

Report of the 35th Single Antigen, Flow and Virtual Crossmatch Exchange

September 17, 2025

Cells	205-206
Serum	207-210

In this study, virtual donor V3 and serum 204 (patient 2) from Exchange 24 (March 2024) are re-examined as cell 205 and serum 207. A comparison of virtual crossmatch predictions (VXM) (**V3 vs. serum 204**) against the physical flow crossmatch (FXM) (**cell 205 vs. serum 207**) are summarized in **Part 1** of this report. **Part 2** examines the Luminex single antigen (SAB)

data for serum sample nos. **207 - 210**. **Part 3** summarizes the FXM results for **cells 205 and 206** against the 4 sera. Finally, in **Part 4**, the VXM predictions for 3 potential donors (V1 - V3) against serum 209 and serum 210 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 34. Among them, 13 labs reported back physical FXM results in Exchange 35 (Table 1a). All 13 labs reported the physical T/ B-cell FXM as positive in agreement with predictions (Table 1b).

The reporting of DSA and DSA strength was also consistent across the 2 studies. In Exchange 34, multiple DSA (A2, A24, B27, DR52, DR53) were reported against donor V3. Respective MFI values for each at the time were 5008, 5195, 3781, 6810, 3827. In addition, anti-Bw4 (13398) reactivity was reported against the donor by 4 of the 13 labs. In this pre-

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

Exchange 034					Exchange 035				
Virtual Crossmatch - Donor V3 vs. Serum 204					Physical Flow Crossmatch - Cell 205 vs. Serum 207				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V3	204	13	POS (13)	POS (13)	205	207	13	POS (13)	POS (13)

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

		T-cell Virtual XM (Exchange 34)		
		+	-	Ø
Physical T-cell FXM (Exchange 35)	+	13		
	-			
	Ø			

		B-cell Virtual XM (Exchange 34)		
		+	-	Ø
Physical B-cell FXM (Exchange 35)	+	13		
	-			
	Ø			

+ / - = positive/negative Ø = borderline/not typed

n = number of labs

sent study, anti-A2, -A24, -B27, -DR52, and -DR53 reactivity was reported once again against cell 205. DSA strength were similar to the previous study, with respective median MFI values reported as 5278, 5400, 3533,

8553, and 4473. In addition, 3 of the 4 labs assigning Bw4 as a DSA in Exchange 34, reported it as a DSA once again in Exchange 35 (Bw4, 11281 ± 5391).

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

Cell 205 HLA Genotype: A*02:02:01-A*24:02:01-B*27:05:02-B*39:06:02-C*02:02:02-C*07:02:01/DRB1*04:04:01-DRB1*14:06:01-DRB3*01:01:02-DRB4*01:03:03-DQA1*03:01:01-DQA1*05:03:01-DQB1*03:01:01-DQB1*03:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Exchange 034					Exchange 035				
Virtual Crossmatch - Donor V3 vs. Serum 204 (Patient 2)					Physical Flow Crossmatch - Cell 205 vs. Serum 207				
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	A24 (6659) A2 (6879) B27 (4722)	Positive	NT	230	POSITIVE	A2(6380), A24(7709), B27(3909)	POSITIVE	DR53
792	Positive	A24 (3111) A2 (4611) B27 (2393)	Positive	DR52 (5738) DR53 (3329)	792	POSITIVE	A2(4840), A24(3834)	POSITIVE	DR52(6225), DR53(3938)
793	Positive	Bw 4 (4000) A24 (5742) A2 (6305)	Positive	DR52 (7318) DR53 (3611)	793	POSITIVE	A2(8254), A24(8054), B2705(4486), Aw 4/Bw 4(~7000)	POSITIVE	DRB3*01 9552, DR53 5647
1426	Positive	A24 (5155) A2 (4751) B27 (3619)	Positive	DR52 (7343) DR53 (3429)	1426	POSITIVE	A2 (4639), A24 (3988), B27 (3982)	POSITIVE	DR52 (7852), DR53 (3269)
2400	Positive	A24 (4258) A2 (4163) B27 (3090)	Positive	DR52 (6556) DR53 (3663)	2400	POSITIVE	A*02(4098), A*24(2795), B*27(2375)	POSITIVE	DRB3*01(5236), DRB4*01(4002)
3632	Positive	A24 (4828) A2 (4698) B27 (3289)	Positive	DR52 (5910) DR53 (2979)	3632	POSITIVE	A2(MFI=4103), A24(MFI=4598), B27(MFI=2430)	POSITIVE	DRB3(MFI=4798), DRB4(MFI=2949)
3753	Positive	Bw 4 (13398) A24 (2997) A2 (4134) B27 (1792)	Positive	DR52 (6050) DR53 (3907)	3753	POSITIVE	A2(3537), A24(3815), B*27:05(1948), Bw 4(4761)	POSITIVE	DR53 (3466), DRB3*01(5908)
3808	Positive	A24 (2639) A2 (1945) B27 (1437)	Positive	DR52 (2964) DR53 (1488)	3808	POSITIVE	A*24:02(2497), A*02:02(1845), B*27:05(1380)	POSITIVE Moderate	DRB3*01:01(2439) DRB4*01:01(1154)
3966	Positive	A24 (6326) A2 (8154) B27 (4426)	Positive	DR52 (7461) DR53 (4138)	3966	POSITIVE		POSITIVE	
5130	Positive	A24 (4031)	Positive	DRB4*01:03 MFI: 4082, DRB3*01:01 MFI: 7425	5130	POSITIVE	A24(6817), B27:05(4803)	POSITIVE	DRB3*01:01 (10151)
8001	Positive	Bw 4 (19433) A24 (3783) A2 (6415) B27 (2641)	Positive	DR52 (6933) DR53 (4066)	8001	POSITIVE	A2 (5607), A24 (4398), B27 (3158), Bw 4 (17983-2073)	POSITIVE	DRB3*01:01 (18034), DRB4*01:03 (9452)
8083	Positive	B2705 (4048) Bw 4 (15345) A24 (6239) A2 (4708)	Positive	DR52 (6603) DR53 (3031)	8083	POSITIVE	A*02:02(3614), A24:02(5934), B*27:05(3541)	POSITIVE	DR52(01:01) 7691, DR53(4101)
8110	Positive	B2705 (4293) A24 (6957) A2 (6733)	Positive	DR52 (7882) DR53 (6873)	8111	POSITIVE	A2(6100), A24(5400), B*27:05(3000)	POSITIVE	DRB3*01:01(8200), DRB4*01:03(4500)

Part 2

Class I and class II single antigen results for serum samples 207 - 210 are summarized in Tables 12 - 15. Individual listing of results for each par-

ticipating laboratory are listed in Tables 16 – 22. Pretreatment and cutoff values are listed in Table 29.

Antibody Identification

Serum 207: This sample was previously examined as serum 204 in Exchange 34. As shown below, the reporting of antibody and antibody strength was generally consistent across the 2 studies.

Class I		Class I		Class II		Class II	
*** Serum 204 ***		*** Serum 207 ***		*** Serum 204 ***		*** Serum 207 ***	
Antigen	Median	Antigen	Median	Antigen	Median	Antigen	Median
B13	15976	B13	17983	DQ2	18793	DQ2	21483
A68	7772	A68	8510	DR7	15469	DR7	17323
A25	7358	A25	7800	DR9	5989	DR9	8022
A69	7133	A69	6833	DR12	6331	DR12	7355
B57	6416	B57	6500	DR53	3827	DR53	4473
B63	6052	B63	6500	DQA1*02	12348	DQA1*02	9600
A32	6542	A32	6318	DR52	6810	DR52	8553
B49	5811	B49	6310				
B59	5598	B59	6200				
B51	5122	B51	5800				
B53	5037	B53	5700				
A24	5195	A24	5400				
B77	4676	B77	5300				
A2	5008	A2	5278				

For this sample, multiple DSA (A2, A24, B27, DR52, DR53) were reported against cell 205. Respective MFI values for each was 5278, 5400, 3533, 11281, 8553, and 4473. Against cell 206, labs reported anti-B38 (5618), -DR12 (7355), -DR52 (8553), and -DR53 (4473) reactivity. In addition, 4 labs reported Bw4 (11281) as a DSA against each cell.

*(median MFI by SAB)

Genotypes of cells provided by UCLA

Cell 205 (Hispanic): A*02:02:01-A*24:02:01-B*27:05:02-B*39:06:02-C*02:02:02-C*07:02:01/DRB1*04:04:01-DRB1*14:06:01-DRB3*01:01:02-DRB4*01:03:03-DQA1*03:01:01-DQA1*05:03:01-DQB1*03:01:01-DQB1*03:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Serum 208: Strong class I reactivity was detected in this sample, with labs reporting reactivity to a number of 7C specificities, including B67 (20909), B7 (20581), B42 (19775), B55 (19185), B73 (18063), and B81 (18024). In addition, anti-A2 (15213), -A1 (12586), -B8 (11806), -A3 (9784), and -A69 (9740) reactivity was reported. For class II, 100% of labs reported reactivity to DR1 (7558), DR10 (7187), DR103 (5898), DR51 (3727), DR7 (4100), and DR9 (3144).

Multiple DSA (A2, A24, B27, Cw2, DR52) were reported against cell 205. Respective MFI's for each was 15213, 6323, 15681, and 2585. Against cell 206, labs reported anti-A3 (9784), -B38 (5000), -A11 (3057), -DR12 (1493), and -DR52 (2585) reactivity.

Serum 209: Strong anti-B45 (25940), -B44 (24400), -B76 (23201), and -B82 (15424) reactivity was detected in this sample. In addition, labs reported reactivity to a number of 5C, 7C, 10C, and 12C specificities, including reactivity to B49 (9000), B50 (8860), A68 (7900), B72 (6827), A34 (6779), B41 (6642), A33 (6334), and B61 (6185). Strong DR and DQ reactivity was also detected, including reactivity to DQ6 (19609), DQ9 (15913), DQ8 (14723), DR13 (13287), DR16 (12387), and DR12 (11370).

Anti-DQ7 (2972) and -DQ8 (14723) reactivity was reported against cell 205. There were no class I DSA were reported. Against cell 206, labs reported anti-B60 (5803) and -DR12 (11370) reactivity.

Serum 210: Strong class I and class II reactivity was detected in this sample, including reactivity to A2, B57, A68, A69, B58, DR7, DQ9, DQ8, and DQ7. Each was reported with respective median MFI's of > 19000.

Multiple DSA were reported against cell 205 (A2, A24, B27, DQ8, DQ7, DR52). Respective MFI for each was 27564, 17075, 118223, 19361, 19293, 14474). Against cell 206, anti-B38 (14945), -DQ7 (19293), -DR12 (13157), and -DQ4 (4879) reactivity was reported. In addition, several labs reported anti-Bw4 (20950) reactivity against each cell.

Cell 206 (Chinese): A*03:01-A*11:01-B*38:01:01-B*40:01:02-C*07:02:01-C*12:03:01/DRB1*04:05:01-DRB1*12:02:01G-DRB3*03:01:03-DRB4*01:01:01G-DQA1*03:03:01-DQA1*06:01:01-DQB1*03:01:01G-DQB1*04:01:01-DPA1*01:03:01G-DPA1*02:02:02-DPB1*05:01:01G-DPB1*21:01:01

Conclusion:

Good agreement (> 90%) was achieved in the reporting of class I and class II antibodies for all 4 sera samples. In each case, class I antibodies of > 17000 MFI and class II DSA of > 7000 MFI were present.

A total of 17 labs submitted single antigen data for samples 207 - 2010. Figures 1 and 2 illustrate the breakdown of pretreatment method and kit type used by labs. The majority of labs (n = 10) used EDTA as a pretreatment method.

Three labs used a combination of FBS/FCS with EDTA. DTT was used by 1 lab and DTBA by another. Finally, 2 labs indicated the sera was untreated prior to testing.

For kit type, the majority of labs (n = 12 labs) used the One Lambda LabScreen Single Antigen kit. Three labs used One Lambda's LabScreen ExPlex kit, and 2 labs used LIFECODES® Single Antigen Assays (LSA).

Figure 1. Kit Information breakdown

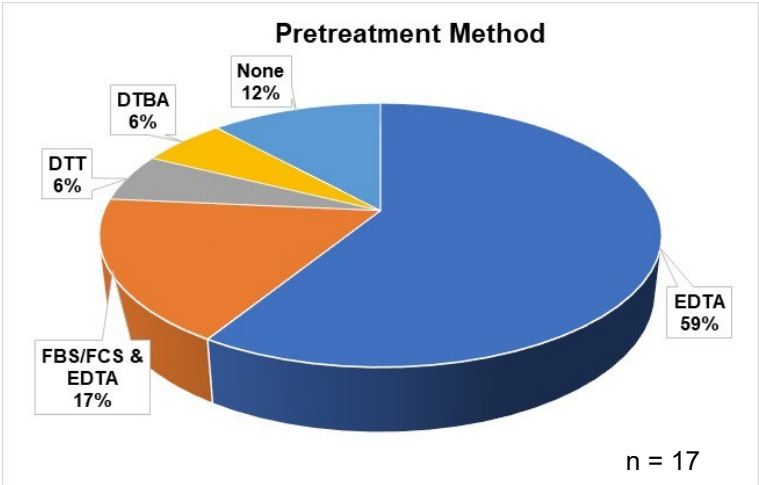
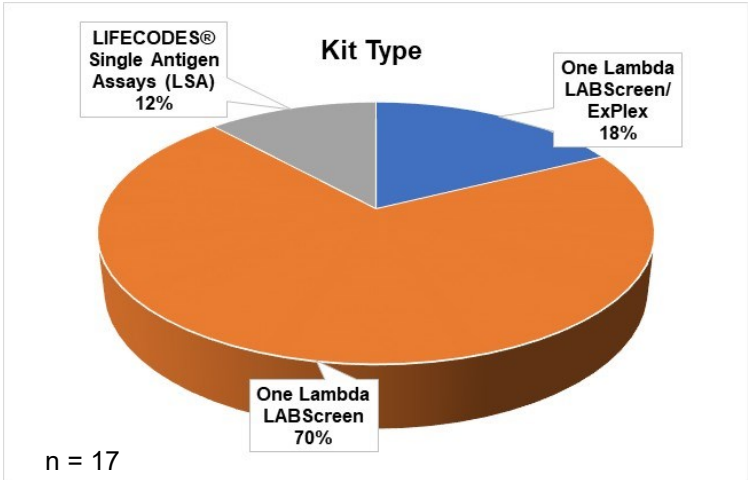


Figure 2. Sera pretreatment breakdown



Part 3

Flow cytometric crossmatch results for cell 199 and cell 200 against serum samples 201 - 204 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 205. For this cell, $\geq 80\%$ agreement was achieved for all 8 T/B-cell FXM against each of the 4 sera. Among the positive FXM, class I and or class II DSA of > 5400 MFI were present.

Cell 206. For this cell, $\geq 80\%$ agreement was also achieved for all 8 T/B-cell FXM. Each were reported as positive in the presence of class I/II DSA of > 5600 MFI.

Table 2. Summary of Flow crossmatch results for Cell #205- #206 vs. Serum #207 - #210

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
205	207	18	POS(18)	POS(18)	206	207	18	POS(16) <i>NEG(1)</i> Borderline(1)	POS(17) Borderline(1)
205	208	18	POS(18)	POS(17) Borderline(1)	206	208	18	POS(18)	POS(17) Borderline(1)
205	209	18	NEG(16) <i>POS(1)</i> NT(1)	POS(18)	206	209	18	POS(16) <i>NEG(1)</i> Borderline(1)	POS(18)
205	210	18	POS(18)	POS(18)	206	210	18	POS(18)	POS(18)

Conclusion:

Good agreement ($\geq 80\%$) was achieved for all 8 T-cell FXM. All but 1 was reported as positive in the presence of class I DSA of > 5400 MFI. In the case of cell 206 vs. serum samples 207 and 209, 1 lab reported the T-cell FXM as negative and 1 lab reported borderline results. In each case, a single DSA of < 6000 MFI was present.

Good agreement ($\geq 80\%$) was achieved for all 8 B-cell FXM. Each were

reported as positive in the presence of class I and/or class II DSA of > 7000 MFI. Interestingly, 1 lab reported the B-cell FXM for cell 205 and 206 vs. serum 208 as borderline despite reporting the presence of class I DSA of > 12000 MFI. Another lab reported the B-cell FXM for cell 206 vs. serum 207 as borderline. In this case, the lab reported DSA of moderate strength (< 6200 MFI) were present.

Part 4

Virtual XM predictions for each virtual donor (V1 - V3) against serum samples 209 and 210 are summarized in Table 3 and individual laboratory

predictions are listed in Tables 23 - 28. 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 4 out of 6 challenges. Among the positive predictions, multiple class I DSA or DSA of > 20000 MFI were present. For donors V1 and V2 vs. Serum 209, predictions were split among labs, with the majority of labs ($n = 12$) predicting the physical T-cell FXM to be negative in

the absence of class I DSA.

For virtual **B-cell predictions** of the expected B-cell FXM, $\geq 80\%$ agreement was achieved for all 6 challenges. In each case, strong class I and/or class II DSA of > 14000 MFI) were present.

Table 3. Summary of Virtual Crossmatch Predictions (Serum #209 - #210 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	209	16	NEG(12) POS(3) Borderline(1)	POS(15)	V2	209	16	NEG(12) POS(3) Borderline(1)	POS(16)
V1	210	16	POS(16)	POS(16)	V2	210	16	NEG(16)	POS(16)
Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction					
V3	209	16	POS(16)	POS(16)					
V3	210	16	POS(16)	POS(16)					
consensus < 80%									

DSA Identification

Patient 1 (Serum 209)

Patient's fictional case history: This individual is a 40-year-old male being evaluated for his second transplant. The HLA typing of the first transplant was A*02:01-A*24:02-B*18:01-B*57:01-C*03:04-C*02:02/DRB1*03:01-DRB3*02:02-DQA1*05:01-DQB1*02:01-DPA1*02:01-DPB1*18:01.

Patient 1's HLA type is as follows:

A*02:01	B*18:01, B*57:01	C*02:02, C*06:02			
DRB1*03:01, DRB1*03:02	DRB3*02:02, DRB3*01:01	DQA1*05:01, DQA1*04:01	DQB1*02:01 DQB1*04:02	DPA1*04:01	DPB1*28:01

The reporting of class I DSA against **donor V1** was mixed among labs; 10 labs noted there were no class I DSA present, while 6 labs reported A30 (1292) as a DSA. By contrast, good agreement was achieved in the reporting of class II DSA against donor V1, with > 90% of labs reporting DR7 (3362) and DR8 (7358) as DSA. A few labs (n = 11) reported DP10 (2606) as a DSA as well. T-cell predictions were also mixed among labs. Twelve labs predict the expected T-cell FXM to be negative in the absence of class I DSA. Two others reporting weak class I reactivity against the donor also predict the T-cell FXM to be negative. Among the 4 remaining labs, 3 labs predict it to be positive and 1 predicts borderline results due to class I DSA. All 16 labs predict the expected B-cell FXM to be positive. Multiple class II DSA were reported by each lab.

Against **donor V2**, 6 labs reported anti-A30 (1292) reactivity. The remaining labs (n = 10) noted there were no class I DSA present against the donor. Good agreement was achieved in the reporting of class II DSA, with > 90% of labs reporting DQ8 (14723) and DP1 (3832) as DSA. DP3 (3003) was also reported as a DSA by 14 labs. As the reporting of class I DSA was mixed, so were T-cell predictions. Four of the 6 labs noting A30 as a DSA, predict the expected T-cell FXM to be positive or borderline. The remaining 2 labs predict it to be negative, along with the 10 labs which indicated the absence of class I DSA. By contrast, all 16 labs predict the expected B-cell FXM to be positive in the presence of class II DSA.

Good agreement (> 90%) was achieved in the reporting of class I and class II DSA (A68, B61, DP5) against **donor V3**. Respective medium MFI values for each were 7900, 6185, and 2798. Strong anti-DQ8 (14723) reactivity was also reported against the donor by 14 labs. In the presence of strong DSA, all 16 labs predict the expected T/B-cell FXM to be positive.

*(median MFI by SAB)

Virtual Donors – HLA genotype

Donor 1 (V1): Donor #V1 HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01/DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Donor 2 (V2): Donor #V2 HLA A*01:01:01-A*30:01:01-B*07:02:01-B*42:01:01-C*07:02:01-C*17:01:01/DRB1*03:02:01-DRB1*04:05:01-DRB3*01:62:01-DRB4*01:03:01-DQA1*03:03:01-DQA1*04:01:01-DQB1*03:02:01G-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:02:02-DPB1*01:01:01G-DPB1*03:01:01G

Donor 3 (V3): Donor #V3 HLA A*24:02:01-A*68:01:02-B*40:02:01-C*03:04:01-C*03:08/DRB1*04:11:01-DRB4*01:03:01-DQA1*03:01:01-DQB1*03:02:01G-DPA1*01:03:01-DPA1*02:02:02-DPB1*04:02:01G-DPB1*05:01:01G

Patient 2 (Serum 2010)

Patient's fictional case history: This individual is a 28-year-old male being evaluated for his first transplant.

Patient 2's HLA type is as follows:

A*11:01, A*30:01	B*56:01, B*08:01	C*01:02, C*03:04			
DRB1*01:01, DRB1*10:01		DQA1*01:05	DQB1*05:01	DPA1*01:05	DPB1*18:01

Strong class I and class II reactivity was reported against **donor V1**, with 100% of labs reporting A2 (27564) and DR7 (23902) as DSA. Anti-DQ2 (4413) and -DQ4 (4879) reactivity was also reported against the donor by some labs. All 16 labs predict the expected T/B-cell FXM to be positive in the presence of strong DSA.

Against **donor V2**, all 16 labs noted there were no class I DSA present. The reporting of class II DSA was also consistent across labs, with > 90% of labs reporting DQ8 (19351) as a DSA. Additional anti-DR52 (14474) and -DQ4 (4879) reactivity was also reported by some labs. All 16 labs predict the expected T-cell FXM to be negative in the absence of class I DSA, while all 16 labs predict the expected B-cell FXM to be positive in the presence of strong class II DSA.

Good agreement was achieved in the reporting of DSA against **donor V3**, as strong anti-A68 (22673), -A24 (17075), and -DQ8 (19361) reactivity was reported against the donor by all 16 labs. In addition, 2 labs noted DQA1*03 (14224) reactivity against donor V3. In the presence of strong DSA, all 16 labs predict the expected T-cell FXM and the expected B-cell FXM to be positive.

Conclusion

For **serum 209**, only 2 out of 3 virtual T-cell challenges achieved $\geq 80\%$ agreement among labs. In each case, weak anti-A30 (1292) reactivity was present. Against donor V1 and V2, 6 labs reported A30 as a DSA, while the remaining labs noted there were no class I DSA present. The variability in the reporting of class I DSA, resulted in T-cell predictions to be mixed among labs, with the majority ($n = 12$) of labs predating the expected T-cell FXM to be negative. By contrast, $\geq 80\%$ agreement was achieved for the virtual B-cell challenges for this serum against all 3 virtual donors. In each case, class II DSA of > 7000 MFI were present.

For **serum 210**, 100% agreement was achieved among labs across all 6 virtual T/B-cell FXM challenges. All 16 labs predict the expected T-cell FXM against donors V1 and V3 to be positive and all 16 labs predict the expected B-cell FXM against all 3 virtual donors to be positive. In each case, strong class I and/or class II DSA of > 19000 MFI were present.

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Flow Cytometric Crossmatch

Table 4. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #207

Cell 205 HLA Genotype: A*02:02:01-A*24:02:01-B*27:05:02-B*39:06:02-C*02:02:02-C*07:02:01/DRB1*04:04:01-DRB1*14:06:01-DRB3*01:01:02-DRB4*01:03:03-DQA1*03:01:01-DQA1*05:03:01-DQB1*03:01:01-DQB1*03:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	207	1.75	1.75	POSITIVE	A2 6380, A24 7709, B27 3909	2.7	2.9	POSITIVE	DR53	0.75	0.7	YES
615	207	290	242	POSITIVE	A2 (5278), A*24:02 (4417), B*27:05 (3346)	361	214	POSITIVE	DRB3*01:01 (7546), DRB4*01:03 (4458)	237	277	YES
753	207	650	9794	POSITIVE	10000	1200	12615	POSITIVE	16000	401	800	YES
792	207	57	64	POSITIVE	A2(4840), A24(3834)	107	155	POSITIVE	DR52(6225), DR53(3938)	280	306	YES
793	207	>70	240	POSITIVE	A2 (02:05 bead used for 02:02) 8254, A24 8054, B2705 4486, Aw4/Bw4 ~7000	>150	270	POSITIVE	DRB3*01 9552, DR53 5647	127	142	YES
1426	207	67	179	POSITIVE	A2 (4639), A24 (3988), B27 (3982)	82	231	POSITIVE	DR52 (7852), DR53 (3269)	291	303	YES
2400	207	48	279	POSITIVE	A*02(4098), A*24(2795), B*27(2375)	52	258	POSITIVE	DRB3*01(5236), DRB4*01(4002)	36	40	YES
3224	207	70	205	POSITIVE		140	140	POSITIVE		159	212	YES
3632	207	70	240	POSITIVE	A2(MFI=4103), A24(MFI=4598), B27(MFI=2430)	100	249	POSITIVE	DRB3(MFI=4798), DRB4(MFI=2949)	135	154	YES
3753	207	50	195	POSITIVE	A2(3537), A24(3815), B*27:05(1948), Bw4(4761)	100	249	POSITIVE	DR53 (3466), DRB3*01(5908)	271	278	YES
3808	207	348	165	POSITIVE	A*24:02(2497), A*02:02(1845), B*27:05(1380)	441	132	POSITIVE Moderate	DRB3*01:01(2439) DRB4*01:01(1154)	279	328	YES
3966	207	20	170	POSITIVE		50	251	POSITIVE		196	244	NO
5130	207	61	576	POSITIVE	A24 (6817), B27:05 (4803)	77	657	POSITIVE	DRB3*01:01 (10151)	317	576	YES
5214	207	700	16367	POSITIVE	A2(13600), A24(15000), B27(8300)	1500	28408	POSITIVE	DR52(21350), DR53(10600)	1641	2198	YES
8001	207	50	268	POSITIVE	A2 (5607), A24 (4398), B27 (3158), Bw4 (17983-2073)	100	263	POSITIVE	DRB3*01:01 (18034), DRB4*01:03 (9452)	246	308	YES
8050	207	50	208	POSITIVE	A2(9892) A24(5677) B27(5187) Bw4 Cw2(1628)	120	161	POSITIVE	DR52(DRB3*01:01,12175) DR53	145	250	YES
8083	207	80	166	POSITIVE	A*02:02(3614), A24:02(5934), B*27:05(3541)	107	138	POSITIVE	DR52(01:01) 7691, DR53(4101)			YES
8111	207	76	600	POSITIVE	A2(6100), A24(5400), B*27:05(3000)	114	789	POSITIVE	DRB3*01:01(8200), DRB4*01:03(4500)	252	238	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #208

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	208	1.75	4.99	POSITIVE	A2 13973, A24 8452, B27 14688	2.7	4.5	BORDERLINE	DR52 3402, DQA1*05:01 5288	0.75	0.7	YES
615	208	290	398	POSITIVE	A2 (15213), A*24:02 (6182), B*27:05 (16487), C*02:02 (5373)	361	333	POSITIVE	DRB3*01:01 (1015)	237	277	YES
753	208	650	31413	POSITIVE	27000	1200	35474	POSITIVE	3000	401	800	YES
792	208	57	279	POSITIVE	A2(15288), B27(15121), A24(5999), C2(3473)	107	270	POSITIVE	No Class II DSA	280	306	YES
793	208	>70	431	POSITIVE	A2 (02:05 bead used for 02:02) 17668, A24 10684, B2705 19340, Aw4/Bw4 ~9500, C*02:02 7491	>150	412	POSITIVE	DRB3*01 2596	127	142	YES
1426	208	67	361	POSITIVE	A2 (11288), A24 (2611), B27 (15433), Cw2 (4409)	82	347	POSITIVE	DR52 (1094)	291	303	YES
2400	208	48	457	POSITIVE	A*02(12700), A*24(3933), B*27(13726),C*02(2949))	52	375	POSITIVE	No Class II DSA	36	40	YES
3224	208	70	386	POSITIVE		140	289	POSITIVE		159	212	YES
3632	208	70	415	POSITIVE	A2(MFI=14372), A24(MFI=6088), B27(MFI=12603), Cw2(MFI=2486)	100	371	POSITIVE	No Class II DSA	135	154	YES
3753	208	50	372	POSITIVE	A2(10279), A24 (3317), B27 (11436), CW2(3169), Bw4(6910)	100	346	POSITIVE	No Class II DSA	271	278	YES
3808	208	348	315	POSITIVE Strong	A*02:02(8667) B*27:05(6776) A*24:02(3532) C*02:02(1552)	441	246	POSITIVE	No Class II DSA	279	328	YES
3966	208	20	313	POSITIVE		50	336	POSITIVE		196	244	NO
5130	208	61	718	POSITIVE	A24 (6716), B27:05 (18373), C*02 (6896)	77	753	POSITIVE	DRB3*01:01 (1720)	317	576	YES
5214	208	700	91293	POSITIVE	A2(34000), A24(14200), B27(40217), C2(14600).	1500	68880	POSITIVE	DR52(3700)	1641	2198	YES
8001	208	50	397	POSITIVE	A2 (14360), A24 (4089), B27 (16213), Cw2 (5021), Bw4 (16213-1395)	100	359	POSITIVE	DRB3*01:01 (1068)	246	308	YES
8050	208	50	385	POSITIVE	A2(23268) A24(7479) B27(28005) Cw2(9909)	120	279	POSITIVE	DR52(DRB3*01:01,2429)	145	250	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #208, cont.

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	208	80	274	POSITIVE	A*02:02(15074), A*24:02(6323), B*27:05(11004),	107	206	POSITIVE	Class I DSA			YES
8111	208	76	3003	POSITIVE	A2(17000),A24(7500), B27(18800),Cw2(4800)	114	2363	POSITIVE	DR1(6600), DRB3*01:01(1200)	252	238	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #209

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	209	1.75	0.9	NEGATIVE		2.7	2.9	POSITIVE	DQ7 4226, DQ8 21226	0.75	0.7	YES
615	209	290	No result	NT	B*27:05 (732)	361	192	POSITIVE	DQB1*03:02 (14582), DQB1*03:01 (2997)	237	277	YES
753	209	650	143	NEGATIVE		1200	9374	POSITIVE	28000	401	800	YES
792	209	57	-7	NEGATIVE	No Class I DSA	107	183	POSITIVE	DQ8(11189), DQ7(2362)	280	306	YES
793	209	>70	54	NEGATIVE	slight right shift on T cells, no HLA class I DSA	>150	285	POSITIVE	DQ7 2943, DQ8 13569	127	142	YES
1426	209	67	7	NEGATIVE		82	223	POSITIVE	DQ7 (2321), DQ8 (11346)	291	303	YES
2400	209	48	60	POSITIVE	No Class I DSA	52	267	POSITIVE	DQB1*03:02(12556), DQA1*05:03(2030)	36	40	YES
3224	209	70		NEGATIVE		140	134	POSITIVE		159	212	YES
3632	209	70	49	NEGATIVE	No Class I DSA	100	242	POSITIVE	DQ8(MFI=12013),DQ7(MFI=1668)	135	154	YES
3753	209	50	27	NEGATIVE	No Class I DSA	100	231	POSITIVE	DQ7(1679), DQ8 (11701)	271	278	YES
3808	209	348	-52	NEGATIVE	No Class I DSA	441	142	POSITIVE Moderate	DQB1*03:02(4579)	279	328	YES
3966	209	20	14	NEGATIVE		50	237	POSITIVE		196	244	NO
5130	209	61	298	NEGATIVE		77	622	POSITIVE	DQA1*05:03 (3507)	317	576	YES
5214	209	700	566	NEGATIVE		1500	26043	POSITIVE	DQ7(6500), DQ8(33000).	1641	2198	YES
8001	209	50	31	NEGATIVE		100	287	POSITIVE	DQ7 (2634), DQ8 (18081)	246	308	YES
8050	209	50	2	NEGATIVE	No Class I DSA	120	153	POSITIVE	DQ7(4279) DQ8(20657)	145	250	YES
8083	209	80	44	NEGATIVE		107	107	POSITIVE	DQB1*03:02 (8)(12268), DPA1*01:03 (4026), DPB1*03:01(4026) and class I DSA.			YES
8111	209	76	3	NEGATIVE		114	561	POSITIVE	DQ7(2000),DQ8(11900)	252	238	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #210

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	210	1.75	4	POSITIVE	A2 12586, A24 19178, B27 14378	2.7	7.5	POSITIVE	DR52 19673, DQ7 18626, DQ8 19928	0.75	0.7	YES
615	210	290	445	POSITIVE	A2 (24400), A*24:02 (11589), B*27:05 (11248)	361	425	POSITIVE	DQB1*03:01 (21320), DQB1*03:02 (20900), DRB3*01:01 (14387), DRB4*01:03 (701)	237	277	YES
753	210	650	34284	POSITIVE	48000	1200	40400	POSITIVE	34000	401	800	YES
792	210	57	248	POSITIVE	A2(27564), A24(13603), B27(9697)	107	325	POSITIVE	DQ7(19870), DQ8(14740), DR52(10940)	280	306	YES
793	210	>70	466	POSITIVE	A2 (02:05 bead used for 02:02) 26735, A24 18545, B2705 13892, Aw4/Bw4 ~15,000; Cw7 equivocal	>150	503	POSITIVE	DRB3*01 14200, DQ7 19765, DQ8 16133; DR53 just below cutoff	127	142	YES
1426	210	67	413	POSITIVE	A2 (13709), A24 (16422), B27 (15608)	82	454	POSITIVE	DQ7 (18282), DQ8 (16804), DR52 (14010)	291	303	YES
2400	210	48	531	POSITIVE	A*02(26516),A*24(10941),B*27 (9330)	52	497	POSITIVE	DRB3*01(12617), DQB1*03:01(18859), DQB1*03:02(18219)	36	40	YES
3224	210	70	434	POSITIVE		140	380	POSITIVE		159	212	YES
3632	210	70	487	POSITIVE	A2(MFI=26858),A24(MFI=10675),B27(MFI=7749)	100	496	POSITIVE	DR52(MFI=10288),DQ7(MFI=18380),DQ8(MFI=17625)	135	154	YES
3753	210	50	415	POSITIVE	A2(29083 MFI), A24(14590 MFI), B27(9647 MFI),Bw4(15006 MFI).	100	457	POSITIVE	DQ7(19439 MFI), DQ8 (18593 MFI), DRB3*01 (12761 MFI).	271	278	YES
3808	210	348	352	POSITIVE Strong	A*02:02(18980) A*24:02(8673) B*27:05(5386)	441	301	POSITIVE Strong	DQB1*03:02(8533) DQA1*03:01(8103) DQB1*03:01(6888) DRB3*01:01(5536)	279	328	YES
3966	210	20	381	POSITIVE		50	420	POSITIVE		196	244	NO
5130	210	61	769	POSITIVE	A24 (16310), B27:05 (14152)	77	815	POSITIVE	DQ7 (18140), DQ8 (17948), BRB3*01:01 (16822), DQA1*05:03 (13209), DQA1*03:01 (18657)	317	576	YES
5214	210	700	152031	POSITIVE	A2(63000), A24(42000), B27(35000).	1500	281311	POSITIVE	DR52(37500), DQ7(50000), DQ8(46000).	1641	2198	YES
8001	210	50	359	POSITIVE	A2 (30609), A24 (14601), B27 (12782), Bw4 (26382-5913)	100	331	POSITIVE	DRB3*01:01 (13910), DQ7 (22592), DQ8 (21930)	246	308	YES
8050	210	50	403	POSITIVE	A2(29427) A24(17546) Bw4 B27(14744)	120	340	POSITIVE	DR52(DRB3*01:01,18948) DQ7(24502) DQ8(23262)	145	250	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #205 vs. Serum #210, cont.

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	210	80	336	POSITIVE	A*02:02(37939), A*24:02(16975), B*27:05(12012)	107	322	POSITIVE	DR52(01:01)13265, DQB1*03:01(7) (16395), DQB1*03:02(8) (20523)			YES
8111	210	76	3550	POSITIVE	A2(30000),A24(17500), B*27:05(11800)	114	6298	POSITIVE	DQA1*03(10000), DQA1*05(15000), DQ7(14200),DQ8(14,200)	252	238	YES

Table 8. Individual Flow crossmatch results and DSA reported for Cell #206 vs. Serum #207

Cell 206 HLA Genotype: A*03:01-A*11:01-B*38:01:01-B*40:01:02-C*07:02:01-C*12:03:01/DRB1*04:05:01-DRB1*12:02:01G-DRB3*03:01:03-DRB4*01:01:01G-DQA1*03:03:01-DQA1*06:01:01-DQB1*03:01:01G-DQB1*04:01:01-DPA1*01:03:01G-DPA1*02:02:02-DPB1*05:01:01G-DPB1*21:01:01

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	207	1.45	1.38	BORDERLINE	B38 7171	2.5	2.5	POSITIVE	DR12 8907, DR52 13384, DR53 7242	0.4	0.5	YES
615	207	273	211	POSITIVE	B*38:01(4626), B*40:01(896)	316	203	POSITIVE	DRB3*03:01 (8170), DRB1*12:02 (5715), DRB4*01:01 (4459)	220	232	YES
753	207	650	3943	POSITIVE	9800	1200	11120	POSITIVE	16900	475	650	YES
792	207	57	137	POSITIVE	B38(3777)	107	232	POSITIVE	DR12(4691), DR52(6364), DR53(3851)	209	217	YES
793	207	>70	210	POSITIVE	B38 7478, Bw4 ~7000	>150	189	POSITIVE	DR12 7390, DRB3*03 9965, DR53 5647	80	147	YES
1426	207	67	119	POSITIVE	B38 (5917)	82	248	POSITIVE	DR12 (5923), DR52 (8613), DR53 (3527)	284	252	YES
2400	207	48	218	POSITIVE	B*38(2759)	52	240	POSITIVE	DRB1*12(4060), DRB3*03(5698), DRB4*01(4198)	36	40	YES
3224	207	70	52	POSITIVE		140	134	POSITIVE		139	113	YES
3632	207	70	227	POSITIVE	B38(MFI=3749)	100	311	POSITIVE	DR12(MFI=3755), DR52(MFI=5272), DR53(MFI=2909)	57	93	YES
3753	207	50	155	POSITIVE	B38(3758), Bw4(4761)	100	241	POSITIVE	DR12(4106), DRB3*03(6452), DR53(3466)	258	265	YES
3808	207	279	160	POSITIVE	B*38:01(2421)	389	128	POSITIVE Moderate	DRB1*12:02(1543) DRB3*03:01(2212) DRB4*01:01(1154)	210	277	YES
3966	207	20	112	POSITIVE		50	155	POSITIVE		185	298	NO
5130	207	61	515	POSITIVE	B*38:01 (6838)	77	622	POSITIVE	DRB3*03:01 (10585), DRB4*01:01 (4631)	242	586	YES
5214	207	700	7329	POSITIVE	B38(14000).	1500	21176	POSITIVE	DR12(17000), DR52(21350), DR53(10600).	1027	1214	YES
8001	207	50	250	POSITIVE	B38 (4647), Bw4 (17983-2073)	100	265	POSITIVE	DR12 (14982), DR52 (16613), DR53 (9303)	199	262	YES
8050	207	50	115	POSITIVE	B38(8517) Bw4 Cw12(1133)	120	111	POSITIVE	DR12(10867) DR52(DRB3*03:01,13154) DR53(7165)	80	188	YES
8083	207	80	34	NEGATIVE	B*38:01(6136)	107	92	BORDERLINE	DRB1*12:02(5499), DR52(03:01) (8212), DR53(01:01) (4101)			YES
8111	207	76	495	POSITIVE	B38(5100)	114	1384	POSITIVE	DR12(8000), DRB3*03:01(8500), DR53(4700)	324	303	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #206 vs. Serum #208

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	208	1.45	1.5	POSITIVE	A3 12311, A11 3775, B38 6711	2.5	2.6	BORDERLINE	Dr12 3025, Dr52 4276	0.4	0.5	YES
615	208	273	285	POSITIVE	A*03:01 (10124), B*38:01 (5000), A*11:01 (3023)	316	185	POSITIVE	DRB1*12:02 (1019), DRB3*03:01 (1150)	220	232	YES
753	208	650	7913	POSITIVE	19700	1200	9224	POSITIVE	16900	475	650	YES
792	208	57	212	POSITIVE	A3(9784), B38(3554), A11(2278)	107	209	POSITIVE	No Class II DSA	209	217	YES
793	208	>70	151	POSITIVE	A3 15146, A11 4730, B38 8435, Bw4 ~9500	>150	225	POSITIVE	DR12 2338, DRB3*03 2916	80	147	YES
1426	208	67	179	POSITIVE	A11 (1500), A3 (7365), B38 (5343)	82	194	POSITIVE	DR52 (1390)	284	252	YES
2400	208	48	311	POSITIVE	A*03(8424), A*11(1910), B*38(2945)	52	220	POSITIVE	No DSA	36	40	YES
3224	208	70	147	POSITIVE		140	76	POSITIVE		139	113	YES
3632	208	70	307	POSITIVE	A3(MFI=8158),A11(MFI=1879),B38(MFI=2915)	100	278	POSITIVE	No Class II DSA detected	57	93	YES
3753	208	50	189	POSITIVE	A3(6819), A11(1711), B38(3254), Bw4(6910)	100	162	POSITIVE	No CLASS II DSA	258	265	YES
3808	208	279	251	POSITIVE Strong	A*03:01(4848) A*11:01(976) B*38:01(1902)	389	125	POSITIVE Moderate	No Class II DSA	210	277	YES
3966	208	20	189	POSITIVE		50	185	POSITIVE		185	298	NO
5130	208	61	593	POSITIVE	A3 (13468), A11 (4312)	77	651	POSITIVE	DRB3*03:01 (1905)	242	586	YES
5214	208	700	17569	POSITIVE	A11(6300), A3(24900), B38(14000).	1500	15115	POSITIVE	DR12(3250), DR52(3700).	1027	1214	YES
8001	208	50	330	POSITIVE	A3 (9211) A11 (1803) B38 (4118), Bw4 (16213-1395)	100	261	POSITIVE	DR52 (1262)	199	262	YES
8050	208	50	178	POSITIVE	A3(17199) A11(5351) B38(9744)	120	94	POSITIVE	DR12(2462) DR52 (DRB3*03:01,2974)	80	188	YES
8083	208	80	274	POSITIVE	A*03:01(7053), B*38:01(4153)	107	206	POSITIVE	Class I DSA			YES
8111	208	76	1503	POSITIVE	A3(15100),A11(3700), B38(6000)	114	1316	POSITIVE	DR12(1300), DRB3*03:01(1300)	324	303	YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #206 vs. Serum #209

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	209	1.45	0.64	BORDERLINE	B60 7262	2.5	2.73	POSITIVE	DR12 16647,DQ7 4226, DP5 5888	0.4	0.5	YES
615	209	273	208	POSITIVE	B*40:01 (5737), A*11:01 (841), A*03:01 (547)	316	312	POSITIVE	DRB1*12:02 (8738), DQB1*03:01 (2997), DPB1*05:01 (2798), DQB1*04:01 (1100)	220	232	YES
753	209	650	3050	POSITIVE	10000	1200	18060	POSITIVE	22000	475	650	YES
792	209	57	141	POSITIVE	B60(4831)	107	324	POSITIVE	DR12(8920), DQ7(2594), DP5(2203)	209	217	YES
793	209	>70	255	POSITIVE	B60 6190	>150	161	POSITIVE	DR12 10705, DQ7 3198, DQ4 1286, DP5 3085, DP21 (DP19) 2649	80	147	YES
1426	209	67	118	POSITIVE	B60 (5610)	82	343	POSITIVE	DP5 (1842), DQ4 (1474), DQ7 (3430), DR12 (8505), DP21 (84DEAV Eplet =2269)	284	252	YES
2400	209	48	249	POSITIVE	B*40:01(4284)	52	347	POSITIVE	DRB1*12(8352), DQA1*06:01/ DQB1*03:01(2206), DQA1*03:03/ DQB1*04:01(1036), DPB1*05(2278)	36	40	YES
3224	209	70	82	POSITIVE		140	264	POSITIVE		139	113	YES
3632	209	70	216	POSITIVE	B60(MFI=2305)	100	395	POSITIVE	DR12(MFI=6242)	57	93	YES
3753	209	50	129	POSITIVE	B60 (3075)	100	332	POSITIVE	DR12(7067), DQ7(1679), DP5(2001)	258	265	YES
3808	209	279	177	POSITIVE	B*40:01(2307)	389	235	POSITIVE	DRB1*12:02(3850) DPB1*05:01(1149)	210	277	YES
3966	209	20	100	POSITIVE		50	230	POSITIVE		185	298	NO
5130	209	61	492	POSITIVE	A11 (1328)	77	681	POSITIVE	DQA1*03:03 (20839), DQA1*06:01 (4101), DPA1*02:02 (3945), DPB1*05:01 (4512)	242	586	YES
5214	209	700	8150	POSITIVE	B60(12700).	1500	49924	POSITIVE	DR12(27000), DQ4(2100), DQ7(6500).	1027	1214	YES
8001	209	50	283	POSITIVE	B*40:01 (5992)	100	361	POSITIVE	DR12 (9428), DQ7 (2634), DPB1*05:01 (2623)	199	262	YES
8050	209	50	122	POSITIVE	B60(9323)	120	222	POSITIVE	DR12(16418) DQ4(1706) DQ7(4279) DP5(4920)	80	188	YES
8083	209	80	52	NEGATIVE	B*40:01(4787)	107	138	POSITIVE	DRB1*12:02(12117), DPA1*01:03(9870), DPB1*05:01(4392), DPB1*03:02(4026)			YES
8111	209	76	435	POSITIVE	B60(6100)	114	4037	POSITIVE	DQ7(2000),DR12(8400), DPA1*02:02(1700), DP21 DEAV(2000),DP5(1900)	324	303	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #206 vs. Serum #210

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	210	1.45	1.63	POSITIVE	B38 18954	2.5	2.9	POSITIVE	DQ7 18626, DQ4 7356	0.4	0.5	YES
615	210	273	342	POSITIVE	B*38:01 (11629)	316	317	POSITIVE	DQB1*03:01(21320), DRB3*03:01 (15793), DRB1*12:02 (11228), DQB1*04:01 (5705),DRB4*01:01 (707)	220	232	YES
753	210	650	11911	POSITIVE	9800	1200	28100	POSITIVE	22700	475	650	YES
792	210	57	239	POSITIVE	B38(12267)	107	324	POSITIVE	DQ7(19274), DR52(12164), DR12(8437), DQ4(3640)	209	217	YES
793	210	>70	305	POSITIVE	B38 17462, Bw4 ~15,000, Cw7 just below cutoff	>150	308	POSITIVE	DR12 10760, DQ7 19806, DQ4 5419; DRB3*03 13694	80	147	YES
1426	210	67	226	POSITIVE	B38 (15304)	82	373	POSITIVE	DQ4 (5459), DQ7 (21314), DR12 (10626), DR52 (15514)	284	252	YES
2400	210	48	373	POSITIVE	B*38(9756)	52	397	POSITIVE	DRB1*12(9818), DRB3*03(14325), DQB1*03:01(18859), DQB1*04:01(4596)	36	40	YES
3224	210	70	169	POSITIVE		140	282	POSITIVE		139	113	YES
3632	210	70	347	POSITIVE	B38(MFI=8195)	100	417	POSITIVE	DR12(MFI=7528),DR52(MFI=11154),DQ4 (MFI=2970),DQ7(MFI=17804)	57	93	YES
3753	210	50	228	POSITIVE	B38(13894), Bw4(15006)	100	340	POSITIVE	DQ4(3620), DQ7 (19439), DR12(9117), DRB3*03(14016)	258	265	YES
3808	210	279	275	POSITIVE Strong	B*38:01(7013)	389	230	POSITIVE	DRB1*12:02(2985) DRB3*03:01(4464) DQA1*06:01(6505) DQB1*03:01(6888)	210	277	YES
3966	210	20	257	POSITIVE		50	260	POSITIVE		185	298	NO
5130	210	61	637	POSITIVE	B*38:01 (17120)	77	728	POSITIVE	DRB3*03:01 (16502), DQB1*04:01 (7606), DQA1*03:03 (14793), DQA1*06:01 (13040)))	242	586	YES
5214	210	700	26125	POSITIVE	B38(38000).	1500	66238	POSITIVE	DR12(32773), DR52(38068), DQ4(12390), DQ7(46865).	1027	1214	YES
8001	210	50	316	POSITIVE	B38 (14945), Bw4 (26382-5913)	100	339	POSITIVE	DR12 (10074), DR52 (14474), DQ7 (22592), DQ4 (5132)	199	262	YES
8050	210	50	232	POSITIVE	B38(15551) Bw4	120	242	POSITIVE	DR12(16875) DR52(DRB3*03:01,19474) DQ4(5563) DQ7(24502)	80	188	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #206 vs. Serum #210, cont.

Ctr	Serum no	T-Cell Pos cutoff	T-Cell MCS	T-Cell RESULT	Class I DSA()		B-Cell Pos cutoff	B-cell MCS	B-Cell RESULT	Class II DSA()		T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	210	80	336	POSITIVE	B*38:01(14123)		107	322	POSITIVE	DRB1*12:02(9299), DR52(03:01)12082, DQB1*03:01(7) (16395)				YES
8111	210	76	2179	POSITIVE	B38(15000)		114	6893	POSITIVE	DR12(9500),DQA1*03(10000), DQA1*06(16600),DQ4(3100), DQ7(14200),DRB3*03:01(10500)		324	303	YES

Antibody Identification - Single Antigen

Table 12. Summary of Single Antigen results for Serum #207

*** Serum 207 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B13	17	100%	17983	19091	7218	7093	40800
A68	17	100%	8510	9689	3676	4761	21300
A25	17	100%	7800	8947	3870	3986	21000
A69	17	100%	6833	8258	3611	2900	19500
B57	17	100%	6500	7854	3780	2870	19100
B63	17	100%	6500	7883	3507	3285	18000
A32	17	100%	6318	7733	4145	2788	20200
B49	17	100%	6310	7263	3669	3022	18600
B59	17	100%	6200	7225	3506	2783	18000
B51	17	100%	5800	6629	2971	2631	15300
B53	17	100%	5700	6473	3145	2276	16000
A24	17	100%	5400	6234	2948	2497	15000
B77	17	100%	5300	6079	2462	2958	13000
A2	17	100%	5278	6057	2722	1874	13600
B58	17	100%	4982	5962	2876	2062	14400
B52	17	100%	4968	5442	2747	2322	14000
B44	17	100%	4867	5278	2459	2528	12800
A23	17	100%	4821	5801	2858	2317	14600
A34	17	100%	4312	4154	1164	2002	7100
A26	17	100%	3883	4559	1501	2555	8800
B37	17	100%	3828	4044	1800	1863	9300
B38	16	94%	5618	6099	2853	2421	14000
B47	16	94%	3130	3168	1090	1484	5300
A33	15	88%	3858	4454	2028	1616	9800
B76	14	82%	2649	3060	1385	1283	6000
B62	13	76%	2804	3015	1274	1194	5800
B75	13	76%	2400	2570	844	1217	4500
Bw4	12	70%	11281	10846	5391	4151	19350
A66	12	70%	4217	4758	1961	2625	10300
B27	12	70%	3622	3983	1898	1627	8300
B2705	10	58%	3444	4140	1935	1380	8300
Cw18	10	58%	2506	2980	1356	1587	5337
Cw6	8	47%	1775	2244	1090	1220	4149
B46	7	41%	1786	1746	722	502	2849
A6601	6	35%	4116	5018	2694	2523	10300

*** Serum 207 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ2	17	100%	21483	22331	7474	9129	40200
DR7	17	100%	17323	19810	7757	7626	41200
DR9	17	100%	8022	7905	3594	2931	18341
DR12	17	100%	7355	8549	4080	2248	17764
DR53	17	100%	4473	5218	2348	1154	10600
DQA1*02	13	76%	9600	11298	4325	4870	20000
DR52	13	76%	8553	10278	5135	2439	21350
DPw6	3	17%	2474	3053	1593	1457	5229
DQ9	1	5%	6973	6973	-	6973	6973
DQ8	1	5%	6129	6129	-	6129	6129
DQ7	1	5%	5933	5933	-	5933	5933
DQ4	1	5%	5781	5781	-	5781	5781
DP15	1	5%	3841	3841	-	3841	3841
DPw3	1	5%	3647	3647	-	3647	3647
DP20	1	5%	3304	3304	-	3304	3304
DPA1*03	1	5%	1987	1987	-	1987	1987
DP17	1	5%	1149	1149	-	1149	1149
DP9	1	5%	1003	1003	-	1003	1003

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

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Table 13. Summary of Single Antigen results for Serum #208

*** Serum 208 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B67	17	100%	20909	22883	9414	9351	50200
B7	17	100%	20581	22977	8282	12391	47300
B42	17	100%	19775	21401	9019	8150	47000
B55	17	100%	19185	20561	9754	1185	45500
B73	17	100%	18063	19590	8867	5688	44000
B81	17	100%	18024	19409	8028	8284	42400
B56	17	100%	18023	20587	8764	7934	44400
B54	17	100%	16196	17439	7447	6899	37700
A2	17	100%	15213	16491	6021	10268	34000
B82	17	100%	14275	16191	7146	7850	37000
A1	17	100%	12586	14582	6757	4907	33300
B8	17	100%	11806	13740	6028	4774	27800
A3	17	100%	9784	11512	5130	4848	24900
A69	17	100%	9740	11004	4312	5796	23200
B57	17	100%	9409	10271	5019	3436	23900
B59	17	100%	8327	9305	4532	3699	21300
A23	17	100%	7596	8847	4582	3502	22400
B58	17	100%	6998	7669	3982	2519	17500
B63	17	100%	6489	7140	3679	2555	16800
A24	17	100%	6323	6693	3058	3317	14200
A36	17	100%	6247	7607	4014	2649	18200
B44	17	100%	6100	6634	3436	2905	15900
A32	17	100%	6097	7170	3964	2075	18200
B76	17	100%	5820	6911	3482	2763	14200
B49	17	100%	5744	6785	4144	2501	19000
B53	17	100%	5563	6276	3470	1878	15500
B37	17	100%	5100	5422	2794	1904	12600
B38	17	100%	5000	5918	3277	1902	14000
B51	17	100%	4900	5303	2698	1779	12000
A25	17	100%	3625	4113	2001	1383	9300
B27	16	94%	16672	18563	7818	8143	40217
B2705	4	23%	14689	18695	12233	6776	38627
Cw2	15	88%	4934	5543	3315	1552	14600
A11	14	82%	3057	3511	1784	976	7000
Cw18	16	94%	7440	8631	4751	1416	20200

*** Serum 208 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
Cw15	15	88%	5098	6587	3713	1670	15500
Cw6	15	88%	4427	5105	3062	1007	12300
Cw4	15	88%	3639	4625	2511	947	9980
A80	15	88%	2578	3213	1579	1106	5861
B77	14	82%	3292	3618	1788	1638	7400
B47	14	82%	2606	3345	1597	1500	6510
B52	13	76%	3768	4179	2359	1486	10200
Cw5	12	70%	3288	3748	2227	885	8900
A43	12	70%	2650	2960	1451	789	5380

*** Serum 208 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR1	17	100%	7558	8530	3748	1402	17000
DR10	17	100%	7187	8154	4178	1112	18100
DR103	17	100%	6898	8413	4036	1252	17800
DR51	17	100%	3727	4093	1586	1162	7303
DR7	17	100%	4100	5485	2767	1888	11700
DR9	17	100%	3144	3836	1684	1002	7000
DQ2	12	70%	2140	2278	719	1443	3700
DP14	10	58%	1690	1776	588	1018	2770
DP17	10	58%	2331	2543	985	1496	4300
DP20	10	58%	1955	2159	753	1252	3300
DP9	10	58%	2907	3104	1178	1893	5200
DPw3	10	58%	1738	1895	633	1129	2900
DPw6	10	58%	1987	2173	700	1356	3300
DR12	9	52%	1493	1857	759	939	3250
DR52	7	41%	2585	2249	924	1150	3700
DPw1	1	5%	1000	1000	-	1000	1000

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 14. Summary of Single Antigen results for Serum #209

*** Serum 209 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B45	17	100%	25940	27741	8464	16797	52000
B44	17	100%	24400	26848	8158	19048	52000
B76	17	100%	23201	25859	7893	17974	50000
B49	17	100%	9000	10317	4914	4316	24700
B50	17	100%	8860	9899	3942	4260	19000
A68	17	100%	7900	8317	3943	2912	18850
B72	17	100%	6827	7819	3624	2275	17000
A34	17	100%	6779	7568	3563	2427	16000
B41	17	100%	6642	7209	3252	2662	15600
A33	17	100%	6334	6361	2857	2104	13300
B61	17	100%	6185	6665	2778	2198	13000
B62	17	100%	5863	6769	3273	2415	15600
B60	17	100%	5803	6105	2666	2305	12700
B82	16	94%	15424	17341	6327	10780	33000
A69	16	94%	5790	6118	3062	1396	14000
B13	16	94%	4441	4717	2059	1142	9050
B47	16	94%	4151	4650	1800	2074	8200
A25	15	88%	4177	4453	2017	1374	9400
A26	15	88%	3878	4328	1911	1358	8800
A66	14	82%	5485	6077	2669	2638	13050
A31	10	58%	1791	2151	756	1215	3700
B35	9	52%	1500	1701	486	1007	2470
B71	8	47%	1707	1642	631	688	2858
B53	8	47%	1586	1662	411	1173	2500
A29	8	47%	1525	1671	420	1248	2570
A30	8	47%	1292	1445	369	1046	2100
B52	7	41%	1715	1663	706	569	2743
B51	5	29%	1007	1182	303	823	1607
A6601	4	23%	5986	6863	4724	1782	13700
A6602	4	23%	5936	6548	4212	1920	12400
B4005	3	17%	7564	7199	1972	4622	9411
B18	3	17%	726	878	256	671	1239

*** Serum 209 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ6	17	100%	19609	22065	8202	7317	44500
DQ9	17	100%	15913	17983	7230	5798	37600
DQ8	17	100%	14723	16750	6526	4579	33000
DR13	17	100%	13287	15045	6766	5116	33800
DR16	17	100%	12387	13964	6241	4486	31000
DR11	17	100%	11774	13520	5920	5131	29000
DR12	17	100%	11370	12400	5613	3914	27000
DR51	17	100%	11003	10808	3881	3468	19300
DR103	17	100%	10190	11381	4996	4199	24000
DR8	17	100%	7358	8377	3660	3130	17000
DR15	17	100%	5269	6212	3149	1747	13000
DR7	17	100%	3362	4273	2179	1371	8800
DPw1	15	88%	3832	4552	2284	1079	10000
DPw3	15	88%	3003	3727	1789	1041	7800
DP11	15	88%	2960	3363	1651	978	7000
DP9	15	88%	2812	3549	1773	956	7800
DPw5	15	88%	2798	3405	1615	1149	6900
DPw6	15	88%	2768	3568	1839	840	6958
DP14	15	88%	2640	3411	1563	1169	7100
DP13	15	88%	2455	2967	1317	1059	5700
DR4	14	82%	9052	11534	5379	4686	23700
DP19	14	82%	2375	2955	1343	1165	5600
DQ7	13	76%	2972	3299	1271	1679	6500
DP10	13	76%	2606	3209	1480	1700	6700
DP20	13	76%	2552	3296	1550	1800	7000
DQ4	12	70%	2028	2080	737	1000	3410
DP17	11	64%	2262	2859	1192	1500	5300
DR1403	4	23%	6674	6538	2483	3067	9740

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 15. Summary of Single Antigen results for Serum #210

*** Serum 210 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A2	17	100%	27564	28350	12407	9523	63000
B57	17	100%	23658	24101	9868	10680	59000
A68	17	100%	22673	25089	9360	15245	56000
A69	17	100%	21716	24258	9403	13503	56000
B58	17	100%	21430	23078	8960	13082	51700
A32	17	100%	18320	20178	9034	8197	49000
A23	17	100%	17764	18309	8009	8145	45000
A24	17	100%	17075	18049	7279	8673	42000
B49	17	100%	16345	17085	7956	7535	44000
B63	17	100%	16256	17187	7290	7705	40900
B59	17	100%	15145	16260	6806	7020	38000
B38	17	100%	14945	15662	6973	7013	38000
A25	17	100%	14913	16995	7675	7042	42000
B53	17	100%	14432	15699	7003	6028	38000
B51	17	100%	14000	14760	6262	6360	35000
B77	17	100%	12100	12946	5492	6849	30000
B37	17	100%	12000	13319	6118	5485	33000
B52	17	100%	11949	12188	5485	5680	31000
B44	17	100%	10338	10681	4893	4729	27300
B13	17	100%	10008	10217	4184	2770	23000
B47	17	100%	6461	7825	3180	4371	16000
Bw4	11	64%	20950	19972	8189	5000	36100
B27	11	64%	11248	12034	3033	6722	16141
B2705	10	58%	12397	14654	7673	5386	35000
A2403	4	23%	17083	22194	13526	9612	45000
A203	2	11%	41369	41369	22631	18738	64000
B62	2	11%	11506	11506	6012	5494	17518

*** Serum 210 ***							
17 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR7	17	100%	23902	25928	10468	10802	55500
DQ9	17	100%	20043	21761	8708	8674	49000
DQ8	17	100%	19361	21059	7935	8533	46000
DQ7	17	100%	19293	21601	9084	6888	46865
DR9	17	100%	13768	14495	5026	6770	27500
DR12	17	100%	13157	14782	6253	5013	32773
DQ6	17	100%	5237	5968	3237	1517	16000
DQ4	16	94%	4879	5448	2518	979	12390
DQ2	15	88%	4413	5456	3124	2829	16000
DR52	13	76%	14474	17102	7834	5536	38068
DQA1*02	3	17%	20183	16419	5564	8553	20523
DQA1*05	2	11%	26279	26278	4422	21857	30700
DQA1*03	2	11%	14224	14224	6121	8103	20345
DQA1*06	2	11%	13702	13702	7197	6505	20899
DQA1*04	2	11%	4803	4803	2007	2796	6810
DR53	1	5%	707	707	-	707	707

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 16a. Individual laboratory results for Serum #207 - class I by One Lambda Single Antigen, cont.

**** Serum 207 ****															
Ctr	B62	B75	A66	A6601	B27	B2705	Bw4	Cw18	Cw6	B46	Cw15	B82	Cw17	Other	Manufactuer
230			6989		4999		12466								One Lambda
615	2201	2551	4183		3346	3346		1587	1253	1237	838	750	675	B8,Cw5,B60,A*33:03	One Lambda
753	3460	3050		6430		5110	10200	4245							One Lambda
792			3911		2120										One Lambda
793	3677	3159	4251		6334	6354	7000	2005	1249	1786	1697		1069	C*15:02,A*33:03,B*27:04, B*27:06,A*66:01,C*16:02	One Lambda
1426	3076	2602	4258		4317			3006	2150	2076			1631	A*33:03, A*66:01, B*27:05	One Lambda
2400		2075	3739		2375		4151								One Lambda
3224	2170	2256	3679			2417	19350	1753			1144			A*33:03	One Lambda
3632	2804			3908	3452		14685								One Lambda
3753	1467	1623		2523	1948		4761							B*27:05,A*33:03	One Lambda
5130	4216	2193				4803		3763	3137	2377	1850	1667		A*33:03, A*66:01	One Lambda
5214	5800	4500	10300	10300	8300	8300	17200	4700	3400					A203,A2403, A*33:03,A*34:01,A34*:02	One Lambda
8001	1959	2029	4503			3158	17983	1612	1220					A*33:03,B*27:05	One Lambda
8050	4677	3763		4324	5187		5000	5337	4149	2849	2203	1804	2731	B8,Cw2,Cw5,B60,A*33:03 >	One Lambda
8111	2500	2400	3400			3000	5000	1800	1400	1400		1000			One Lambda
Avg	3167	2683	4921	5497	4238	4561	10709	2981	2245	1954	1546	1305	1527		
Std															
Dev.S	1262	813	2137	3028	2027	2001	5884	1429	1165	607	550	510	894		
MFI															
%CV	40%	30%	43%	55%	48%	44%	55%	48%	52%	31%	36%	39%	59%		

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 16b. Individual laboratory results for Serum #207 - class I by Werfen Single Antigen, cont.

**** Serum 207 ****															
Ctr	B62	B75	A66	A6601	B27	B2705	Bw4	Cw18	Cw6	B46	Cw15	B82	Cw17	Other	Manufactuer
3808	1194	1217	2625	2625	1627		1380			502				A203,A2403	Werfen
8083			5259		3792	12361	3541							A2403	Werfen
Avg	-	-	3942	-	2710	-	2461	-	-	-	-	-	-		
Std															
Dev.S	-	-	1863	-	1531	-	1528	-	-	-	-	-	-		
MFI															
%CV	-	-	47%	-	57%	-	62%	-	-	-	-	-	-		

Table 17a. Individual laboratory results for Serum #208 - class I by One Lambda Single Antigen

	**** Serum 208 ****																							
Ctr	A1	A2	A23	A24	A25	A3	A32	A36	A69	B37	B38	B42	B44	B49	B51	B53	B54	B55	B56	B57	B58	B59	B63	B67
230	13848	13973	9633	8063	4820	13124	8850	6731	10712	5416	7831	18041	6114	5738	5383	7060	16689	18394	17994	10093	8384	9582	7385	20294
615	13608	15213	8591	6728	4083	10124	6097	7333	10410	5530	5000	20393	6727	6397	4900	5563	16196	19185	18796	9409	7068	8327	6489	21000
753	24980	26200	15270	12750	7660	19700	13570	12740	17830	8530	11600	36560	11000	11000	10050	12070	31500	37450	37040	17500	14790	17190	13780	38880
792	11752	15288	6230	5999	2829	9784	4303	5656	9486	3611	3554	19775	4230	3590	3236	4039	16559	20224	20231	7866	5425	7162	5052	20909
793	17485	16532	11347	9591	5923	15488	9490	10208	13710	6939	8449	22493	8445	7815	7198	8810	19793	22163	21705	12142	10256	12294	8827	23947
1426	10934	11746	7004	3445	3625	7823	6405	5407	7747	6247	5801	18101	6463	7284	5101	6104	13054	17479	17483	10062	6998	8428	7324	20152
2400	11126	12495	5571	4025	2417	8424	3648	5624	8961	3309	2945	18423	3798	3927	3050	3186	13461	17174	16361	6057	4026	5499	3875	19525
3224	10131	10725	4806	3926	2266	7581	4628	4110	5796	1904	3405	16222	3499	3400	3158	3616	13043	16337	16584	6938	4804	5803	4203	17515
3632	9466	14372	4965	6088	3065	8158	3982	4479	9635	2766	2915	16856	3531	2796	2777	3304	14659	17578	17803	6813	4579	6100	4295	18693
3753	9398	10279	4538	3317	2176	6819	4306	3677	5828	2513	3254	14917	3246	3383	2914	3514	11786	15523	15010	6200	4651	5510	4040	16543
5130	17330	17759	11029	6716	4562	13468	8580	9968	12463	6495	6147	21192	7643	8107	6129	6431	17027	20505	19008	11146	7854	9415	7257	21923
5214	33300	34000	22400	14200	9300	24900	18200	18200	23200	12600	14000	47000	15900	19000	12000	15500	37700	45500	44400	23900	17500	21300	16800	50200
8001	12586	14360	6609	4104	2810	9211	5476	6247	9235	4746	4118	20032	5270	5744	3914	4796	14745	19506	18023	8486	5735	6397	4996	21962
8050	22816	23268	12618	7479	5240	17199	10629	13772	13694	9899	9744	31682	12082	13228	8654	10090	24627	30223	29343	17905	13224	14911	11543	31968
8111	15000	17000	8700	7500	4600	12000	7000	7700	12500	5100	5800	22000	6100	5500	5100	6500	19000	22900	22800	10100	7700	9500	7500	24000
Avg	15584	16881	9287	6929	4358	12254	7678	8123	11414	5707	6304	22912	6937	7127	5571	6706	18656	22676	22172	10974	8200	9828	7558	24501
Std Dev.S	6756	6409	4810	3252	2049	5175	4062	4120	4537	2932	3392	8800	3633	4400	2803	3569	7319	8546	8385	5073	4062	4695	3814	9138
MFI %CV	43%	38%	52%	47%	47%	42%	53%	51%	40%	51%	54%	38%	52%	62%	50%	53%	39%	38%	38%	46%	50%	48%	50%	37%

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 17b. Individual laboratory results for Serum #208 - class I by Werfen Single Antigen

	**** Serum 208 ****																							
Ctr	A1	A2	A23	A24	A25	A3	A32	A36	A69	B37	B38	B42	B44	B49	B51	B53	B54	B55	B56	B57	B58	B59	B63	B67
3808	4907	10268	3502	3532	1383	4848	2075	2649	6125	2275	1902	8150	2905	2501	1779	1878	6899	8220	7934	3436	2519	3699	2555	9351
8083	9241	16882	7596	6323	3162	7053	4657	4826	9740	4308	4153	11989	5833	5937	4811	4234	9728	1185	9467	6570	4865	7084	5463	12152
Avg	7074	13575	5549	4928	2273	5951	3366	3738	7933	3292	3028	10070	4369	4219	3295	3056	8314	4703	8701	5003	3692	5392	4009	10752
Std																								
Dev.S	3065	4677	2895	1974	1258	1559	1826	1539	2556	1438	1592	2715	2070	2430	2144	1666	2000	4974	1084	2216	1659	2394	2056	1981
MFI																								
%CV	43%	34%	52%	40%	55%	26%	54%	41%	32%	44%	53%	27%	47%	58%	65%	55%	24%	106%	12%	44%	45%	44%	51%	18%

Table 17a. Individual laboratory results for Serum #208 - class I by One Lambda Single Antigen, cont.

	**** Serum 208 ****																								
Ctr	B7	B73	B76	B8	B81	B82	B27	B2705	B2708	Cw18	A80	Cw15	Cw2	Cw4	Cw6	A11	B47	B77	B52	A43	Cw5	B13	Cw17	B45	Bw4
230	18636	18118	6854	15585	16448	13126	15900			7825						4479									6500
615	20581	18063	6116	11858	18033	15844	17775			7165	3001	5098	5373	3639	4427	3170	2530	3130	3768	2300	3114	1929	2932	1627	
753	38970	33940	12290	25860	33430	27360	30500			16750	5700	13250	8800	9980	9450	7000	6510	6530	6060	5380	4820	4050	5280	3740	12075
792	20908	18117	5287	11118	18024	14163	17126			5813	2578	4566	3473	3982	3293	2944	2312	2149							
793	22018	20829	9622	16781	20857	16665	20361			8280	4924	6837	6380	5317	7146	5036	5492	5081	4475	4064	4005	3467	3584	2839	5000
1426	20167	16813	5820	11806	16386	14930	16217			7677	2451	5323	4934	3449	4533	1996	2572	3386	4246	2070	3461	1973	3626	1757	
2400	18757	16666	4621	9158	16315	13445	14893			4828	2298	3295	2949	2254	2624										
3224	18006	14608	3246	9746	13974	10413	13469			5835	1106	4779	2814	3174	2186	2090	1829	1641	1659	1502	1327	1247		878	11114
3632	19757	15462	4088	9711	14718	12345	14810			4418	2070	3542	2486	2492	2516	2396									
3753	17929	13029	3766	9589	13133	9598	11436			6364	1810	4701	3169	3548	3070	1711	1861	1638	1689	1750	2001	1297	2001		6910
5130	20602	21068	8693	15732	18618	16191		18373	19782	11052	4302	7640	6896	4511	6346		2639	3198	4286	3342	4152	2577	3817	2599	
5214	47300	44000	14200	27800	42400	37000	40217	38627	41806	20200	5500	15500	14600	9700	12300	6300	5700	7400	10200	4900	8900	4900	9900	3200	15300
8001	21461	17860	4722	9911	18081	14275	17488			7202	2273	5020	5021	3420	3861	2011	2007	2133	2846	1697	2812	1648	3306	1073	16213
8050	30999	29471	13589	21132	28025	25436	28005			15275	5861	11091	9909	7362	9123	5351	5058	5553	7150	4732	7108	3922	5394	3819	
8111	23400	21000	7300	14000	20500	16500	18800			8000	3200	6500	4800	5600	4700	3700	3600	3600	3000	3000	2400	2000	3000	2200	6000
Avg	23966	21270	7348	14652	20596	17153	19786	28500	30794	9112	3362	6939	5829	4888	5398	3706	3509	3787	4489	3158	4009	2637	4284	2373	9889
Std Dev.S	8541	8339	3588	5992	8045	7308	7862	14322	15573	4673	1586	3730	3371	2482	3071	1771	1705	1930	2521	1418	2248	1246	2225	1044	4391
MFI																									
%CV	36%	39%	49%	41%	39%	43%	40%	50%	51%	51%	47%	54%	58%	51%	57%	48%	49%	51%	56%	45%	56%	47%	52%	44%	44%

Table 17b. Individual laboratory results for Serum #208 - class I by Werfen Single Antigen, cont.

	**** Serum 208 ****																								
Ctr	B7	B73	B76	B8	B81	B82	B27	B2705	B2708	Cw18	A80	Cw15	Cw2	Cw4	Cw6	A11	B47	B77	B52	A43	Cw5	B13	Cw17	B45	Bw4
3808	12391	5688	2763	4774	8284	7850	8143	6776	8189	1416	1121	1670	1552	947	1007	976	1500	1776	1486	789	885		1190		
8083	18738	8305	4512	9027	12743	10111	11873	11004	12105								3228	3438	3464						
Avg	15565	6997	3638	6901	10514	8981	10008	8890	10147	-	-	-	-	-	-	-	2364	2607	2475	-	-	-	-	-	-
Std Dev.S	4488	1850	1237	3007	3153	1599	2638	2990	2769	-	-	-	-	-	-	-	1222	1175	1399	-	-	-	-	-	-
MFI																									
%CV	29%	26%	34%	44%	30%	18%	26%	34%	27%	-	-	-	-	-	-	-	52%	45%	57%	-	-	-	-	-	-

Table 17a. Individual laboratory results for Serum #208 - class I by One Lambda Single Antigen, cont.

**** Serum 208 ****						
Ctr	A26	A66	A6601	A68	Other	Manufactuer
230					B62	One Lambda
615	1651	1864	1864	1897	A*68:02	One Lambda
753	2640			2650		One Lambda
792						One Lambda
793	1616		2167	2393	B75,B35,B71,B72,A*66:01,A*68:02, C*16:02,B*48:02,B*15:24	One Lambda
1426					Bw4	One Lambda
2400						One Lambda
3224	551				Cw14	One Lambda
3632	2397	2293				One Lambda
3753						One Lambda
5130					A1101,A1102,A*68:02	One Lambda
5214					A1101,B8101,Bw6,A203 >	One Lambda
8001						One Lambda
8050						One Lambda
8111	3000		2900			One Lambda
Avg	1976	2079	2310	2313		
Std						
Dev.S	887	303	533	383		
MFI						
%CV	45%	15%	23%	17%		

Table 17b. Individual laboratory results for Serum #208 - class I by Werfen Single Antigen, cont.

**** Serum 208 ****						
Ctr	A26	A66	A6601	A68	Other	Manufactuer
3808		981	981	1326	A1101,A1102,B703,B8101 >	Werfen
8083		3666			A2403	Werfen
Avg	-	2324	-	-		
Std						
Dev.S	-	1899	-	-		
MFI						
%CV	-	82%	-	-		

Table 18a. Individual laboratory results for Serum #209 - class I by One Lambda Single Antigen

	**** Serum 209 ****																								
Ctr	A33	A34	A68	B41	B44	B45	B49	B50	B60	B61	B62	B72	B76	A69	B13	B47	B82	A25	A26	A66	A6601	A6602	A31	B35	A29
230	7736	9348	9576	8107	25058	25182	10581	12090	7262	7322	7280	9171	25368	7511	5286	5628	16306	5030	4822	7231					
615	6526	6654	7949	6642	20586	19351	9190	7871	5737	5979	5863	6496	18734	5579	4475	3704	13446	3724	3812	5181			1541	1383	1270
753	11500	12750	13250	11500	40000	45800	15535	17550	9600	11500	10860	14100	39700	9800	7500	8055	24000	7130	7500	10000			2985	2470	2570
792	5810	6040	6571	5530	23484	26043	7551	7957	4831	6128	4774	6158	22668	4314	4128	3858	13543	3165	3247	4411					
793	6459	7988	8001	6464	20882	23860	8739	10032	5940	6163	6427	7409	20842	6082	4407	3069	12007	4387	3650	6285			1782	1440	1550
1426	5462	6075	7336	7169	25181	26381	10106	8094	5803	6185	6765	7506	25227	4958	4052	3847	17326	4177	4002	5185			1694	2323	1397
2400	3876	4909	5758	5035	22262	22751	7603	6370	4284	4359	4734	4890	20633	4211	2735	2764	13510	2626	2819	3982					
3224	6334	6779	6915	5875	23040	25940	8221	9272	4962	6324	5345	6827	22062	4562	4370	4201	12694	3407	3163	4695			1215	1186	
3632	3089	3532	3623	3233	20224	23294	4316	4935	2305	3489	3108	4134	20227	2423	2468		10850			2638					
3753	3233	4235	4242	3859	22302	25804	5882	6552	3075	3754	4043	4846	22160	2963	2178	2609	10780	1930	1937	3021					
5130	6229	11779	12507	10454	24910	23778	14307	12307	8782	9189	10007	10637	23201	9632	7547	6258		6449	6191		8741	8632	2769	2088	2018
5214	13300	16000	18850	15600	52000	52000	24700	19000	12700	13000	15600	17000	50000	14000	9050	8200	33000	9400	8800	13050	13700	12400	3700		
8001	7725	7893	9343	7322	28369	28563	10247	8860	5992	6280	5816	6523	25691	6639	4697	4309	16147	3729	3878	5785			1521	1007	1248
8050	8812	11230	12083	11234	31983	31946	16751	14154	9323	9944	11150	11621	30393	7819	6639	6732	21548	5873	5046	7623			2503	1913	1818
8111	6500	7500	7900	7000	24400	27000	9000	10200	6100	7000	6500	8000	24500	6000	4800	5000	14700	4400	4700	6000			1800	1500	1500
Avg	6839	8181	8927	7668	26979	28513	10849	10350	6446	7108	7218	8355	26094	6433	4955	4874	16418	4673	4541	6078	11221	10516	2151	1701	1671
Std Dev.S	2787	3458	3925	3279	8602	8818	5126	4036	2712	2721	3322	3607	8353	3003	1968	1844	6104	1979	1868	2769	3507	2664	797	516	449
MFI %CV	41%	42%	44%	43%	32%	31%	47%	39%	42%	38%	46%	43%	32%	47%	40%	38%	37%	42%	41%	46%	31%	25%	37%	30%	27%

Table 18b. Individual laboratory results for Serum #209 - class I by Werfen Single Antigen

	**** Serum 209 ****																								
Ctr	A33	A34	A68	B41	B44	B45	B49	B50	B60	B61	B62	B72	B76	A69	B13	B47	B82	A25	A26	A66	A6601	A6602	A31	B35	A29
3808	2104	2427	2912	2662	19048	16797	4513	4260	2307	2198	2415	2275	17974	1396	1142	2074	18291	1374	1358		1782	1920			
8083	3446	3521	4587	4867	32698	27109	8151	8789	4787	4493	4395	5342	30228			4101	29312				3231	3240			
Avg	2775	2974	3750	3765	25873	21953	6332	6525	3547	3346	3405	3809	24101	-	-	3088	23802	-	-	-	2507	2580	-	-	-
Std Dev.S	949	774	1184	1559	9652	7292	2572	3202	1754	1623	1400	2169	8665	-	-	1433	7793	-	-	-	1025	933	-	-	-
MFI																									
%CV	34%	26%	32%	41%	37%	33%	41%	49%	49%	49%	41%	57%	36%	-	-	46%	33%	-	-	-	41%	36%	-	-	-

Table 18a. Individual laboratory results for Serum #209 - class I by One Lambda Single Antigen, cont.

**** Serum 209 ****							
Ctr	A30	B53	B71	B52	B51	Other	Manufactuer
230						B4005,B48	One Lambda
615	1171	1252	1708	1715	1007	B75,B56,A74,A3, B*15:02, B*51:02>	One Lambda
753	2100	2500					One Lambda
792							One Lambda
793	1197	1404	1705	989		B4005,B7,B*48:02,B*07:14	One Lambda
1426	1383	2017	2858	2743	1607	B75,B18	One Lambda
2400							One Lambda
3224		1173	688	569	823	B18	One Lambda
3632						B4005,B7,B48	One Lambda
3753							One Lambda
5130	1990	1783	1821	2042		B8201,B*51:02	One Lambda
5214							One Lambda
8001	1046						One Lambda
8050	1475	1471	1938	2287	1476	B56,A11,B27	One Lambda
8111	1200	1700	1600	1300	1000		One Lambda
Avg	1445	1663	1760	1664	1183		
Std Dev.S	394	440	635	762	339		
MFI							
%CV	27%	26%	36%	46%	29%		

Table 18b. Individual laboratory results for Serum #209 - class I by Werfen Single Antigen, cont.

**** Serum 209 ****							
Ctr	A30	B53	B71	B52	B51	Other	Manufactuer
3808			823				Werfen
8083							Werfen
Avg	-	-	-	-	-		
Std Dev.S	-	-	-	-	-		
MFI							
%CV	-	-	-	-	-		

Table 19a. Individual laboratory results for Serum #210 - class I by One Lambda Single Antigen

	**** Serum 210 ****																				
Ctr	A2	A23	A24	A25	A32	A68	A69	B13	B37	B38	B44	B47	B49	B51	B52	B53	B57	B58	B59	B63	B77
230	12586	20402	19649	17512	16635	19177	18749	12324	15498	17994	11183	10857	18676	17234	13366	19193	14528	18056	18845	18201	15994
615	24400	13969	14374	13601	16174	20002	19533	9206	11262	11629	9872	5540	14050	11300	9911	11625	20664	17376	12454	13058	9004
753	48000	28400	29000	29200	36000	40000	38500	15000	20150	26300	15000	13480	25350	23400	15860	26040	21500	38670	26070	28500	21200
792	27564	14242	14982	13493	16431	22139	21405	10008	9744	12267	7594	6461	12375	11608	8618	12031	23910	20802	12792	13709	9587
793	24808	18892	18948	18531	21334	23186	22411	11241	13925	15840	10666	9920	16345	15968	12577	17238	23658	22269	17014	17960	14435
1426	13906	19653	18313	18490	20029	22673	22301	10042	17295	15631	13242	8247	19731	14607	13997	15889	17636	21072	17643	17227	12208
2400	27183	13601	12627	11568	14990	23253	23320	6979	10305	9756	7996	4745	13266	10321	8932	10699	23035	21430	11075	12667	8348
3224	27116	14468	15517	13843	18033	21460	20682	9524	8461	12997	7199	5780	11785	11670	8818	12462	24614	20651	13601	14516	9806
3632	27677	9604	11562	10545	13057	19776	19982	7673	6341	8195	6219	4790	8364	8180	5903	8988	21492	17375	8984	9599	6849
3753	29083	14600	14590	14457	19080	22542	21716	7048	9674	13894	6785	6107	13215	12305	9967	13476	24096	21970	14180	15006	10919
5130	9523	17919	17075	14913	14766	15245	16641	12434	14086	17120	12026	6461	17010	16028	14942	16677	10680	13856	16448	16554	13345
5214	63000	45000	42000	42000	49000	56000	56000	23000	33000	38000	27300	16000	44000	35000	31000	38000	59000	51700	38000	40900	30000
8001	30609	17808	17518	15664	19108	26118	26443	10822	12389	14945	10338	5913	17351	13730	11949	14432	26382	22758	15145	16207	11595
8050	29427	19786	17546	16977	21386	27680	24612	8959	15007	15551	10479	6093	19705	14239	13336	14739	28606	25383	17330	17422	12224
8111	30000	17000	17500	16500	20500	25000	25000	10300	12000	15000	9200	8000	14000	14000	10300	15000	26000	24000	15300	16700	12100
Avg	28325	19023	18747	17820	21102	25617	25153	10971	13942	16341	11007	7893	17682	15306	12632	16433	24387	23825	16992	17882	13174
Std																					
Dev.S	13202	8363	7579	7957	9364	10031	9886	3952	6363	7282	5133	3316	8362	6500	5770	7222	10645	9469	7026	7585	5810
MFI																					
%CV	47%	44%	40%	45%	44%	39%	39%	36%	46%	45%	47%	42%	47%	42%	46%	44%	44%	40%	41%	42%	44%

Table 19b. Individual laboratory results for Serum #210 - class I by Werfen Single Antigen

	**** Serum 210 ****																				
Ctr	A2	A23	A24	A25	A32	A68	A69	B13	B37	B38	B44	B47	B49	B51	B52	B53	B57	B58	B59	B63	B77
3808	19129	8145	8673	7042	8197	16366	13503	2770	5485	7013	4729	4371	7535	6360	5680	6028	16543	13082	7020	7705	7143
8083	37939	17764	16975	14587	18320	25903	21590	6360	11804	14123	11757	10262	17694	14981	12048	14367	27387	21892	14529	16256	15329
Avg	28534	12955	12824	10815	13259	21135	17547	4565	8645	10568	8243	7317	12615	10671	8864	10198	21965	17487	10775	11981	11236
Std																					
Dev.S	13301	6802	5870	5335	7158	6744	5718	2539	4468	5028	4970	4166	7183	6096	4503	5897	7668	6230	5310	6046	5788
MFI																					
%CV	47%	53%	46%	49%	54%	32%	33%	56%	52%	48%	60%	57%	57%	57%	51%	58%	35%	36%	49%	50%	52%

Table 19a. Individual laboratory results for Serum #210 - class I by One Lambda Single Antigen, cont.

	**** Serum 210 ****				
Ctr	B27	B2705	Bw4	Other	Manufactuer
230	15238			B62	One Lambda
615	11248	11248			One Lambda
753		20260	20950		One Lambda
792	9697				One Lambda
793	16141	14435	15000	B*27:04,B*27:05,B*27:06,B*15:24	One Lambda
1426	15876			Bw4,B*27:05	One Lambda
2400	9330		11771		One Lambda
3224		9470	24614		One Lambda
3632	10359		21492	B62	One Lambda
3753	9647		15006	Bw4	One Lambda
5130		14152		A2403	One Lambda
5214		35000	36100	A203,A2403	One Lambda
8001		12782	26382	B*27:05	One Lambda
8050	14744		5000		One Lambda
8111		11800	16000		One Lambda
Avg	12476	16143	19232		
Std					
Dev.S	2945	8264	8674		
MFI					
%CV	24%	51%	45%		

Table 19b. Individual laboratory results for Serum #210 - class I by Werfen Single Antigen, cont.

	**** Serum 210 ****				
Ctr	B27	B2705	Bw4	Other	Manufactuer
3808	6722	5386		A203,A2403	Werfen
8083	13381	12012	27387	A2403	Werfen
Avg	10052	8699	-		
Std					
Dev.S	4709	4685	-		
MFI					
%CV	47%	54%	-		

Table 20a. Individual laboratory results for Serum #207 - class II by One Lambda Single Antigen

**** Serum 207 ****								
Ctr	DQ2	DR12	DR53	DR7	DR9	DQA1*02	DR52	Other
230	22024	10638	7203	24587	8755	12088	12461	One Lambda
615	22002	7355	4459	15780	8167	15116	8170	DRB3*01:01,DRB3*03:01
753	28380	12500	7700	30500	10000	13370	14700	One Lambda
792	23890	6318	3938	15085	6858		6364	DQ4,DQ7,DQ8,DQ9 >
793	16790	8291	4618	17323	6306	7000	9025	DRB3*01,DRB3*03
1426	17295	7331	3721	15253	5168	8229	8553	DPw6
2400	17509	4708	4100	14421	4418	8722	5467	One Lambda
3224	24549	7829	4473	17825	8565	16547		DRB3*01:01,DRB3*03:01
3632	21483	4842	2949	12254	5400			One Lambda
3753	15990	4106	3466	14913	4106	4870	6180	DRB3*01,DRB3*03
5130	17523	9347	4912	20180	11203			DQA1*02:01,DQA1*05:01,DRB3*03:01, DRB3*01:01
5214	40200	17000	10600	41200	11750	20000	21350	DRB3*01,DRB3*03
8001	38485	17764	9452	28924	18341	15400	18034	DPw3,DPw6,DP20,DP9,DRB3*01:01,DRB3*03:01, DQA1*02:01,DPB1*03:01,DPB1*06:01,DPB1*09:01, DPB1*15:01, DPB1*17:01,DPB1*20:01,DPA1*03:01>
8050	23233	10867	7165	22104	8022		12664	DRB3*03:01,DRB3*01:01
8111	20000	7000	4700	17000	5000	9600		DRB3*03:01,DRB3*01:01
Avg	23290	9060	5564	20490	8137	11904	11179	
Std Dev.S	7369	4119	2302	7854	3702	4629	5178	
MFI %CV	32%	45%	41%	38%	45%	39%	46%	

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 20b. Individual laboratory results for Serum #207 - class II by Werfen Single Antigen

**** Serum 207 ****								
Ctr	DQ2	DR12	DR53	DR7	DR9	DQA1*02	DR52	Other
3808	9129	2248	1154	7626	2931	9129	2439	Werfen
8083	21161	7198	4101	21811	9407	6806	8212	Werfen
Avg	15145	4723	2628	14719	6169	7968	5326	
Std Dev.S	8508	3500	2084	10030	4579	1643	4082	
MFI %CV	56%	74%	79%	68%	74%	21%	77%	

Table 20a. Individual laboratory results for Serum #207 - class II by One Lambda Single Antigen

**** Serum 207 ****								
Ctr	DQ2	DR12	DR53	DR7	DR9	DQA1*02	DR52	Other
230	22024	10638	7203	24587	8755	12088	12461	One Lambda
615	22002	7355	4459	15780	8167	15116	8170	DRB3*01:01,DRB3*03:01
753	28380	12500	7700	30500	10000	13370	14700	One Lambda
792	23890	6318	3938	15085	6858		6364	DQ4,DQ7,DQ8,DQ9 >
793	16790	8291	4618	17323	6306	7000	9025	DRB3*01,DRB3*03
1426	17295	7331	3721	15253	5168	8229	8553	DPw6
2400	17509	4708	4100	14421	4418	8722	5467	One Lambda
3224	24549	7829	4473	17825	8565	16547		DRB3*01:01,DRB3*03:01
3632	21483	4842	2949	12254	5400			One Lambda
3753	15990	4106	3466	14913	4106	4870	6180	DRB3*01,DRB3*03
5130	17523	9347	4912	20180	11203			DQA1*02:01,DQA1*05:01,DRB3*03:01, DRB3*01:01
5214	40200	17000	10600	41200	11750	20000	21350	DRB3*01,DRB3*03
8001	38485	17764	9452	28924	18341	15400	18034	DPw3,DPw6,DP20,DP9,DRB3*01:01,DRB3*03:01, DQA1*02:01,DPB1*03:01,DPB1*06:01,DPB1*09:01, DPB1*15:01, DPB1*17:01,DPB1*20:01,DPA1*03:01>
8050	23233	10867	7165	22104	8022		12664	DRB3*03:01,DRB3*01:01
8111	20000	7000	4700	17000	5000	9600		DRB3*03:01,DRB3*01:01
Avg	23290	9060	5564	20490	8137	11904	11179	
Std Dev.S	7369	4119	2302	7854	3702	4629	5178	
MFI %CV	32%	45%	41%	38%	45%	39%	46%	

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 20b. Individual laboratory results for Serum #207 - class II by Werfen Single Antigen

**** Serum 207 ****								
Ctr	DQ2	DR12	DR53	DR7	DR9	DQA1*02	DR52	Other
3808	9129	2248	1154	7626	2931	9129	2439	Werfen
8083	21161	7198	4101	21811	9407	6806	8212	Werfen
Avg	15145	4723	2628	14719	6169	7968	5326	
Std Dev.S	8508	3500	2084	10030	4579	1643	4082	
MFI %CV	56%	74%	79%	68%	74%	21%	77%	

Table 21a. Individual laboratory results for Serum #208 - class II by One Lambda Single Antigen

	**** Serum 208 ****																
Ctr	DR1	DR103	DR10	DR51	DR7	DR9	DQ2	DP14	DP17	DP20	DP9	DPw3	DPw6	DR12	DR52	Other	Manufactuer
230	13821	14187	14128	7303	9887	6902	3303										One Lambda
615	7108	6462	6452	3595	3913	3013	1755	1327	1664	1508	1893	1475	1657	1139	1150	DRB3*03:01, DRB3*01:01	One Lambda
753	13800	14130	14100	6000	9450	6200	2740	2770	3800	3200	4550	2900	3300	2500	3000		One Lambda
792	7687	7198	7257	3827	4360	2999											One Lambda
793	9802	9947	9769	4577	7136	4748	2279	2326	3124	2865	3688	2411	2744	2396	2585	DRB3*01,DRB3*03	One Lambda
1426	6551	6370	6449	2870	4067	3187	1614	1380	1688	1690	2125	1517	1623	1493	1350		One Lambda
2400	6821	6720	7195	3727	3854	2817											One Lambda
3224	7397	6898	6798	3702	3790	3020	1443	1018	1598	1378	2054	1129	1356	939		DRB3*01:01,DRB3*03:01	One Lambda
3632	6353	5876	5753	3190	3022	2203											One Lambda
3753	1402	1252	1112	2001	2001	2001	2001										One Lambda
5130	9862	10047	8578	6128	6759	5388	2930	2352	3108	2684	3891	2677	2957			DQA1*05:01,DRB3*03:01,DRB3*01:01	One Lambda
5214	17000	17800	18100	6350	11700	7000	3700	2194	4300	3300	5200	2440	2829	3250	3700	DRB3*01,DRB3*03	One Lambda
																DRB3*01:01,DRB3*03:01,DPB1*03:01,DPB1*06:01,DPB1*09:01,DPB1*14:01,DPB1*17:01,DPB1*20:01	
8001	7558	6656	7187	3343	3943	3144	1666	1100	1496	1252	1950	1148	1356	1241	1262	DRB3*03:01,DRB3*01:01	One Lambda
8050	11132	11297	11424	4332	7797	4920	2406	1999	2961	2220	3697	1959	2316	2462	2702	DPw1,DRB3*03:01,DRB3*01:01	One Lambda
8111	6600	6600	6500	2600	4100	3000	1500	1300	1700	1500	2000	1300	1600	1300			One Lambda
Avg	8860	8763	8720	4236	5719	4036	2278	1777	2544	2160	3105	1896	2174	1858	2250		
Std																	
Dev.S	3846	4178	4201	1541	2883	1680	751	620	1038	794	1242	667	737	806	998		
MFI																	
%CV	43%	48%	48%	36%	50%	42%	33%	35%	41%	37%	40%	35%	34%	43%	44%		

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 21b. Individual laboratory results for Serum #208 - class II by Werfen Single Antigen

	**** Serum 208 ****																
Ctr	DR1	DR103	DR10	DR51	DR7	DR9	DQ2	DP14	DP17	DP20	DP9	DPw3	DPw6	DR12	DR52	Other	Manufactuer
3808	3068	2881	1800	1162	1888	1002											Werfen
8083	9064	8705	6024	4876	5587	3679											Werfen
Avg	6066	5793	3912	3019	3738	2341	-	-	-	-	-	-	-	-	-		
Std																	
Dev.S	4240	4118	2987	2626	2616	1893	-	-	-	-	-	-	-	-	-		
MFI																	
%CV	70%	71%	76%	87%	70%	81%	-	-	-	-	-	-	-	-	-		

Table 22a. Individual laboratory results for Serum #209 - class II by One Lambda Single Antigen

	**** Serum 209 ****																					
Ctr	DQ6	DQ8	DQ9	DR103	DR11	DR12	DR13	DR15	DR16	DR51	DR7	DR8	DP11	DP13	DP14	DP9	DPw1	DPw3	DPw5	DPw6	DP19	DR4
230	25588	21226	23131	16761	19175	17755	19907	10281	20055	14512	7060	11816										15336
615	17932	14582	14515	8318	10647	10375	11408	5063	10922	10241	3335	6305	2774	2455	2624	2723	3832	3003	2798	2654	2145	8526
753	37055	28390	30800	20710	25000	22600	27700	12800	25000	16000	8755	15670	6700	5700	6260	6790	9100	7100	6400	6500	5350	21000
792	22376	16146	16642	8749	10931	10598	11835	4697	11630	11003	3006	6284	2370	2320	2522	2624	3712	2943	2544	2500	2021	8631
793	18510	14562	15881	10873	12436	11500	13319	6693	13402	9868	4197	7358	3411	2513	3537	3659	4418	3762	3237	3118	2533	10175
1426	19609	14723	15913	10190	10462	9505	12206	2659	10493	11235	3940	7659	2960	2284	2521	2812	3869	2901	2460	2768	2629	8801
2400	17386	12556	13673	8663	9864	9058	11828	4750	10649	6759	2883	5676	2288	2214	2560	2528	3333	2715	2277	2525		8128
3224	23122	17437	17115	10306	12543	12325	14472	5481	13613	12539	3362	7389	3003	2550	2880	3079	3562	3307	2972	2957	2217	
3632	17230	12013	11643	7014	8310	7216	9040	3354	8560	8593	2143	6410										6270
3753	16549	11701	12844	7941	9419	7067	10973	3968	10357	6171	2440	5331	2001	2001	2173	2074	2706	2153	2001	2001	2001	7612
5130	23004	20839	20545	12014	14937	13582	17011	7556	15811	15006	4027	9704	3870	3587	4092	4534	5459	4712	4512	4565	3687	
5214	44500	33000	37600	24000	29000	27000	33800	13000	31000	19300	8800	17000	7000	5600	7100	7800	10000	7800	6900	6750	5600	23700
8001	23989	18081	17751	9008	11774	11370	13287	5269	12387	11653	2930	6414	2572	2338	2640	2691	3639	2905	2623	2620	2005	9302
8050	26548	20657	22824	15190	17030	16418	19253	7962	17077	11280	6063	11969	5141	4077	5064	5123	6528	5442	4920	4868	4423	14811
8111	16500	12000	13500	7100	9000	8400	10500	4100	8800	6000	2500	5200	1900	1700	2300	2100	3000	2100	1900	1900	1700	
Avg	23327	17861	18958	11789	14035	12985	15769	6509	14650	11344	4363	8679	3538	3026	3559	3734	4858	3911	3503	3517	3026	11858
Std Dev.S	7950	6195	7171	5134	6100	5722	6922	3243	6351	3755	2231	3763	1703	1323	1613	1825	2322	1832	1656	1628	1385	5625
MFI %CV	34%	35%	38%	44%	43%	44%	44%	50%	43%	33%	51%	43%	48%	44%	45%	49%	48%	47%	47%	46%	46%	47%

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 22b. Individual laboratory results for Serum #209 - class II by Werfen Single Antigen

	**** Serum 209 ****																					
Ctr	DQ6	DQ8	DQ9	DR103	DR11	DR12	DR13	DR15	DR16	DR51	DR7	DR8	DP11	DP13	DP14	DP9	DPw1	DPw3	DPw5	DPw6	DP19	DR4
3808	7317	4579	5798	4199	5131	3914	5116	1747	4486	3468	1371	3130	978	1059	1169	956	1079	1041	1149	840	1165	4686
8083	17892	12268	15537	12453	14181	12117	14123	6232	13161	10111	5839	9094	3491	4115	3730	3744	4054	4026	4392	6958	3899	14506
Avg	12605	8424	10668	8326	9656	8016	9620	3990	8824	6790	3605	6112	2235	2587	2450	2350	2567	2534	2771	3899	2532	9596
Std Dev.S	7478	5437	6887	5836	6399	5800	6369	3171	6134	4697	3159	4217	1777	2161	1811	1971	2104	2111	2293	4326	1933	6944
MFI																						
%CV	59%	65%	65%	70%	66%	72%	66%	79%	70%	69%	88%	69%	80%	84%	74%	84%	82%	83%	83%	111%	76%	72%

Table 22a. Individual laboratory results for Serum #209 - class II by One Lambda Single Antigen, cont.

**** Serum 209 ****								
Ctr	DP10	DP20	DQ7	DQ4	DP17	DR1403	Other	Manufactuer
230			4226	3312			DR14	One Lambda
615	2396	2305	3326	1633	2085		DRB1*04:02	One Lambda
753	5640	6000	4625	3410	4780		DPA1*02	One Lambda
792	2214	2189	2851	2136				One Lambda
793	2939	3379	2351	1351	2528	7754	DP26,DP31,DP30,DP107,DRB1*04:02,DRB1*14:03 >	One Lambda
1426	2606	2552	3078	2832	2262		DRB5*01:01,DRB1*04:02	One Lambda
2400	2144	2356	2405					One Lambda
3224	2620	2822	2799	1955	2201		DPA1*02,DPA1*03,DRB1*04:02	One Lambda
3632				2220		5594		One Lambda
3753	2001	2001	1679		2001		DRB1*04:02	One Lambda
5130	3945	3706			3170		DPA1*02:02,DQA1*03:03,DQA1*01:03,DPA1*03:01, DQA1*05:05,DQA1*06:01,DQA1*05:03, DQA1*03:02,DRB1*04:02,DQB1*03:19	One Lambda
5214	6700	7000	6500	2100	5300		DRB1*04:02	One Lambda
8001	2307	2315	2972	1311	1865		DRB1*04:02,DPB1*01:01,DPB1*03:01,DPB1*05:01, DPB1*06:01,DPB1*09:01,DPB1*10:01,DPB1*11:01, DPB1*13:01,DPB1*14:01,DPB1*17:01,DPB1*19:01,DPB1*20:01	One Lambda
8050	4513	4432	4279	1706	3758		DRB1*04:02	One Lambda
8111	1700	1800	1800	1000	1500			One Lambda
Avg	3210	3297	3299	2081	2859	6674		
Std Dev.S	1540	1614	1323	770	1250	1527		
MFI %CV	48%	49%	40%	37%	44%	23%		

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 22b. Individual laboratory results for Serum #209 - class II by Werfen Single Antigen, cont.

**** Serum 209 ****								
Ctr	DP10	DP20	DQ7	DQ4	DP17	DR1403	Other	Manufactuer
3808						3067	DR14,DPw2,DP18,DQA1*01 >	Werfen
8083						9740	DQ2,DPw2,DPw4,DP18 >	Werfen
Avg	-	-	-	-	-	6404		
Std Dev.S	-	-	-	-	-	4719		
MFI %CV	-	-	-	-	-	74%		

Table 23a. Individual laboratory results for Serum #210 - class II by One Lambda Single Antigen

**** Serum 210 ****												
Ctr	DQ6	DQ7	DQ8	DQ9	DR12	DR7	DR9	DQ4	DQ2	DR52	Other	Manufactuer
230	7960	18626	19928	21018	18006	14878	16983	7356	5778	20327		One Lambda
615	6398	21915	20900	20157	15389	23835	15884	6059	6392	15793	DR53,DRB3*01:01.DRB3*03:01	One Lambda
753	10520	41300	34375	37315	26000	45000	22000	8480	6840	28000	DQA1*05	One Lambda
792	3806	20517	19361	18635	12238	24089	13594	4246	4285	12164	DRB3*01,DRB3*03	One Lambda
793	5237	17653	17209	18295	12972	21521	10706	4676	3648	13714	DRB3*01,DRB3*03	One Lambda
1426	5551	19293	19263	20249	13157	20847	12428	4696	3783	14915		One Lambda
2400	4279	18859	18219	19484	11840	23902	11063	4403	3877	13471		One Lambda
3224	5083	21857	20345	20294	14108	24459	14949	5062	4589		DQA1*05,DQA1*06,DQA1*02,DQA1*03,DRB3*01:01,DRB3*03:01 >	One Lambda
3632	3249	18380	17625	16905	10510	23749	11902	3704	3562			One Lambda
3753	4188	19439	18593	20043	9117	26356	9927	3620	2829	13389	DRB3*01,DRB3*03	One Lambda
5130	7926	18140	17948	18657	16141	10802	17618	7606	7337		DQA1*02:01,DQA1*03:01,DQA1*03:03,DQA1*01:03,DQA1*04:01,DQA1*05:05,DQA1*05:01,DQA1*06:01,DQA1*05:03,DQA1*03:02,DRB3*01:01,DRB3*03:01	One Lambda
5214	16000	46865	46000	49000	32773	55500	27500	12390	16000	38068	DRB3*01,DRB3*03	One Lambda
8001	5310	22601	21930	21700	14613	26049	15144	5132	5618	14474	DRB3*01:01,DRB3*03:01	One Lambda
8050	6206	24502	23262	25173	16875	30106	13768	5563	4413	19211	DRB3*03:01,DRB3*01:01	One Lambda
8111	3100	14000	14000	15000	9500	19000	7500	3200	2900		DRB3*03:01,DRB3*01:01	One Lambda
Avg	6321	22930	21931	22795	15549	26006	14731	5746	5457	18502		
Std Dev.S	3336	8995	8026	8848	6310	11080	5010	2392	3234	7924		
MFI %CV	53%	39%	37%	39%	41%	43%	34%	42%	59%	43%		

Blue = DSA against cell #205 only

Gold = DSA against cell #206 only

Green = DSA against cell #205 and #206

Table 23b. Individual laboratory results for Serum #210 - class II by Werfen Single Antigen

**** Serum 210 ****												
Ctr	DQ6	DQ7	DQ8	DQ9	DR12	DR7	DR9	DQ4	DQ2	DR52	Other	Manufactuer
3808	1517	6888	8533	8674	5013	16880	6770	979		5536	DQA1*06,DQA1*02,DQA1*03,DQA1*04	Werfen
8083	5126	16395	20523	19340	13056	33811	18691			13265	DQA1*02	Werfen
Avg	3322	11642	14528	14007	9035	25346	12731	-	-	9401		
Std Dev.S	2552	6722	8478	7542	5687	11972	8429	-	-	5465		
MFI %CV	77%	58%	58%	54%	63%	47%	66%	-	-	58%		

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Table 24. Individual Virtual crossmatch results for Serum #209 vs Donor# V1

Donor #V1: HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01/DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	209	76	Negative	No class I DSA	Positive	DR7 (7060) DR8 (12314) DQ4 (3638) DP10 (4997)	
792	209	98.78	Negative	No class I DSA	Positive	DR7 (3006) DR8 (6284) DP10 (2214)	
793	209	99.46	Negative	A30 (1197)	-	DR7 (4197) DR8 (7358) DPw3 (4000) DP10 (2939)	weak DSA, negative cell based flow crossmatch; "self" + all DQ4 beads, not called DSA; DP131~DEAV DP3/6/9/14/17/20
910	209	99	Negative	No class I DSA	Positive	DR7 (2472) DR8 (5230) DP10 (1858) DP17 (1554)	Patient's DP reactivities share 84DEAV eplet
1426	209	100%	Negative	A30 (1266)	Positive	DR7 (3460) DR8 (7178) DP10 (2084) DP17 (1782)	
1461	209	28	Negative	No class I DSA	Positive	DR7 (2063) DR8 (4126)	
2400	209	99	Negative	No class I DSA	Positive	DR7 (2791) DR8 (5580) DQ4 (1501) DP10 (2041) DP17 (1661)	
3632	209	96	Negative	No class I DSA	Positive	DR7 (2143) DR8 (4269) DQ4 (1528)	DSA to DR7(MFI=2143), DR8(MFI=4269) and DQ4(MFI=1528)
3753	209	98.78%	Negative	No class I DSA	Positive	DR7 (2440) DR8 (5331) DP10 (2001) DP17 (2001)	No Class I DSA. The donor's DPB1 antigen is encoded by DPB1*131:01, which is not covered by SAB panel. However, DPB1*17:01(2001 MFI) is on the single antigen bead panel and is Positive, and therefore DSA. DPB1*17:01 and DPB1*131:01 are in the same HLA P-group.
3808	209		Negative	No class I DSA	Positive	DR7 (1371) DR8 (3130) DP17 (701)	
3966	209	99%	Positive	A30 (1131)	Positive	DR7 (3031) DR8 (7965) DQ4 (1188) DP10 (2834) DP17 (2395)	Unacceptable
5130	209	99%	Positive	A30 (1990)	Positive	DP10 (3945)	DSA: A30 (1990) DPB1*10:01 (3945)
8001	209	99	Borderline	A30 (1046)	Positive	DR7 (2930) DR8 (6414) DP10 (2307)	
8080	209	99	Negative	No class I DSA	Positive	DR7 (3781) DR8 (7707) DP10 (2958) DP17 (2490)	Donors DPB1*131:01 is part of the DPB1*17:01P group
8083	209	99.99	Negative	No class I DSA	Positive	DR7 (5839) DR8 (9094) DQ2 (5218) DP11 (3491)	No DSA to Class I antibodies. Class II DSA.
8110	209	81	Positive	A30 (2100)	Positive	DR7 (5108) DR8 (12100) DP10 (5984) DPA1*02 (5062)	Based on CL1 & CL2

Table 25. Individual Virtual crossmatch results for Serum #209 vs Donor# V2

Donor #V2: HLA A*01:01:01-A*30:01:01-B*07:02:01-B*42:01:01-C*07:02:01-C*17:01:01/DRB1*03:02:01-DRB1*04:05:01-DRB3*01:62:01-DRB4*01:03:01-DQA1*03:03:01-DQA1*04:01:01-DQB1*03:02:01G-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:02:02-DPB1*01:01:01G-DPB1*03:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	209	76	Negative	No class I DSA	Positive	DQ8 (21226) DPw1 (7716) DPw3 (6298)	
792	209	98.78	Negative	No class I DSA	Positive	DQ8 (16146) DPw1 (3712) DPw3 (2943)	
793	209	99.46	Negative	B7 (1517) A30 (1197)	Positive	DQ8 (14562) DPw1 (4418) DPw3 (3762)	weak DSA; negative cell based flow crossmatch apparent "self" reactivity with all 4 DQ4 beads, not called DSA for VXM
910	209	99	Negative	No class I DSA	Positive	DQ8 (14143) DPw1 (2773) DPw3 (2590)	Patient's DP reactivities share 84DEAV eplet
1426	209	100	Negative	A30 (1266)	Positive	DQ8 (14242) DPw1 (3388) DPw3 (2421)	
1461	209	28	Negative	No class I DSA	Positive	DQ8 (5536)	
2400	209	99	Negative	No class I DSA	Positive	DQ4 (1501) DQ8 (12355) DPw1 (3195) DPw3 (2623)	
3632	209	96	Negative	No class I DSA	Positive	DQ4 (1528) DQ8 (12073) DPw1 (2771) DPw3 (2241)	No Class I DSA. DSA to DQ8(MFI=12073), DQ4(MFI=1528), DP1 (MFI=2771) and DP3 (MFI=2241).
3753	209	98.78%	Negative	No class I DSA	Positive	DQ8 (11701) DPw1 (2706) DPw3 (2153)	
3808	209		Negative	No class I DSA	Positive	DQ8 (4579) DPw1 (1079) DPw3 (1041)	
3966	209	99%	Positive	A30 (1131)	Positive	DQ4 (1188) DQ8 (15978) DPw1 (4496) DPw3 (3461)	Unacceptable
5130	209	99	Positive	A30 (1990)	Positive	DPw1 (5459) DQA1*03 (20839)	
8001	209	99	Borderline	A30 (1046)	Positive	DQ8 (18081) DPw1 (3639) DPw3 (2905)	
8080	209	99	Negative	No class I DSA	Positive	DQ8 (18590) DPw1 (4712) DPw3 (3479)	
8083	209	99.99	Negative	No class I DSA	Positive	DQ8 (12268) DPw1 (4054) DPw3 (4026) DPA1*01 (9870)	No DSA to Class I antibodies.
8110	209	81	Positive	A30 (2100)	Positive	DQ8 (19182) DPw1 (6535) DPw3 (6535) DPA1*02 (5062) DQA1*03 (12830)	Class 1 & 2

Table 26. Individual Virtual crossmatch results for Serum #209 vs Donor# V3

Donor #V3: HLA A*24:02:01-A*68:01:02-B*40:02:01-C*03:04:01-C*03:08/DRB1*04:11:01-DRB4*01:03:01-DQA1*03:01:01-DQB1*03:02:01G-DPA1*01:03:01-DPA1*02:02:02-DPB1*04:02:01G-DPB1*05:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	209	76	Positive	A68 (9634) B61 (7389)	Positive	DQ8 (21226) DPw5 (5650)	
792	209	98.78	Positive	A68 (6571) B61 (5029)	Positive	DQ8 (11189) DPw5 (2203)	
793	209	99.46	Positive	A68 (8001) B61 (6163)	Positive	DQ8 (14562) DPw5 (3237)	2 moderate DSA, positive T cell flow crossmatch
910	209	99	Positive	A68 (5119) B61 (4027)	Positive	DQ8 (10236) DPw5 (1679)	Patient's DP reactivities share 84DEAV eplet. Current donor share mismatches with previous donor
1426	209	100	Positive	A68 (7742) B61 (5906)	Positive	DQ8 (14242) DPw5 (1980)	
1461	209	28	Positive	A68 (2294) B61 (1635)	Positive	DR4 (6520) DQ8 (5536) DPw4 (6054) DPw5 (1715)	
2400	209	99	Positive	A68 (6328) B61 (4259)	Positive	DQ8 (12355) DPw5 (2180)	
3632	209	96	Positive	A68 (3623) B61 (3041)	Positive	DQ8 (12013)	DSA to A68(MFI=3623) and B61 (MFI=3041).
3753	209	98.78%	Positive	A68 (4242) B61 (3754)	Positive	DQ8 (11701) DPw5 (2001)	DSA to DQ8 (MFI=12013).
3808	209		Positive	A68 (2912) B61 (2198)	Positive	DR4 (4686) DQ8 (4579) DPw5 (1149)	
3966	209	99%	Positive	A68 (8719) B61 (7038)	Positive	DR4 (10657) DPw5 (3141)	Unacceptable. No bead DRB1*04:11 in SAB PANEL.
5130	209	99%	Positive	A68 (12507)	Positive	DPw5 (4512) DPA1*02 (3945)	
8001	209	99	Positive	A68 (9343) B61 (6274)	Positive	DQ8 (18081) DPw5 (2623)	
8080	209	99	Positive	A68 (7875) B61 (10874)	Positive	DQ8 (28806) DPw5 (2892)	
8083	209	99.99	Positive	A68 (4587) B61 (4493)	Positive	DQ8 (11943) DPw4 (9870) DPw5 (4362) DPA1*01 (9870)	Questionable DR4 DSA as DRB1*04:11 was not in kit. Also class I DSA.
8110	209	81	Positive	A68 (14500) B61 (10100)	Positive	DQ8 (19182) DPw5 (5441) DPA1*02 (5062)	Class 1 & 2

Table 27. Individual Virtual crossmatch results for Serum #210 vs Donor# V1

Donor #V1: HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01/DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	210	53	Positive	A2 (12008)	DR7 (14879) DQ2 (5590) DQ4 (6944)	Positive	
792	210	99.76	Positive	A2 (27001)	DR7 (24089) DQ2 (2671) DQ4 (2217)	Positive	
793	210	99.64	Positive	A2 (24808)	DR7 (21521) DQ2 (3648) DQ4 (4676)	Positive	strong class I DSA, positive T cell flow crossmatch; DR53 just below positive threshold
910	210	100	Positive	A2 (23359)	DR7 (22321) DQ2 (3056) DQ4 (2439)	Positive	Patient Class I reactivities share Aw4/Bw4 epitope
1426	210	100	Positive	A2 (14921)	DR7 (20603) DQ2 (3536) DQ4 (4133)	Positive	
1461	210	30	Positive	A2 (16820)	DR7 (11910)	Positive	
2400	210	100	Positive	A2 (26393)	DR7 (23786) DQ2 (3193) DQ4 (4078)	Positive	
3632	210	100	Positive	A2 (27285)	DR7 (23749) DQ2 (2617) DQ4 (1819)	Positive	DSA to A2 (MFI=27285); DSA to DR7(MFI=23749), DQ2(MFI=2617) and DQ4(MFI=1819)
3753	210	99.64%	Positive	A2 (29083)	DR7 (26356) DQ2 (2829) DQ4 (3620)	Positive	
3808	210		Positive	A2 (19129)	DR7 (16880) DQ4 (979) DQA1*02 (8533) DQA1*04 (6810)	Positive	
3966	210	100%	Positive	A2 (29699)	DR7 (27594) DQ2 (4325) DQ4 (5462)	Positive	Unacceptable
5130	210	99.60%	Positive	A2 (9523)	DR7 (10802) DQA1*02 (18140) DQA1*04 (4235)	Positive	
8001	210	100	Positive	A2 (30449)	DR7 (26049) DQ2 (5618) DQ4 (5075)	Positive	
8080	210	100	Positive	A2 (27833)	DR7 (25550) DQ2 (4248) DQ4 (4018)	Positive	
8083	210	99.67	Positive	A2 (35841)	DR7 (33811) DQA1*02 (20523)	Positive	DSA to class I and II antibodies
8110	210	90	Positive	A2 (32394)	DR7 (19304) DQ4 (5165) DQA1*03 (11505) DQA1*04 (2432)	Positive	

Table 28. Individual Virtual crossmatch results for Serum #210 vs Donor# V2

Donor #V2: HLA A*01:01:01-A*30:01:01-B*07:02:01-B*42:01:01-C*07:02:01-C*17:01:01/DRB1*03:02:01-DRB1*04:05:01-DRB3*01:62:01-DRB4*01:03:01-DQA1*03:03:01-DQA1*04:01:01-DQB1*03:02:01G-DQB1*04:02:01-DPA1*01:03:01-DPA1*02:02:02-DPB1*01:01:01G-DPB1*03:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	210	53	Negative	No class I DSA	DQ4 (7770) DR52 (20328) DQ8 (19928)	Positive	
792	210	99.76	Negative	No class I DSA	DQ4 (2217) DR52 (10940) DQ8 (19361)	Positive	No Class I DSA present
793	210	99.64	Negative	No class I DSA	DQ4 (4676) DR52 (11715) DQ8 (17209)	Positive	no class I DSA, Cw7 and C*17 just below threshold; DR52=DRB3*01 allele specific DSA; DR53 just below positive threshold
910	210	100	Negative	No class I DSA	DQ4 (2439) DR52 (11764) DQ8 (19017)	Positive	
1426	210	100	Negative	No class I DSA	DQ4 (4133) DR52 (14762) DQ8 (19028)	Positive	Epitope analysis for DRB3*01:62. Possible 57V epitope.
1461	210	30	Negative	No class I DSA	DR52 (3078) DQ8 (5962)	Positive	
2400	210	100	Negative	No class I DSA	DQ4 (4078) DR52 (12520) DQ8 (17993)	Positive	No Class I DSA
3632	210	100	Negative	No class I DSA	DQ4 (1819) DR52 (10288) DQ8 (17625)	Positive	No Class 1 DSA; DSA to DQ8 (MFI=17625), DQ4 (MFI=1819) and DR52 (MFI=10288)
3753	210	99.64%	Negative	No class I DSA	DQ4 (3620) DQ8 (18593)	Positive	No Class I DSA. DSA to DRB3*01 (MFI=12761).
3808	210		Negative	No class I DSA	DQ4 (979) DR52 (5536) DQ8 (8533) DQA1*04 (6810)	Positive	
3966	210	100%	Negative	No class I DSA	DQ4 (5462) DR52 (16732) DQ8 (21577)	Positive	No DSA CLASS I; No bead DRB3*01:62 in SAB PANEL
5130	210	99%	Negative	No class I DSA	DQ4 (6224) DQA1*03 (14793) DQA1*04 (4235)	Positive	
8001	210	100	Negative	No class I DSA	DQ4 (5075) DR52 (13910) DQ8 (21930)	Positive	No class I DSA
8080	210	100	Negative	No class I DSA	DQ4 (4018) DR52 (16539) DQ8 (24222)	Positive	
8083	210	99.67	Negative	No class I DSA	DR52 (13265) DQ8 (17439)	Positive	No DSA to Class I antibodies. DSA to DRB3*01:01 in same P group with DRB3*01:62.
8110	210	90	Negative	No class I DSA	DQ4 (5165) DQ8 (15521) DQA1*03 (11505) DQA1*04 (2432)	Positive	No Class 1 DSA

Table 29. Individual Virtual crossmatch results for Serum #210 vs Donor# V3

Donor #V3: HLA A*24:02:01-A*68:01:02-B*40:02:01-C*03:04:01-C*03:08/DRB1*04:11:01-DRB4*01:03:01-DQA1*03:01:01-DQB1*03:02:01G-DPA1*01:03:01-DPA1*02:02:02-DPB1*04:02:01G-DPB1*05:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Comments
230	210	53	Positive	A68 (20531) A24 (19178)	DQ8 (19928)	Positive	
792	210	99.76	Positive	A68 (21337) A24 (13603)	DQ8 (14740)	Positive	
793	210	99.64	Positive	A68 (23186) A24 (18948)	DQ8 (16237)	Positive	2 strong class I DSA, strong positive T flow crossmatch; DR53 just below positive threshold; predict positive B flow due to strong class I DSA + DQ DSA
910	210	100	Positive	A68 (20862) A24 (13065)	DQ8 (15138)	Positive	Patient's Class I reactivities share Aw4/Bw4 epitope
1426	210	100	Positive	A68 (23147) A24 (16422)	DQ8 (19028)	Positive	
1461	210	30	Positive	A68 (12213) A24 (6513)	DQ8 (5962)	Positive	
2400	210	100	Positive	A68 (23372) A24 (10809)	DQ8 (17993)	Positive	
3632	210	100	Positive	A68 (19203) A24 (10675)	DQ8 (17625)	Positive	DSA to A24(MFI=10675) and A68(MFI=19203); DSA to DQ8 (MFI=17625)
3753	210	99.64%	Positive	A68 (22542) A24 (14590)	DQ8 (18593)	Positive	
3808	210		Positive	A68 (14770) A24 (8673)	DQ8 (8533) DQA1*03 (8103)	Positive	
3966	210	100%	Positive	A68 (26697) A24 (17685)	DQ8 (21577)	Positive	Unacceptable
5130	210	99%	Positive	A68 (14778) A24 (16310)	DQA1*03 (18657)	Positive	
8001	210	100	Positive	A68 (26118) A24 (14601)	DQ8 (21930)	Positive	
8080	210	100	Positive	A68 (26287) A24 (15370)	DQ8 (38484)	Positive	
8083	210	99.67	Positive	A68 (24257) A24 (16975)	DQ8 (16709)	Positive	DSA to Class I antibodies. DSA to class I antibodies
8110	210	90	Positive	A68 (30309) A24 (23100)	DQ8 (15521) DQA1*03 (11800)	Positive	

Table 30. Individual Cutoff values and Pretreatment - Exchange 35

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
230	A	4000	DRB1	4000	One Lambda	LABScreen Single Antigen/ExPlex	None
	B	4000	DRB3/4/5	4000			
	C	1000	DQA1	4000			
	Class I		DQB1	4000			
			DPB1	10000			
			Class II				
615	A		DRB1		One Lambda	LABScreen Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	500	DQB1				
			DPB1				
			Class II	500			
753	A	2000	DRB1	2000	One Lambda	LABScreen Single Antigen	EDTA
	B	2000	DRB3/4/5	2000			
	C	3000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
792	A	2000	DRB1	2000	One Lambda	LABScreen Single Antigen	FBS/EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
793	A		DRB1		One Lambda	LABScreen Single Antigen/ExPlex	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	1000	DQB1				
			DPB1				
			Class II	1000			

Table 30. Individual Cutoff values and Pretreatment - Exchange 35

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
1426	A	1000	DRB1	1000	One Lambda	LABScreen Single Antigen	DTBA
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
2400	A	2000	DRB1	2000	One Lambda	LABScreen Single Antigen	EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	20			
3224	A	1000	DRB1	1000	One Lambda	LABScreen 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	5000	One Lambda	LABScreen Single Antigen/ExPlex	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	LABScreen Single Antigen	EDTA
	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 35

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
3808	A		DRB1		Werfen	LIFECODES® Single Antigen Assays (LSA)	None
	B		DRB3/4/5				
	C		DQA1				
	Class I	750	DQB1				
			DPB1				
			Class II	750			
5130	A	1500	DRB1	1500	One Lambda	LABScreen Class II SAB	EDTA
	B	1500	DRB3/4/5	1500			
	C	1500	DQA1	1500			
	Class I	1500	DQB1	1500			
			DPB1	1500			
			Class II	1500			
5214	A	3000	DRB1	3000	One Lambda	LabScreen 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	LABScreen Single Antigen	EDTA & FBS
	B		DRB3/4/5				
	C		DQA1				
	Class I	1000	DQB1				
			DPB1				
			Class II	1000			
8050	A	1000	DRB1	1000	One Lambda	LABScreen Single Antigen	DTT
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			

Table 30. Individual Cutoff values and Pretreatment - Exchange 35

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
8083	A		DRB1		Werfen	LIFECODES® Single Antigen Assays (LSA)	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I		DQB1				
			DPB1				
			Class II				
8111	A	1000	DRB1	1000	One Lambda	LABScreen Single Antigen	EDTA
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			