Lambda Single Antigen

**** Serum 185 ****																
Ctr	DR11	DR13	DR17	DR8	DR9	DR12	DR14	DR18	DR52	DR53	DR10	DR7	DQ2	DQ5	Other	Manufacturer
230	10529	9749	7746	6132	8408	5081	9977	8064	2958	5883	4475					One Lambda
615	7867	8354	5411	5740	6670	3373	11034	5972	3781	4769	3747	1309	1579	1610	DQ6	One Lambda
792	6230	6671	4138	4638	5644	2448	8503	4600	2508	3074	2421			1517		One Lambda
2400	6306	6411	4655	5373	6850	3000	7757	5088	3242	3157	2859			2308	3457	One Lambda
3224	8276	8770	5573	6343	7503	3593	11519	5844	3759	4195	3303	1498	1839			One Lambda
3632	4672	5454	3226	3541	5417		7435	3734	2393	2612						One Lambda
3753	6633	6877	4630	4920	6841	2921	8428	5154	2142	3689	2672					One Lambda
5130	6891	7269	4785	5078	6258	2795		4968			2983					One Lambda
5214	15951	17541	11030	12261	18979	8091	22257	12089	8184	9423	7074	3298				One Lambda
8001	6856	7505	4629	4945	6592	2985	9716	5133	3026	3508	2512	1197				One Lambda
8050	4644	4800	3320	3286	4301	2083	5975	3518	1558	2675	2112					One Lambda
8083	7150	7907	4943	5494	8219	3127	10765	5426	3394	4456	3141	1415				One Lambda
8103	2099	2257	1355	1418	2681	1061	3184		851	937	811			673	DR3	One Lambda
8111	6200	6700	4500	5200	7100	2900	7900	5100	2150	3700	3050	1250	1000			One Lambda
14262	3484	3796	2442	2696	4093	1532	4988	2614	1739	2750	2328					One Lambda
Avg	6919	7337	4826	5138	7037	3214	9246	5522	2978	3916	3106	1661	1682	1814		
Std Dev.S	3208	3419	2255	2388	3653	1692	4427	2277	1724	1967	1415	809	545	1173		
MFI																
%CV	46%	47%	47%	46%	52%	53%	48%	41%	58%	50%	46%	49%	32%	65%		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 22a. Individual laboratory results for Serum #185 - class II by Immucor

**** Serum 185 ****																
Ctr	DR11	DR13	DR17	DR8	DR9	DR12	DR14	DR18	DR52	DR53	DR10	DR7	DQ2	DQ5	Other	Manufacturer
3808	3051	2717	2120	1772	1356	1131	4174	2474	1091	1143					DR1403,DR1404	Immucor
8029	3259	2831	2424	1984	1738	1280	4171	2906	1258	1294	908				DR1403,DR1404	Immucor
Avg	3155	2774	2272	1878	1547	1206	4173	2690	1175	1219	-	-	-	-		
Std Dev.S	147	81	215	150	270	105	2	305	118	107	-	-	-	-		
MFI																
%CV	5%	3%	9%	8%	17%	9%	0%	11%	10%	9%	-	-	-	-		

Table 23a. Individual laboratory results for Serum #186 - class II by One Lambda Single Antigen

**** Serum 186 ****			
Ctr		Other	Manufacturer
230	NEG		One Lambda
615	NEG		One Lambda
792	NEG		One Lambda
2400	NEG		One Lambda
3224	NEG		One Lambda
3632	NEG		One Lambda
3753	NEG		One Lambda
5130	NEG		One Lambda
5214	NEG		One Lambda
8001	NEG		One Lambda
8050	NEG		One Lambda
8083	NEG		One Lambda
8103	NEG		One Lambda
8111	NEG		One Lambda
14262	NEG		One Lambda
Avg	-		
Std			
Dev.S	-		
MFI			
%CV	-		

Blue = DSA against cell #181 only

Gold = DSA against cell #182 only

Green = DSA against cell #181 and #182

Table 23a. Individual laboratory results for Serum #186 - class II by Immucor

**** Serum 186 ****			
Ctr		Other	Manufacturer
3808	NEG		Immucor
8029	NEG		Immucor
Avg	-		
Std			
Dev.S	-		
MFI			
%CV	-		

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Table 24. Individual Virtual crossmatch results for Serum #185 vs Donor# V1

Donor #V1 HLA genotype: A*23:01:01-A*31:01:02-B*35:01:01-B*44:03:01-C*04:01:01-DRB1*11:01:01-DRB1*15:01:01-DRB3*02:02:01-DRB5*01:01:01-DQA1*01:02-DQA1*05:05-DQB1*03:01:01G-DQB1*06:02:01G-DPA1*01:03-DPB1*03:01:01G-DPB1*04:01:01G

Ctr	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	50	Positive	B35 (16980) Cw4 (3019)	Positive	DR11 (10261) DR52 (3202)	B35,Cw4
792	100	Positive	A31 (2069) B35 (10926) Cw4 (1552)	Positive	DR11 (5491) DR52 (1656)	
1461	23	Positive	B35 (2423)	Positive	DR11 (2370)	
2400	100	Positive	A31 (2184) A23 (1358) B35 (11288) Cw4 (1165)	Positive	DR11 (5867) DR52 (2100)	
3632	99	Positive	A31 (1934) B35 (10465)	Positive	DR11 (4206)	DSA detected to B35(MFI= 10465) and A31(MFI=1934) Do not recommend moving forward. FXM most likely Positive. DSA detected to DR11 (MFI=4206). Do not recommend moving forward. Flow crossmatch most likely positive.
3753	100	Positive	A31 (1632) A23 (1165) B35 (12665) Cw4 (2209)	Positive	DR11 (6633) DR52 (2142)	
3808		Positive	B35 (4093)	Positive	DR11 (3051)	Unacceptable
3966	100%	Positive	A31 (1090) B35 (11141)	Positive	DR11 (6797) DR52 (2006)	No Bead B*35:03 in SAB PANEL; Unacceptable
5130	99.45%	Positive	B35 (12392)	Positive	DR11 (6077)	
8001	100%	Positive	A31 (1704) B35 (11501) Cw4 (1258)	Positive	DR11 (6116) DR52 (1898)	
8029	81	Positive	A31 (692) A23 (569) B35 (3613) Cw4 (971)	Positive	DR11 (3259) DR52 (765)	-
8050	98.986	Positive	B35 (6900)	Positive	DR11 (4644) DR52 (1558)	
8080	100	Positive	A31 (3485) A23 (2137) B35 (14854)	Positive	DR11 (6167) DR52 (2049)	
8083	99.93	Positive	A30 (11610) A23 (1320) B35 (14064)	Positive	DR11 (7150) DR52 (2159)	DSA to DR11 and Class I
8103	68	Positive	A31 (1548) A23 (1080) B35 (6880) Cw4 (2074)	Negative	DR11 (1928)	high MFI (class I); low MFI (class II)
8110	100%	Positive	A31 (3404) A23 (2956) B35 (22380) Cw4 (3056)	Positive	DR11 (18561) DR52 (5310)	
14262	100	Positive	A31 (1237) B35 (9482) Cw4 (1176)	Positive	DR11 (3230)	

Table 25. Individual Virtual crossmatch results for Serum #185 vs Donor# V2

Donor #V2 HLA genotype: A*11:01:01-A*34:01:01-B*15:35-B*55:02:01-C*01:02:01-C*07:02:01-DRB1*04:05:01-DRB1*12:02:01-DRB3*03:01:03-DRB4*01:03:01-DQA1*03:03:01-DQA1*06:01:01-DQB1*03:01-DQB1*04:02:01-DPA1*02:02-DPB1*01:01:01-DPB1*05:01:01

Ctr	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	50	Positive	B55 (14083)	Positive	DR12 (5627) DR52 (6064) DR53 (7039)	
792	100	Positive	B55 (11168) B62 (8328)	Positive	DR12 (2308) DR52 (2508) DR53 (3074)	
1461	23	Positive	B55 (1877) B15 (2106)	Positive	DR12 (912) DR52 (866) DR53 (905)	
2400	100	Positive	B55 (10857) A34 (1523) B62 (7627)	Positive	DR12 (2838) DR52 (3242) DR53 (3323)	
3632	99	Positive	B55 (8392) B62 (7034)	Positive	DR12 (1853) DR52 (2393) DR53 (2612)	DSA detected to B55(MFI=8392) and B62(MFI=7034). Do not recommend moving forward, FXM most likely Positive. DSA detected to DR53(MFI=2612), DR52(MFI=2393), DR12(MFI=1853). Do not recommend moving forward, FXM most likely Positive.
3753	100	Positive	B55 (10898) A34 (1586) B62 (7599)	Positive	DR12 (2921) DR52 (2142) DR53 (3689)	
3808		Positive	B55 (2717) B62 (2785)	Positive	DR12 (1131) DR52 (1091) DR53 (1143)	Unacceptable
3966	100%	Positive	B55 (9970) B62 (7049)	Positive	DR12 (2316) DR52 (2006) DR53 (4352)	No Bead B*55:02 and B*15:35 in SAB PANEL; Unacceptable
5130	99.45%	Positive	B55 (8733)	Positive	DR12 (2794) DR52 (3267) DR53 (3583)	
8001	100%	Positive	B55 (10663) B62 (7628)	Positive	DR12 (2724) DR52 (3026) DR53 (3508)	specificity of B*15:35 and B*55:02 are not represented on the LSAB panel. MFI values on DSAs are based on other alleles of B*15 and B*55.
8029	81	Positive	Cw1 (817) Cw7 (1004)	Positive	DR12 (1280) DR52 (1258)	
8050	98.986	Positive	B55 (6695) B62 (4358)	Positive	DR12 (2083) DR52 (1558) DR53 (2675)	
8080	100	Positive	B55 (12273) A34 (2564) B62 (10281)	Positive	DR12 (2902) DR52 (3460) DR53 (4395)	
8083	99.93	Positive	A34 (1321) B62 (9192)	Positive	DR12 (2886) DR52 (3394) DR53 (4456)	No bead for B*15:35 (62) used B*15:01(62). DSA to Class I and Class II .
8103	68	Negative	A34 (959) Cw7 (764)	Negative	DR12 (1061) DR53 (937)	low MFI (class I); low MFI (class II)
8110	100%	Positive	B55 (19129) A34 (3151)	Positive	DR12 (7389) DR52 (5310) DR53 (7417)	
14262	100	Positive	B55 (5525) A34 (1186) B62 (6272)	Positive	DR12 (1528) DR52 (1739) DR53 (3013)	Epitope analysis for B*15:35 (B62)

Table 26. Individual Virtual crossmatch results for Serum #185 vs Donor# V3

Donor #V3 HLA genotype: A*02:01:01-A*03:01:01-B*35:03:01-B*57:03:01-C*04:01:01-C*07:01:02-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQB1*06:04:01-DPA1*01:05-DPB1*04:01:01

Ctr	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	50	Positive	B35 (16783) Cw4 (3019)	Positive	DR13 (7826) DR52 (6064)	
792	100	Positive	B57 (2080) B35 (10926) A2 (2473)	Positive	DR13 (6671) DR52 (2508)	
1461	23	Positive	B35 (2593)	Positive	DR13 (2022) DR52 (866)	
2400	100	Positive	B57 (1845) B35 (11288) A2 (2426) Cw4 (1165)	Positive	DR13 (5859) DR52 (3242) DQ6 (1607)	
3632	99	Positive	B35 (8865) A2 (1872)	Positive	DR13 (1367) DR52 (2393)	No Class II DSA, but FXM will be most likely positive due to Class I DSA. Do not recommend moving forward. DSA detected to DR52(MFI=2393) and DR13 (MFI=1367). Do not recommend moving forward, FXM will most likely be Positive.
3753	100	Positive	B57 (1728) B35 (12665) A2 (1978) Cw4 (2209)	Positive	DR13 (6877) DR52 (2142)	
3808		Positive	B35 (4093)	Positive	DR13 (2490) DR52 (1091)	Unacceptable
3966	100%	Positive	B57 (1358) B35 (11141) A2 (1647)	Positive	DR13 (7024) DR52 (2006)	No Bead B*35:03 and DRB1*13:02 in SAB PANEL;
5130	99.45%	Positive	B35 (11105) A2 (2998)	Positive	DR13 (3704) DR52 (3267)	Unacceptable
8001	100%	Positive	B57 (1565) B35 (11501) A2 (2121) Cw4 (1258)	Positive	DR13 (7505) DR52 (3026)	Specificity to B*35:03 is not on the LSAB panel. MFI value for B35 taken from another allele of B*35. Specificity for DRB1*13:02 is not on the LSAB panel. MFI for DR13 taken from another allele of DR13.
8029	81	Positive	Cw7 (946) A2 (758) Cw4 (971)	Positive	DR52 (1258)	
8050	98.986	Positive	B35 (6900)	Positive	DR13 (4800) DR52 (1558)	
8080	100	Positive	B57 (2054) B35 (14807) A2 (4191)	Positive	DR13 (8030) DR52 (6920)	
8083	99.93	Positive	B57 (1930) B35 (14064) A2 (2680) Cw4 (1204)	Positive	DR13 (7907) DR52 (3615)	No bead for B*35:03 used B*35:01. DSA to Class II antibodies. A*02:01 at MFI=2680, B*57:03 at MFI=1930, and C*04:01 at MFI=1204. Also DSA to Class I
8103	68	Borderline	B57 (1663) A2 (2043) Cw4 (2074)	Borderline	DR52 (851)	low MFI (class I); low MFI (class II)
8110	100%	Positive	B57 (2590) A2 (4321) Cw4 (3056)	Positive	DR52 (5310)	
14262	100	Positive	B57 (1477) B35 (5271) A2 (1615) Cw4 (1176)	Positive	DR13 (1587) DR52 (1739)	

Table 27. Individual Virtual crossmatch results for Serum #186 vs Donor# V1

Donor #V1 HLA genotype: A*23:01:01-A*31:01:02-B*35:01:01-B*44:03:01-C*04:01:01-DRB1*11:01:01-DRB1*15:01:01-DRB3*02:02:01-DRB5*01:01:01-DQA1*01:02-DQA1*05:05-DQB1*03:01:01G-DQB1*06:02:01G-DPA1*01:03-DPB1*03:01:01G-DPB1*04:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	186	39	Positive	B35 (10430) B44 (12239)	Positive	No class II DSA	Positive due to Class I
792	186	92	Positive	B35 (7176) B44 (8759)	Positive	No class II DSA	Positive due to Class I DSA
1461	186	32	Positive	B35 (1874) B44 (3453)	Positive	No class II DSA	
2400	186	92	Positive	B35 (7712) B44 (7653)	Positive	No class II DSA	
3632	186	92	Positive	B35 (8862) B44 (9018)	Positive	No class II DSA	No class II dsa. Do not recommend moving forward, FXM will most likely be Positive due to class I antibodies. No Class II DSA, but FXM will be most likely positive due to Class I DSA. Do not recommend moving forward.
3753	186	92	Positive	B35 (7706) B44 (9266)	Positive	No Class II DSA	
3808	186		Positive	B35 (2709) B44 (5425)	Positive	No Class II DSA	No Class II DSA but is expected to be positive due to Class I DSA present. Unacceptable
3966	186	93%	Positive	B35 (8635) B44 (10873)	Positive	No class II DSA	Unacceptable
5130	186	86.03%	Positive	B35 (7782) B44 (9273)	Negative	No class II DSA	
8001	186	95%	Positive	B35 (9065) B44 (10511)	Positive	No class II DSA	
8029	186	36	Positive	B35 (3636) B44 (5594)	Positive	No class II DSA	
8050	186	91.98	Positive	B35 (6937) B44 (6923)	Positive	No class II DSA	
8080	186	92	Positive	B35 (7607) B44 (8497)	Positive	No class II DSA	Patient has Class I DSA
8083	186	94.66	Positive	B35 (8926) B44 (10094)	Positive	No class II DSA	DSA to class I antibodies
8103	186	37	Positive	B35 (5737) B44 (6095)	Negative	No class II DSA	high MFI (class i)
8110	186	92%	Positive	B35 (8881) B44 (9971)	Negative	No class II DSA	
14262	186	92	Positive	B35 (6403) B44 (6552)	Positive	No class II DSA	

Table 28. Individual Virtual crossmatch results for Serum #186 vs Donor# V2

Donor #V2 HLA genotype: A*11:01:01-A*34:01:01-B*15:35-B*55:02:01-C*01:02:01-C*07:02:01-DRB1*04:05:01-DRB1*12:02:01-DRB3*03:01:03-DRB4*01:03:01-DQA1*03:03:01-DQA1*06:01:01-DQB1*03:01-DQB1*04:02:01-DPA1*02:02-DPB1*01:01:01-DPB1*05:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	186	39	Positive	B62 (11573)	Positive	No Class II DSA	Positive due to Class I
792	186	92	Positive	B62 (8157)	Positive	No Class II DSA	No Class II DSA, positive due to Class I DSA
1461	186	32	Positive	B62 (2421)	Positive	No Class II DSA	
2400	186	92	Positive	B62 (7717)	Positive	No Class II DSA	
3632	186	92	Positive	B62 (8705)	Positive	No Class II DSA	DSA detected to B62(MFI=8705). Do not recommend moving forward, FXM will most likely be Positive; No Class II DSA, but FXM will be most likely positive due to Class I DSA. Do not recommend moving forward.
3753	186	92	Positive	B62 (8950)	Positive	No Class II DSA	
3808	186		Positive	B15 (3638)	Positive	No Class II DSA	No Class II DSA but is expected to be positive due to Class I DSA present. Unacceptable
3966	186	93%	Positive	B62 (10205)	Positive	No Class II DSA	No bead B*15:35 in SAB PANEL
5130	186	86.03%	Negative	No class I DSA	Negative	No Class II DSA	
8001	186	95%	Positive	B62 (10082)	Positive	No Class II DSA	Specificity for B*15:35 is not represented on our LSAB panel. MFI is based on B*15:01 allele of B*15.
8029	186	36	Positive	No class I DSA	Positive	No Class II DSA	
8050	186	91.98	Positive	B62 (7489) B52 (2518)	Positive	No Class II DSA	
8080	186	92	Positive	B62 (7811)	Positive	No Class II DSA	Patient has Class I DSA
8083	186	94.66	Positive	B62 (9500)	Positive	No Class II DSA	No bead for B*15:35(62) used B*15:01(62). Due to Class I antibodies.
8103	186	37	Negative	No class I DSA	Negative	No Class II DSA	
8110	186	92%	Negative	No class I DSA	Negative	No Class II DSA	
14262	186	92	Positive	B62 (6064)	Positive	No Class II DSA	Epitope analysis for B*15:35 (B62)

Table 29. Individual Virtual crossmatch results for Serum #186 vs Donor# V3

Donor #V3 HLA genotype: A*02:01:01-A*03:01:01-B*35:03:01-B*57:03:01-C*04:01:01-C*07:01:02-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQB1*06:04:01-DPA1*01:05-DPB1*04:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	186	50	Positive	B35 (9609)	Positive	No Class II DSA	Positive due to Class I
792	186	92	Positive	B35 (7176)	Positive	No Class II DSA	No Class II DSA, positive due to Class I DSA
1461	186	32	Positive	B35 (1874)	Positive	No Class II DSA	
2400	186	92	Positive	B35 (7712)	Positive	No Class II DSA	
3632	186	92	Positive	B35 (6805)	Positive	No Class II DSA	DSA detected to B35(MFI=6805).Do not recommend moving forward, FXM will most likely be Positive. No Class II DSA, but FXM will be most likely positive due to Class I DSA. Do not recommend moving forward.
3753	186	92	Positive	B35 (7706)	Positive	No Class II DSA	
3808	186		Positive	B35 (2709)	Positive	No Class II DSA	No Class II DSA but is expected to be positive due to Class I DSA present. Unacceptable
3966	186	93%	Positive	B35 (8635)	Positive	No Class II DSA	No Bead B*35:03 in SAB PANEL
5130	186	86.03%	Positive	B35 (6340)	Negative	No Class II DSA	
8001	186	95%	Positive	B35 (9065)	Positive	No Class II DSA	Specificity to B*35:03 is not on the LSAB panel. MFI value for B35 taken from another allele of B*35.
8029	186	36	Positive	No class I DSA	Positive	No Class II DSA	
8050	186	91.98	Positive	B35 (6937)	Positive	No Class II DSA	
8080	186	92	Positive	B35 (7075)	Positive	No Class II DSA	Patient has Class I DSA
8083	186	94.66	NT		NT		No bead for B*35:03.
8103	186	37	Negative	No class I DSA	Negative	No Class II DSA	
8110	186	92%	Negative	No class I DSA	Negative	No Class II DSA	
14262	186	92	Positive	B35 (3509)	Positive	No Class II DSA	

Table 30: Individual Cutoff values and Pretreatment - Exchange 31

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment	
230	A	4000	DRB1	4000	One Lambda	Single Antigen/Explex	None	
	B	4000	DRB3/4/5	4000				
	C	10000	DQA1	4000				
	Class I			DQB1				4000
				DPB1				10000
			Class II					
615	A		DRB1		One Lambda	Single Antigen	EDTA	
	B		DRB3/4/5					
	C		DQA1					
	Class I	500		DQB1				
				DPB1				
			Class II	500				
792	A	1500	DRB1	1500	One Lambda	Single Antigen	FBS/EDTA	
	B	1500	DRB3/4/5	1500				
	C	1500	DQA1	1500				
	Class I	1500		DQB1				1500
				DPB1				1500
			Class II	1500				
2400	A	2000	DRB1	2000	One Lambda	Single Antigen	EDTA	
	B	2000	DRB3/4/5	2000				
	C	2000	DQA1	2000				
	Class I	2000		DQB1				2000
				DPB1				2000
			Class II	2000				
3224	A	1000	DRB1	1000	One Lambda	Single Antigen	EDTA	
	B	1000	DRB3/4/5	1000				
	C	1000	DQA1	1000				
	Class I	1000		DQB1				1000
				DPB1				1000
			Class II	1000				
3632	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					
3753	A	1000	DRB1	1000	One Lambda	Single Antigen	DTT	
	B	1000	DRB3/4/5	1000				
	C	2000	DQA1	1000				
	Class I	1000		DQB1				1000
				DPB1				2000
			Class II	1000				

Table 30: Individual Cutoff values and Pretreatment - Exchange 31

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
3808	A		DRB1		Immucor	Single Antigen	None
	B		DRB3/4/5				
	C		DQA1				
	Class I	750	DQB1				
			DPB1				
			Class II	750			
5130	A	2000	DRB1	2000	One Lambda	Single Antigen/Explex	None
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
5214	A	3000	DRB1	3000	One Lambda	Single Antigen	FCS+EDTA
	B	3000	DRB3/4/5	3000			
	C	3000	DQA1	3000			
	Class I	3000	DQB1	3000			
			DPB1	3000			
			Class II	3000			
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	Immucor	Lifecodes	EDTA
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I	9	DQB1	500			
			DPB1	500			
			Class II	27			
8050	A	1000	DRB1	1000	One Lambda	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		DRB1		One Lambda	Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	2000	DQB1				
			DPB1				
			Class II	2000			

Table 30: Individual Cutoff values and Pretreatment - Exchange 31

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment	
8103	A	500	DRB1	500	One Lambda	Single Antigen	DTT	
	B	500	DRB3/4/5	500				
	C	500	DQA1	500				
	Class I			DQB1				500
				DPB1				500
				Class II				
8111	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
14262	A	1000	DRB1	1000	One Lambda	Single Antigen	ABSORB	
	C	1000	DRB3/4/5	1000				
	Class I			DQA1				1000
				DQB1				1000
				DPB1				1000
				Class II				1000