

# REPORT OF THE 420<sup>th</sup> CELL EXCHANGE

## FEBRUARY 23, 2021

B-cell Line	581 - 582
Cells	1677-1680
Sera	1305-1312

### B-CELL LINE EXCHANGE #291

The results for B-cell Line Exchange #291 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. We would like to express our appreciation to, **University of Michigan Medical School, Ann Arbor** and to **Welsh Blood Service, Pontyclun**, for generously providing the cells examined in this study.

We would like to also acknowledge and thank the labs performing NGS for sharing their results and encourage other NGS labs to share their findings. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Ter-581.** The reported consensus type for this sample from a Caucasian donor is DRB1\*03:01-DRB1\*04:26-DRB3\*01:01-DRB4\*01:03-DQA1\*03:01-DQA1\*05:01-DQB1\*02:01-DQB1\*03:02-DPA1\*01:03-DPB1\*03:01-DPB1\*04:01/A\*32:01-A\*68:02-B\*08:01-B\*44:02-C\*01:02-C\*07:01. Combining data from family studies and the Cell Exchange, the haplotypes in this cell are determined to be A\*68:02-B\*44:02-C\*07:01-DRB1\*04:26-DRB4\*01:03--DQA1\*03:01-DQB1\*03:02 and A\*32:01-B\*08:01-C\*01:02-DRB1\*03:01-DRB3\*01:01-DQA1\*05:01-DQB1\*02:01.

This cell was previously examined in the Exchange as Ter 423 (2009) and Ter 271 (2001). In this present retyping, DRB1\*04:26 was reported by 100% of labs, compared to an assignment of only 68% in 2009. Good agreement was achieved for all class I and class II allele assignments, with each reported by > 90% of labs. No grade was assigned to DPA1 for high resolution, as there were < 10 labs reporting.

**Ter-582.** The reported consensus type for this sample from a donor of unknown ethnicity is DRB1\*01:01-DRB1\*01:03-DQA1\*01:01-DQA1\*05:05-DQB1\*03:01-DQB1\*05:01-DPA1\*01:03-DPB1\*02:01-DPB1\*04:01/A\*02:36-A\*31:01-B\*07:02-B\*27:05-C\*01:02-C\*07:02. Likely associations present in this cell are B\*27:05-C\*01:02-DRB1\*01:03-DQB1\*03:01 and B\*07:02-C\*07:02-DRB1\*01:01-DQB1\*05:01, with respective HF = 0.00126 and 0.00979, in Caucasians.

This cell was previously examined in the class I DNA Extract Exchange as extracts 536 (2011), 307 (2004), and 269 (2003). In this present retyping, the assignment of A\*02:36 improved greatly, increasing from 60% in 2011 to 100% in the current study. Allele assignments for all class I and class II loci achieved good agreement, with each assigned by > 90% of labs. As with Ter 581, DPA1 was not graded for high resolution, as < 10 labs reported high resolution typing results.

Table 1: Summary of the 291<sup>st</sup> B-cell Line Exchange

Ter-581												
DNA Typing - class II	<b>26 labs High; 22 labs low-DRB1</b>	%(n)	<b>19 labs High; 14 labs Low-DRB3/4/5</b>	%(n)	<b>20 labs High; 19 labs Low-DQA1</b>	%(n)	<b>26 labs High; 20 labs Low-DQB1</b>	%(n)	<b>15 labs High; 8 labs Low-DPA1</b>	%(n)	<b>25 labs High; 13 labs Low-DPB1</b>	%(n)
	DRB1*03:01:01	31(8)	DRB3*01:01:02	26(5)	DQA1*03:01:01	25(5)	DQB1*02:01:01:01	4 (1)	DPA1*01:03:01	33(5)	DPB1*03:01:01	32(8)
	DRB1*03:01:01G	8 (2)	DRB3*01:01	74(14)	DQA1*03:01	75(15)	DQB1*02:01:01	27(7)	DPA1*01:03	67(10)	DPB1*03:01:01G	12(3)
	DRB1*03:01P	4 (1)	DRB3*01	79(11)	DQA1*03	100(19)	DQB1*02:01:01G	4 (1)	DPA1*01	100(8)	DPB1*03:01	56(14)
	DRB1*03:01	57(15)	DRB3*PRESENT	21(3)			DQB1*02:01	65(17)			DPB1*03	100(13)
	DRB1*03(DR17)	95(21)					DQB1*02	100(20)				
	DRB1*03	5 (1)										
DNA Typing - class I	<b>21 labs High; 19 labs low- A</b>	%(n)	<b>21 labs High; 19 labs low- B</b>	%(n)	<b>21 labs High; 19 labs low- C</b>	%(n)						
	A*32:01:01:01	5 (1)	B*08:01:01:01	5 (1)	C*01:02:01:01	5 (1)						
	A*32:01:01	33(7)	B*08:01:01	33(7)	C*01:02:01	33(7)						
	A*32:01:01G	5 (1)	B*08:01:01G	5 (1)	C*01:02:01G	5 (1)						
	A*32:01	57(12)	B*08:01	57(12)	C*01:02	57(12)						
	A*32	100(19)	B*08	100(19)	C*01	100(19)						
DNA Typing - class I	<b>21 labs High; 19 labs low- A</b>	%(n)	<b>21 labs High; 19 labs low- B</b>	%(n)	<b>21 labs High; 19 labs low- C</b>	%(n)						
	A*68:02:01:01	5 (1)	B*44:02:01:01	5 (1)	C*07:01:01:01	5 (1)						
	A*68:02:01	33(7)	B*44:02:01	33(7)	C*07:01:01	33(7)						
	A*68:02:01G	5 (1)	B*44:02:01G	5 (1)	C*07:01:01G	5 (1)						
	A*68:02	57(12)	B*44:02	57(12)	C*07:01	57(12)						
	A*68	100(19)	B*44	100(19)	C*07	100(19)						

**Table 2: Summary of the 291<sup>st</sup> B-cell Line Exchange**

**Ter-582**

<b>DNA Typing - class II</b>	<b>26 labs High; 22 labs low-DRB1</b>	%(n)
	DRB1*01:01:01	27(7)
	DRB1*01:01:01G	8 (2)
	DRB1*01:01	65(17)
	DRB1*01	100(22)
<b>26 labs High; 22 labs low-DRB1</b>	%(n)	
DRB1*01:03	100(26)	
DRB1*103	9 (2)	
DRB1*01	91(20)	


<b>20 labs High; 19 labs Low-DQA1</b>	%(n)
DQA1*01:01:01	25(5)
DQA1*01:01	75(15)
DQA1*01	100(19)
<b>20 labs High; 19 labs Low-DQA1</b>	%(n)
DQA1*05:05:01	20(4)
DQA1*05:01:01	5 (1)
DQA1*05:05	75(15)
DQA1*05	100(19)

<b>26 labs High; 20 labs Low-DQB1</b>	%(n)
DQB1*03:01:01	23(6)
DQB1*03:01:01G	8 (2)
DQB1*03:01	69(18)
DQB1*03(DQ7)	5 (1)
DQB1*03	95(19)
<b>26 labs High; 20 labs Low-DQB1</b>	%(n)
DQB1*05:01:01	31(8)
DQB1*05:01	69(18)
DQB1*05	100(20)

<b>15 labs High; 8 labs Low-DPA1</b>	%(n)
DPA1*01:03:01	33(5)
DPA1*01:03:01G	7 (1)
DPA1*01:03	60(9)
DPA1*01	100(8)

<b>25 labs High; 13 labs Low-DPB1</b>	%(n)
DPB1*02:01:02	32(8)
DPB1*02:01:02G	12(3)
DPB1*02:01	56(14)
DPB1*02(DP201)	38(5)
DPB1*02	62(8)
<b>25 labs High; 13 labs Low-DPB1</b>	%(n)
DPB1*04:01:01	36(9)
DPB1*04:01:01G	8 (2)
DPB1*04:01	56(14)
DPB1*04(DP401)	38(5)
DPB1*04	62(8)

<b>DNA Typing - class I</b>	<b>21 labs High; 19 labs low- A</b>	%(n)
	A*02:36	100(21)
	A*02	100(19)
<b>21 labs High; 19 labs low- A</b>	%(n)	
A*31:01:02:01	5 (1)	
A*31:01:02	33(7)	
A*31:01:02G	5 (1)	
A*31:01	57(12)	
A*31	100(19)	

<b>21 labs High; 19 labs low- B</b>	%(n)
B*07:02:01:01	5 (1)
B*07:02:01	33(7)
B*07:02:01G	5 (1)
B*07:02	57(12)
B*07	100(19)
<b>21 labs High; 19 labs low- B</b>	%(n)
B*27:05:02	38(8)
B*27:05:02G	5 (1)
B*27:05	57(12)
B*27	100(19)

<b>21 labs High; 19 labs low- C</b>	%(n)
C*01:02:01:01	5 (1)
C*01:02:01	33(7)
C*01:02	62(13)
C*01	100(19)
<b>21 labs High; 19 labs low- C</b>	%(n)
C*07:02:01:03	5 (1)
C*07:02:01	33(7)
C*07:02	62(13)
C*07	100(19)

**Table 3a: Individual laboratory results for B-cell #581 - Class II**

Low resolution															
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
278	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*03	*04	SSP SSO		
725	*03	*04	3*PRESENT	4*PRESENT	*03	*05	*02	*03					SSP SSO		
731	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*03	*04	SSO SBT NGS RT-PCR		
747	*03	*04	3*PRESENT	4*PRESENT	*03	*05	*02	*03	*01	*01	*03	*04	SSP SSO NGS		
771	*03	*04			*03	*05	*02	*03			*03	*04	SSO NGS		
774	*03	*04	3*01	4*01	*03	*05	*02	*03			*03	*04(DP401)	SSP SSO		
792	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*03	*04	SSO NGS		
793	*03	*04	3*01	4*PRESENT	*03	*05	*02	*03			*03	*04(DP401)	SSP		
2400	*03	*04	3*01	4*01	*03	*05	*02	*03			*03	*04	SSO NGS		
2847	*03	*04											SSO		
3519	*03	*04			*03	*05	*02	*03	*01	*01	*03	*04(DP401)	SSP NGS RT-PCR		
3753	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*03	*04(DP401)	SSO		
3966													SSP		
4079	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*03	*04	SSO		
5130	*03	*04	3*01	3*01	*03	*05	*02	*03			*03	*04	SSO NGS		
5214	*03 (DR17)	*04	3*01	4*01	*03	*05	*02	*03 (DQ8)	*01		*03	*04(DP401)	SSO		
5219	*03	*04			*03	*05	*02	*03					SSO NGS		
5451	*03	*04	3*01	4*01	*03	*05	*02	*03					SSO SBT NGS		
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	RT-PCR		
5642	*03	*04	3*PRESENT	4*PRESENT			*02	*03					SSP SSO		
6649	*03	*04											SSO		
8029	*03	*04			*03	*05	*02	*03					SSO		
8043	*03	*04			*03	*05	*02	*03					SSP SSO		
8068	*03	*04			*03	*05	*02	*03					SSO		

**Table 3b: Individual laboratory results for B-cell #581 - Class II**

Center	High resolution												METHOD	Other Alleles
	DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPB1				
230	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01	*04:01	NGS	
278	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01	*04:01	SSP SSO	
731	*03:01:01	*04:26					*02:01:01:01	*03:02			*03:01:01	*04:01:01	SSO SBT NGS RT-PCR	
747	*03:01:01	*04:26	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01	*01:03:01	*03:01:01	*04:01:01	SSP SSO NGS	DPB1*350:01 DQB1*02:163N DQB1*03:289 DPB1*124:01
762	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*03:01	*04:01	NGS	
771	*03:01	*04:26					*02:01	*03:02			*03:01	*04:01	SSO NGS	
774	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02			*03:01	*04:01	SSP SSO	DRB1*03:56 DRB1*03:58 DRB1*03:61 DRB1*03:72 DRB1*03:73 DRB1*03:83 DRB1*03:93 DRB1*03:62 DRB1*03:66 DRB1*03:68N DRB1*03:100 DRB1*04:274
792	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01	*04:01	SSO NGS	
793					*03:01	*05:01					*03:01	*04:01	SSP	
2344	*03:01:01	*04:26	NT	NT	NT	NT	*02:01:01	*03:02:01	NT	NT	*03:01:01	*04:01:01	NGS	DRB1*03:147 DPB1*124:01 DPB1*350:01
2400	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02			*03:01:01G	*04:01:01G	SSO NGS	DQB1*02:163N DQB1*03:289
3135	*03:01:01G	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01:01G	*04:01:01G		
3224	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*03:01	*04:01	NGS	
3511	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01	*04:01	SSP SSO	
3519	*03:01P	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*03:01	*04:01	SSP NGS RT-PCR	DRB1*03:147
3966	*03:01	*04:26	3*01:01	4*01:03			*02:01	*03:02					SSP	
4251	*03:01:01G	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01:01G	*03:02:01G	*01:03	*01:03	*03:01	*04:01	NGS	
4337	*03:01	*04:26					*02:01	*03:02			*03:01	*04:01	SSP SBT NGS	
5130	*03:01	*04:26	3*01:01	3*01:03	*03:01	*05:01	*02:01	*03:02			*03:01	*04:01	SSO NGS	DRB1*03:147
5133	*03:01:01	*04:26	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01		*03:01:01	*04:01:01	NGS	
5214											*03:01G	*04:01G	SSO	
5219	*03:01:01	*04:26					*02:01:01	*03:02:01			*03:01:01	*04:01:01	SSO NGS	
5451	*03:01:01	*04:26	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01		*03:01:01	*04:01:01	SSO SBT NGS	
5488	*03:01:01	*04:26	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01		*03:01:01	*04:01:01	SSO SBT NGS	DRB1*03:147
5642	*03:01	*04:26					*02:01	*03:02					SSP SSO	
8021	*03:01	*04:26	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*03:01	*04:01	SSO NGS	
8043	*03:01	*04:26			*03:01	*05:01	*02:01	*03:02					SSP SSO	
8122	*03:01:01	*04:26	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01		*03:01:01	*04:01:01	NGS	DPB1*939:01 DPB1*124:01 DPB1*350:01

**Table 4: Individual laboratory results for B-cell #581 - Class I**

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	NGS	
278	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSP SSO	
725	*32	*68	*08	*44	*01	*07							SSP SSO	
731	*32	*68	*08	*44	*01	*07	*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	SSO SBT NGS	
747	*32	*68	*08	*44	*01	*07	*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	SSP SSO NGS	
762													NGS	
771	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSO NGS	
774	*32	*68	*08	*44	*01	*07							SSP SSO	
792	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSO NGS	
793	*32	*68	*08	*44	*01	*07							SSP	
2344							*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	NGS	
2400	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSO NGS	
2847	*32	*68	*08	*44	*01	*07							SSO	
3135							*32:01:01G	*68:02:01G	*08:01:01G	*44:02:01G	*01:02:01G	*07:01:01G		
3224							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	NGS	
3511							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSP SSO	
3519	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSP NGS RT-PCR	
3753	*32	*68	*08	*44	*01	*07							SSO	
3966	*32	*68	*08	*44	*01	*07							SSP	
4079	*32	*68	*08	*44	*01	*07							SSO	
4251							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	NGS	
4337							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSP SBT NGS	
5130	*32	*68	*08	*44	*01	*07	*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSO NGS	
5133							*32:01:01:01	*68:02:01:01	*08:01:01:01	*44:02:01:01	*01:02:01:01	*07:01:01:01	NGS	
5214	*32	*68	*08	*44	*01	*07							SSO	
5219	*32	*68	*08	*44	*01	*07	*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	SSO NGS	
5451							*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	SSO SBT NGS	
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	RT-PCR	
5488							*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	SSO SBT NGS	
5642													SSP SSO	
6649													SSO	
8021							*32:01	*68:02	*08:01	*44:02	*01:02	*07:01	SSO NGS	
8029	*32	*68	*08	*44	*01	*07							SSO	
8043													SSP SSO	
8068	*32	*68	*08	*44	*01	*07							SSO	
8122							*32:01:01	*68:02:01	*08:01:01	*44:02:01	*01:02:01	*07:01:01	NGS	

**Table 5a: Individual laboratory results for B-cell #582 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*01	*01	NT	NT	*01	*05	*03	*05	*01	*01	*02	*04	SSP SSO	
725	*01				*01	*05	*03	*05					SSP SSO	
731	*01	*01			*01	*05	*03	*05	*01	*01	*02	*04	SSO SBT NGS RT-PCR	
747	*01	*01			*01	*05	*03	*05	*01	*01	*02	*04	SSP SSO NGS	
771	*01	*01			*01	*05	*03	*05			*02	*04	SSO NGS	
774	*01	*01			*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP SSO	
792	*01	*103			*01	*05	*03	*05	*01	*01	*02	*04	SSO NGS	
793	*01	*01			*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP	
2400	*01	*01	NP	NP	*01	*05	*03	*05			*02	*04	SSO NGS	
2847	*01	*01											SSO	
3519	*01	*01			*01	*05	*03	*05	*01	*01	*02(DP201)	*04(DP401)	SSP NGS RT-PCR	
3753	*01	*01	NP	NP	*01	*05	*03	*05	*01	*01	*02(DP201)	*04(DP401)	SSO	
3966													SSP	
4079	*01	*01			*01	*05	*03	*05	*01	*01	*02	*04	SSO	
5130	*01	*01			*01	*05	*03	*05			*02	*04	SSO NGS	
5214	*01	*103			*01	*05	*03 (DQ7)	*05	*01		*02(DP201)	*04(DP401)	SSO	
5219	*01	*01			*01	*05	*03	*05					SSO NGS	
5451	*01	*01			*01	*05	*03	*05					SSO SBT NGS	
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	RT-PCR	
5642	*01	*01					*03	*05					SSP SSO	
6649	*01												SSO	
8029	*01	*01			*01	*05	*03	*05					SSO	
8043	*01	*01			*01	*05	*03	*05					SSP SSO	
8068	*01				*01	*05	*03	*05					SSO	

**Table 5b: Individual laboratory results for B-cell #582 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01	*04:01	NGS	
278	*01:01	*01:03	NT	NT	*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01	*04:01	SSP SSO	
731	*01:01	*01:03					*03:01:01	*05:01:01			*02:01:02	*04:01:01	SSO SBT NGS RT-PCR	
747	*01:01:01	*01:03			*01:01:01	*05:05:01	*03:01	*05:01:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	SSP SSO NGS	DQB1*03:297 DQB1*05:01:33
762	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03		*02:01	*04:01	NGS	
771	*01:01	*01:03					*03:01	*05:01			*02:01	*04:01	SSO NGS	
774	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:65 DRB1*01:67 DQB1*03:73 DQB1*03:92 DQB1*03:93
792	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01	*04:01	SSO NGS	
793					*01:01	*05:05					*02:01	*04:01	SSP	
2344	*01:01:01	*01:03	NT	NT	NT	NT	*03:01:01	*05:01:01	NT	NT	*02:01:02	*04:01:01	NGS	DRB1*01:100
2400	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01			*02:01:02G	*04:01:01G	SSO NGS	DQB1*03:297
3135	*01:01:01G	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01:02G	*04:01:01		DQA1*01:04 DQA1*01:05 DQA1*05:09
3224	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03		*02:01	*04:01	NGS	
3511	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01	*04:01	SSP SSO	
3519	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03	*01:03	*02:01	*04:01	SSP NGS RT-PCR	DRB1*01:100
3966	*01:01	*01:03					*03:01	*05:01					SSP	
4251	*01:01:01G	*01:03			*01:01	*05:05	*03:01:01G	*05:01	*01:03:01G	*01:03	*02:01	*04:01	NGS	
4337	*01:01	*01:03					*03:01	*05:01			*02:01	*04:01	SSP SBT NGS	
5130	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSO NGS	DRB1*01:03 DRB1*01:100
5133	*01:01:01	*01:03			*01:01:01	*05:01:01	*03:01:01	*05:01:01	*01:03:01		*02:01:02	*04:01:01	NGS	
5214											*02:01G	*04:01G	SSO	
5219	*01:01:01	*01:03					*03:01:01	*05:01:01			*02:01:02	*04:01:01	SSO NGS	
5451	*01:01:01	*01:03			*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03:01		*02:01:02	*04:01:01	SSO SBT NGS	
5488	*01:01:01	*01:03			*01:01:01	*05:05:01	*03:01:01G	*05:01:01	*01:03:01		*02:01:02	*04:01:01	SSO SBT NGS	DRB1*01:100
5642	*01:01	*01:03					*03:01	*05:01					SSP SSO	
8021	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01	*01:03		*02:01	*04:01	SSO NGS	
8043	*01:01	*01:03			*01:01	*05:05	*03:01	*05:01					SSP SSO	
8122	*01:01:01	*01:03	NP	NP	*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03:01		*02:01:02	*04:01:01	NGS	DPB1*939:01 DPB1*02:01:19



**Table 6: Individual laboratory results for B-cell #582 - Class I**

Table 6: Individual laboratory results for B-cell #582 - Class I														
Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	NGS	
278	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSP SSO	
725	*02	*31	*07	*27	*01	*07							SSP SSO	
731	*02	*31	*07	*27	*01	*07	*02:36	*31:01:02:01	*07:02:01	*27:05:02	*01:02:01	*07:02:01	SSO SBT NGS RT-PCR	
747	*02	*31	*07	*27	*01	*07	*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	SSP SSO NGS	
762													NGS	
771	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSO NGS	
774	*02	*31	*07	*27	*01	*07							SSP SSO	
792	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSO NGS	
793	*02	*31	*07	*27	*01	*07							SSP	
2344							*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	NGS	
2400	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSO NGS	
2847	*02	*31	*07	*27	*01	*07							SSO	
3135							*02:36	*31:01:02G	*07:02:01G	*27:05:02G	*01:02	*07:02		
3224							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	NGS	
3511							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSP SSO	
3519	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSP NGS RT-PCR	
3753	*02	*31	*07	*27	*01	*07							SSO	
3966	*02	*31	*07	*27	*01	*07							SSP	
4079	*02	*31	*07	*27	*01	*07							SSO	
4251							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	NGS	
4337							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSP SBT NGS	
5130	*02	*31	*07	*27	*01	*07	*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSO NGS	
5133							*02:36	*31:01:02	*07:02:01:01	*27:05:02	*01:02:01:01	*07:02:01:03	NGS	
5214	*02	*31	*07	*27	*01	*07							SSO	
5219	*02	*31	*07	*27	*01	*07	*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	SSO NGS	
5451							*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	SSO SBT NGS	
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	RT-PCR	
5488							*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	SSO SBT NGS	
5642													SSP SSO	
6649													SSO	
8021							*02:36	*31:01	*07:02	*27:05	*01:02	*07:02	SSO NGS	
8029	*02	*31	*07	*27	*01	*07							SSO	
8043													SSP SSO	
8068	*02	*31	*07	*27	*01	*07							SSO	
8122							*02:36	*31:01:02	*07:02:01	*27:05:02	*01:02:01	*07:02:01	NGS	

## CELL EXCHANGE #420

The results for Cell Exchange #420 are summarized in Table 7 - 11. Molecular typing results for individual laboratories are listed in Tables 12 – 19 for each sample and individual serological results for each sample are listed in Table 20. Thirteen labs submitted low and/or high resolution class II results

for this study. We would like to thank each of them for sharing their results and encourage other labs to do so as well so that the class II assignment can be graded. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Cell 1677.** The reported class I type for this cell from a Black donor is A\*01:01(A1)-A\*23:01(A23)-B\*42:01(B42)-B\*50:01(B50)-C\*06:02-C\*17:01. Likely associations present are A\*01:01-B\*50:01-C\*06:02 and A\*23:01-B\*42:01-C\*17:01, with respective HF = 0.00042 and 0.00489, in African American populations.

This cell was previously examined as cell 1586 (2017). In this present retyping, good agreement was achieved once again in class I allele assignments, with each reported by 100% of labs. For class II, DRB1\*03:02, DRB1\*07:01, DPB1\*01:01, and DPB1\*04:02 were each assigned by 8 labs. DRB4\*01:03 was assigned by 5 labs. No agreement was achieved for the DRB3\*01 subtype, as 2 labs assigned DRB3\*01:62, 2 labs assigned DRB3\*01:01, and lab assigned DRB3\*01:01P. DQB1\*02:02 and DQB1\*04:02 were each reported by 7 labs.

**Cell 1678.** The reported class I type for this cell from a Korean donor is A\*02:01(A2)-A\*26:02(A26)-B\*15:01(B62)-B\*44:03(B44)-C\*03:03-C\*14:03. One likely association present is A\*26:02-B\*15:01-C\*03:03, observed in Asian populations, with HF = 0.00138. The other likely association present is A\*02:01-B\*44:03-C\*14:03, with HF = 0.00006, in Caucasians.

Good agreement (> 90%) was achieved among labs in the reporting of class I allele assignments. For class II, DRB1 and DPB1 high resolution results were reported by 7 labs. All 7 reported DRB1\*08:03, DRB1\*13:02, DPB1\*02:01, and DPB1\*02:02. The DQB1 types were reported as DQB1\*06:01 and DQB1\*06:04 by 6 labs.

**Cell 1679.** The reported class I type for this cell from a Hispanic donor is A\*02:01(A2)-A\*24:02(A24)-B\*35:12(B35)-B\*35:28-C\*04:01. One likely class I association present is A\*02:01-B\*35:12-C\*04:01, observed commonly in Hispanics with HF = 0.01017. The other likely association present is A\*24:02-B\*35:28-C\*04:01, with HF = 0.00021, in African Americans. This is the first B\*35:28 cell examined in the Cell Exchange.

Good agreement was achieved among labs in the reporting of class I allele assignments, with 100% of labs reporting each. For class II, DRB1\*08:02 and DPB1\*04:02 were each assigned by 6 labs, while DQB1\*04:02 was assigned by 5 labs. This cell was reported as homozygous for class II.

**Cell 1680.** The reported class I type for this cell from a donor of mixed ethnicity (Black/Hispanic) is A\*03:01(A3)-A\*69:01(A69)-B\*35:01(B35)-B\*55:01(B55)-C\*01:02-C\*04:01. Likely class I associations presents in this cell are A\*03:01-B\*35:01-C\*04:01 and A\*69:01-B\*55:01-C\*01:02, with respective HF = 0.01009 and 0.00253 in Hispanics.

Good agreement (> 90%) was achieved among labs in the reporting of class I allele assignments. For class II, high resolution DRB1 and DPB1 typing results were reported by 6 labs, with each assigning DRB1\*03:02, DRB1\*13:02, DPB1\*01:01, and DPB1\*03:01. The DQB1 types were reported as DQB1\*04:02 and DQB1\*06:04 by 5 labs.



**Table 8: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1678**

DNA Typing - class I		<b>10 labs High; 15 labs low- A</b>		<b>11 labs High; 15 labs low- B</b>		<b>11 labs High; 14 labs low- C</b>							
			%(n)		%(n)		%(n)						
	A*02:01:01:01	10(1)		B*15:01:01:01	18(2)	C*03:03:01:09	9 (1)						
	A*02:01:01	20(2)		B*15:01:01	9 (1)	C*03:03:01	18(2)						
	A*02:01	70(7)		B*15:01P	9 (1)	C*03:03	73(8)						
	A*02	100(15)		B*15:01	64(7)	C*03(Cw9)	7 (1)						
				B*15(B62)	6 (1)	C*03	86(12)						
				B*15	87(13)	C*04	7 (1)						
				B*35	6 (1)								
DNA Typing - class I		<b>10 labs High; 15 labs low- A</b>		<b>10 labs High; 15 labs low- B</b>		<b>10 labs High; 14 labs low- C</b>							
			%(n)		%(n)		%(n)						
	A*26:02:01	30(3)		B*44:03:01	30(3)	C*14:03:01:01	10(1)						
	A*26:02	70(7)		B*44:03	70(7)	C*14:03	90(9)						
	A*26	93(14)		B*44	93(14)	C*14	93(13)						
	A*24	7 (1)		B*35	7 (1)	C*04	7 (1)						
DNA Typing - class II		<b>8 labs High; 10 labs low-DRB1</b>		<b>5 labs High; 6 labs low-DRB3/4/5</b>		<b>3 labs High; 8 labs Low-DQA1</b>		<b>7 labs High; 9 labs Low-DQB1</b>		<b>4 labs High; 7 labs Low-DPA1</b>		<b>8 labs High; 7 labs Low-DPB1</b>	
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*08:03:02	38(3)		DRB3*03:01:01	40(2)	DQA1*01:02:01	67(2)	DQB1*06:01:01	29(2)	DPA1*01:03:01	50(2)	DPB1*02:01:02	38(3)
	DRB1*08:03	62(5)		DRB3*03:01	60(3)	DQA1*01:02	33(1)	DQB1*06:01	71(5)	DPA1*01:03	50(2)	DPB1*02:01G	12(1)
	DRB1*08	100(10)		DRB3*03	83(5)	DQA1*01	88(7)	DQB1*06	89(8)	DPA1*01	100(7)	DPB1*02:01	50(4)
				DRB3*PRESENT	17(1)	DQA1*04	12(1)	DQB1*04	11(1)			DPB1*02(DP201)	57(4)
												DPB1*02	43(3)
DNA Typing - class II		<b>8 labs High; 10 labs low-DRB1</b>		<b>3 labs High; 8 labs Low-DQA1</b>		<b>7 labs High; 9 labs Low-DQB1</b>		<b>4 labs High; 7 labs Low-DPA1</b>		<b>8 labs High; 7 labs Low-DPB1</b>			
			%(n)		%(n)		%(n)		%(n)		%(n)		
	DRB1*13:02:01	38(3)		DQA1*01:03:01	67(2)	DQB1*06:04:01	29(2)	DPA1*02:02:02	50(2)	DPB1*02:02:01	38(3)		
	DRB1*13:02	62(5)		DQA1*01:03	33(1)	DQB1*06:04	71(5)	DPA1*02:02	50(2)	DPB1*02:02G	12(1)		
	DRB1*13	90(9)		DQA1*01	88(7)	DQB1*06	89(8)	DPA1*02	86(6)	DPB1*02:02	50(4)		
	DRB1*08	10(1)		DQA1*04	12(1)	DQB1*04	11(1)	DPA1*01	14(1)	DPB1*02(DP202)	57(4)		
										DPB1*02	29(2)		
										DPB1*04	14(1)		



**Table 10: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1680**

DNA Typing - class I	<u>8 labs High; 12 labs low- A</u>		<u>8 labs High; 12 labs low- B</u>		<u>8 labs High; 11 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*03:01:01:07	12(1)	B*35:01:01	25(2)	C*01:02:01:01	12(1)
	A*03:01:01	12(1)	B*35:01	75(6)	C*01:02:01	12(1)
	A*03:01	75(6)	B*35	100(12)	C*01:02	75(6)
A*03	100(12)			C*01	100(11)	
<u>8 labs High; 12 labs low- A</u>		<u>8 labs High; 12 labs low- B</u>		<u>8 labs High; 11 labs low- C</u>		
	%(n)		%(n)		%(n)	
A*69:01:01:01	25(2)	B*55:01:01:01	12(1)	C*04:01:01:14	12(1)	
A*69:01	75(6)	B*55:01:01	12(1)	C*04:01:01	12(1)	
A*69	100(12)	B*55:01	75(6)	C*04:01	75(6)	
		B*55	100(12)	C*04	100(11)	

DNA Typing - class II	<u>6 labs High; 8 labs low-DRB1</u>		<u>3 labs High; 4 labs low-DRB3/4/5</u>		<u>2 labs High; 7 labs Low-DQA1</u>		<u>5 labs High; 7 labs Low-DQB1</u>		<u>2 labs High; 5 labs Low-DPA1</u>		<u>6 labs High; 5 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*03:02:01	33(2)	DRB3*01:62:01	33(1)	DQA1*01:02:01	50(1)	DQB1*04:02:01	20(1)	DPA1*01:03:01	50(1)	DPB1*01:01:01	17(1)
	DRB1*03:02	67(4)	DRB3*01:01P	33(1)	DQA1*01:02	50(1)	DQB1*04:02	80(4)	DPA1*01:03	50(1)	DPB1*01:01G	17(1)
	DRB1*03(DR18)	12(1)	DRB3*01:01	33(1)	DQA1*01	86(6)	DQB1*04	100(7)	DPA1*01	100(5)	DPB1*01:01P	17(1)
DRB1*03	88(7)	DRB3*01	100(4)	DQA1*02	14(1)					DPB1*01:01	50(3)	
										DPB1*01	100(5)	
<u>6 labs High; 8 labs low-DRB1</u>		<u>3 labs High; 4 labs low-DRB3/4/5</u>		<u>2 labs High; 7 labs Low-DQA1</u>		<u>5 labs High; 7 labs Low-DQB1</u>		<u>2 labs High; 5 labs Low-DPA1</u>		<u>6 labs High; 5 labs Low-DPB1</u>		
	%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DRB1*13:02:01	33(2)	DRB3*03:01:01	33(1)	DQA1*04:01:01	50(1)	DQB1*06:04:01	20(1)	DPA1*02:02:02	50(1)	DPB1*03:01:01	17(1)	
DRB1*13:02	68(4)	DRB3*03:01	67(2)	DQA1*04:01	50(1)	DQB1*06:04	80(4)	DPA1*02:02	50(1)	DPB1*03:01G	33(2)	
DRB1*13	88(7)	DRB3*03	100(4)	DQA1*04	86(6)	DQB1*06	86(6)	DPA1*02	100(5)	DPB1*03:01P	17(1)	
DRB1*07	12(1)			DQA1*02	14(1)	DQB1*02	14(1)			DPB1*03:01	33(2)	
										DPB1*03	80(4)	
										DPB1*04	20(1)	

**Table 11. Summary of the 420<sup>th</sup> Cell Exchange (Cell #1677- 1680)**

Serological typing							
(Black) <b>Cell 1677</b> (9 Samples Typed)		(Korean) <b>Cell 1678</b> (9 Samples Typed)		(Hispanic) <b>Cell 1679</b> (7 Samples Typed)		(Mixed) <b>Cell 1680</b> (7 Samples Typed)	
A1	100.0%	A2	100.0%	A2	100.0%	A3	85.7%
	[100.0%]		[100.0%]		[100.0%]		
A23	100.0%	A26	100.0%	A24	85.7%	A69	71.4%
	[100.0%]		[100.0%]	A9	14.3%		[71.4%]
					[100.0%]		
B42	88.9%	B62	100.0%	B35	100.0%	B35	100.0%
			[100.0%]				
B50	100.0%	B44	100.0%	Cw4	28.6%	B55	71.4%
	[100.0%]		[100.0%]		[28.6%]		[71.4%]
						Cw1	28.6%
Cw6	33.3%	CW3	22.20%	Bw6	85.7%	Cw4	14.3%
	[33.3%]		[22.2%]				[14.3%]
Cw17	11.1%	Bw4	88.9%			Bw6	71.4%
Bw6	88.9%	Bw6	88.9%				
Others Found		Others Found		Others Found		Others Found	
Bw4	33.3%	Cw6	11.1%	B70	28.6%	B70	14.3%
Cw7	11.1%					A26	14.3%
B7	11.1%					A66	14.3%
B55	11.1%					Cw3	14.3%
						A74	14.3%
						Cw5	14.3%

**Table 12. Individual laboratory results for Cell #1677 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSP SSO	
725	*01	*23	*42	*50	*06	*17							SSO	
745							*01:01:01	*23:01:01:01	*42:01:01	*50:01:01	*06:02:01:02	*17:01:01:02	SSP SBT NGS	
747	*01	*23	*42	*50	*06	*17	*01:01:01	*23:01:01	*42:01:01	*50:01:01	*06:02:01	*17:01:01	SSP SSO NGS	
762							*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	NGS	
771	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSO NGS	
774	*01	*23	*42	*50	*06	*17							SSP SSO	
3186	*01	*23	*42	*50	*06	*17								
3545	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSO SBT	C*17:02 C*17:03
3808	*01	*23	*42	*50	*06	*17								
4079	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSP NGS	
4251							*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	NGS	
5133							*01:01:01:01	*23:01:01:01	*42:01:01	*50:01:01	*06:02:01:02	*17:01:01:02	NGS	
5214	*01	*23	*42	*50	*06	*17								
5462	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01P	SSO NGS	C*17:51 C*17:43
5642	*01	*23	*42	*50	*06	*17							SSP	
6649	*01	*23	*42	*50									SSO	
8001	*01	*23	*42	*50	*06	*17							SSP SSO	
8103	*03	*69	*35	*55	*01	*04							SSO	



**Table 13a: Individual laboratory results for Cell #1677 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*03	*07	3*PRESENT	4*PRESENT	*02	*04	*02	*04	*01	*02	*01	*04	SSP SSO NGS	
771	*03	*07			*02	*04	*02	*04			*01	*04	SSO NGS	
3186	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
3545	*03	*07											SSO SBT	
3808	*03	*07	NT	NT	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
4079	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)	SSP NGS	
5214	*03(DR18)	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
5462	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	NT	NT	SSO NGS	
8001	*03	*07	3*01	4*01	*02	*04	*02	*04					SSP SSO	
8103	*03	*13			*01	*01	*06	*04	*01	*02	*01	*03	SSO	

**Table 13b: Individual laboratory results for Cell #1677 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*03:02:01	*07:01:01:01					*02:02	*04:02			*01:01:02	*04:02:01:02	SSP SBT NGS	DQB1*02:156
747	*03:02:01	*07:01:01	3*01:62	4*01:03:01	*02:01:01	*04:01:01	*02:02	*04:02:01	*01:03:01	02:01:01	*01:01:02	*04:02:01	SSP SSO NGS	DQB1*02:156 DQB1*02:163N
771	*03:02	*07:01					*02:02	*04:02			*01:01	*04:02	SSO NGS	
3545	*03:02	*07:01											SSO SBT	
4079	*03:02	*07:01	3*01:01	4*01:03	*02:01	*04:01	*02:02	*04:02	*01:03	02:01	*01:01	*04:02	SSP NGS	
5133	*03:02:01	*07:01:01	3*01:62:01	4*01:03:01	*02:01:01	*04:01:01	*02:02:01	*04:02:01	*01:03:01	02:01:01	*01:01:02	*04:02:01	NGS	
5214											*01:01G	*04:02G		
5462	*03:02	*07:01	3*01:01P	4*01:03	*02:01	*04:01	*02:02	*04:02	*01:03	02:01	*01:01	*04:02	SSO NGS	DRB3*01:62
8001	*03:02	*07:01	3*01:01	4*01:03			*02:02	*04:02			*01:01	*04:02	SSP SSO	

**Table 14. Individual laboratory results for Cell #1678 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSP SSO	
725	*02	*26	*15	*44	*03	*14							SSO	
745							*02:01:01	*26:02:01	*15:01:01:01	*44:03:01	*03:03:01	*14:03	SSP SBT NGS	DQB1*06:285 DQB1*06:307 DQB1*06:309
747	*02	*26	*15	*44	*03	*14	*02:01:01	*26:02:01	*15:01:01	*44:03:01	*03:03:01	*14:03	SSP SSO NGS	DQB1*06:01:15
762							*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	NGS	
771	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSO NGS	
774	*02	*26	*15	*44	*03	*14							SSP SSO	
3186	*02	*26	*15	*44	*03	*14								
3545	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSO SBT	
3808	*02	*26	*15	*44	*03	*14								
4079	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSP NGS	
4251							*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	NGS	
5133							*02:01:01:01	*26:02:01	*15:01:01:01	*44:03:01	*03:03:01:09	*14:03:01:01	NGS	
5214	*02	*26	*15(B62)	*44	*03(Cw9)	*14								
5462	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01P	*44:03	*03:03	*14:03	SSO NGS	
5642	*02	*26	*15	*44	*03	*14							SSP	
6649	*02	*26	*15	*44									SSO	
8001	*02	*26	*15	*44	*03	*14			*15:01		*03:03		SSP SSO	
8103	*02	*24	*35	*35	*04	*04							SSO	

**Table 15a: Individual laboratory results for Cell #1678 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*08	*13	3*PRESENT		*01	*01	*06	*06	*01	*02	*02	*02	SSP SSO NGS	
771	*08	*13			*01		*06	*06			*02	*02	SSO NGS	
3186	*08	*13	3*03	NP	*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
3545	*08	*13												SSO SBT
3808	*08	*13	NT	NT	*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
4079	*08	*13	3*03				*06	*06	*01	*02	*02(DP201)	*02(DP202)	SSP NGS	
5214	*08	*13	3*03		*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
5462	*08	*13	3*03	NP	*01	*01	*06	*06	*01	*02	NT	NT	SSO NGS	
8001	*08	*13	3*03		*01	*01	*06	*06					SSP SSO	
8103	*08	*08			*04	*04	*04	*04	*01	*01	*04	*04	SSO	

**Table 15b: Individual laboratory results for Cell #1678 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*08:03:02	*13:02:01					*06:01	*06:04			*02:01:02	*02:02:01	SSP SBT NGS	DQB1*06:285
747	*08:03:02	*13:02:01	3*03:01:01		*01:02:01	*01:03:01	*06:01:01	*06:04:01	*01:03:01	*02:02:02	*02:01:02	*02:02:01	SSP SSO NGS	DQB1*06:307
771	*08:03	*13:02					*06:01	*06:04			*02:01	*02:02	SSO NGS	DQB1*06:309
3545	*08:03	*13:02											SSO SBT	
4079	*08:03	*13:02	3*03:01				*06:01	*06:04	*01:03	*02:02	*02:01	*02:02	SSP NGS	
5133	*08:03:02	*13:02:01	3*03:01:01		*01:02:01	*01:03:01	*06:01:01	*06:04:01	*01:03:01	*02:02:02	*02:01:02	*02:02:01	NGS	
5214											*02:01G	*02:02G		
5462	*08:03	*13:02	3*03:01	NP	*01:02	*01:03	*06:01	*06:04	*01:03	*02:02	*02:01	*02:02	SSO NGS	
8001	*08:03	*13:02	3*03:01				*06:01	*06:04			*02:01	*02:02	SSP SSO	

**Table 16. Individual laboratory results for Cell #1679 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*24	*35	*35	*04	*04	*02:01	*24:02	*35:12	*35:28	*04:01	04:01	SSP SSO	
725	*02	*24	*35		*04								SSO	
745							*02:01:01	*24:02:01	*35:12:01	*35:28	*04:01:01	04:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*02:01	*24:02	*35:12	*35:28	*04:01		NGS	
771	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO NGS	
774	*02	*24	*35	*35	*04				*35:12	*35:28			SSP SSO	B*35:149 B*35:201
3186	*02	*24	*35	*35	*04	*04								
3545	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO SBT	
3808	*02	*24	*35	*35	*04	*04								
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*02	*24	*35	*35	*04									
4251							*02:01	*24:02	*35:12	*35:28	*04:01	04:01	NGS	
5133							*02:01:01:01	*24:02:01:01	*35:12:01:01	*35:28:01:01	*04:01:01		NGS	
5462	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO NGS	
5642	*02	*24	*35	*35	*04	*04							SSP	
6649	*02	*24	*35										SSO	
8001	*02	*24	*35	*35	*04								SSP SSO	
8103	*02	*26	*15	*44	*03	*14							SSO	

**Table 17a: Individual laboratory results for Cell #1679 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*08				*04		*04					*04	SSO NGS	
3186	*08	*08	NP	NP	*04	*04	*04	*04	*01	*01	*04(DP402)	*04(DP402)		
3545	*08												SSO SBT	
3808	*08	*08	NT	NT	*04	*04	*04	*04	*01	*01	*04(DP402)	*04(DP402)		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*08				*04		*04		*01		*04(DP402)			
5462	*08		NP		*04		*04		*01		NT		SSO NGS	
8001	*08				*04		*04						SSP SSO	
8103	*08	*13			*01	*01	*06	*06	*01	*02	*02	*02	SSO	

**Table 17b: Individual laboratory results for Cell #1679 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*08:02:01	*08:02:01					*04:02	*04:02			*04:02:01:02	*04:02:01:02	SSP SBT NGS	
747	NT												SSP SSO NGS	
771	*08:02						*04:02				*04:02		SSO NGS	
3545	*08:02												SSO SBT	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5133	*08:02:01				*04:01:01		*04:02:01		*01:03:01		*04:02:01		NGS	
5214											*04:02G			
5462	*08:02		NP		*04:01		*04:02		*01:03		*04:02		SSO NGS	
8001	*08:02						*04:02				*04:02		SSP SSO	

**Table 18. Individual laboratory results for Cell #1680 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSP SSO	
725	*03	*69	*35	*55	*01	*04							SSO	
745							*03:01:01	*69:01:01:01	*35:01:01	*55:01:01	*01:02:01	*04:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	NGS	
771	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO NGS	
774	*03	*69	*35	*55	*01	*04							SSP SSO	
3186	*03	*69	*35	*55	*01	*04								
3545	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO SBT	
3808	*03	*69	*35	*55	*01	*04								
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	NGS	
5133							*03:01:01:07	*69:01:01:01	*35:01:01	*55:01:01:01	*01:02:01:01	*04:01:01:14	NGS	
5214	*03	*69	*35	*55	*01	*04								
5462	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO NGS	
5642	*03	*69	*35	*55	*01	*04							SSP	
6649	*03	*69	*35	*55									SSO	
8001	*03	*69	*35	*55	*01	*04							SSP SSO	
8103	NT												SSO	

**Table 19a: Individual laboratory results for Cell #1680 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*03	*13			*01	*04	*04	*06			*01	*03	SSO NGS	
3186	*03	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	*01	*03		
3545	*03	*13											SSO SBT	
3808	*03	*13	NT	NT	*01	*04	*04	*06	*01	*02	*01	*03		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*03(DR18)	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	*01	*03		
5462	*03	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	NT	NT	SSO NGS	
6649													SSO	
8001	*03	*13	3*01	3*03	*01	*04	*04	*06					SSP SSO	
8103	*03	*07			*02	*04	*04	*02	*01	*02	*01	*04	SSO	

**Table 19b: Individual laboratory results for Cell #1680 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*03:02:01	*13:02:01					*04:02	*06:04			*01:01	*03:01	SSP SBT NGS	DPB1*417:01 DPB1*1049:01
747	NT												SSP SSO NGS	
771	*03:02	*13:02					*04:02	*06:04			*01:01	*03:01	SSO NGS	
3545	*03:02	*13:02											SSO SBT	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5133	*03:02:01	*13:02:01	3*01:62:01	3*03:01:01	*01:02:01	*04:01:01	*04:02:01	*06:04:01	*01:03:01	*02:02:02	*01:01:01	*03:01:01	NGS	DPB1*1049:01 DPB1*417:01
5214											*01:01G	*03:01G		
5462	*03:02	*13:02	3*01:01P	3*03:01	*01:02	*04:01	*04:02	*06:04	*01:03	*02:02	*01:01P	*03:01P	SSO NGS	DPB1*1049:01 DPB1*417:01 DRB3*01:62
8001	*03:02	*13:02	3*01:01	3*03:01			*04:02	*06:04			*01:01	*03:01:01G	SSP SSO	





## SERUM EXCHANGE #578

The results for Serum Exchange #578 are summarized in Tables 21 - 28 and individual listing of results are shown in tables 29 - 39. Strong anti-A2, -

B35, and -DQ3 (DQ7, DQ8, DQ9) reactivity was examined in this study.

1305	method	#labs	B35	B51	B53	B77	B78	A23	A24	A2403	B18	B38	B39	B3901	B49	B50	B52	B54	B56	B57	B58	B62	B71	B72	B59	B44	B45	
class I	NIH-Std	1	no consensus																									
	AHG	1	no consensus																									
	Flow	1	no specificities assigned																									
	C1q	2	100%	100%	100%	50%	50%																					
	PRA	3	80%	80%	80%	80%	80%	40%	60%		80%	80%	80%		80%	80%	80%	80%	80%	80%	60%	80%	80%	80%	80%	80%	80%	
	SAB	24	100%	100%	100%	100%	95%	100%	100%	29%	100%	100%	76%	19%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	90%	86%	
1305	method	#labs	B55	B27	B2705	B37	B63	B75	B76	B46	A25	A26	A34	A32	A80	A29	A33	A68	B13	B47	A11	A1101	A1102	A3	A43	A31	B48	
	PRA	3	80%	80%		60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	40%			40%	40%	40%	60%
	SAB	24	90%	81%	14%	100%	100%	100%	100%	86%	100%	71%	71%	100%	86%	76%	76%	71%	71%	67%	67%	10%	10%	62%	62%	57%	57%	
1305	method	#labs	B64	B67	A66	A6601	B65	B8	Cw15	A30	Cw12	Cw5	Cw14	Cw18	Cw16	Cw6	Cw8	Bw4	Cw1	Cw7	Cw4	A1	B7801	B5C	A10C	A1C	A2C	
	PRA	3	40%	20%	60%		40%	60%	40%	40%	20%	40%	20%	20%	20%	20%	20%											
	SAB	24	57%	57%	52%	33%	52%	52%	48%	43%	33%	33%	24%	19%	14%	14%	14%	48%	52%	19%	14%	29%	19%	14%	10%	10%	10%	
1305	method	#labs	DR103	DR1	DR15	DR16	DR51	DR9	DR4	DQ6	DR14	DQ5	DQA1*01	DR2														
class II	Flow	1	no specificities assigned																									
	C1q	1	no consensus																									
	PRA	5	80%	60%	80%	80%	80%	80%	40%	20%	40%	20%																
	SAB	19	100%	100%	100%	100%	100%	100%	68%	58%	53%	37%	16%	5%														

**Serum 1305.** Strong anti-B35 (16776) and -B53 (17055) reactivity was detected in this serum by all methods, except Flow. In addition, strong reactivity to other 5C specificities, including B51 (16237), B77 (11905), and B78 (14099), was also reported by various methods. Labs reporting by PRA and SAB also detected reactivity to B44, B45, as well as reactivity to a number of 7C, 8C,

10C, and C-locus specificities.

Anti-DR51 (11688) reactivity was detected in the sample by C1q, PRA, and SAB labs. Additionally, good agreement (100%) was achieved among SAB labs in the reporting of other DR specificities, including DR1 (2576), DR103 (2623), DR15 (11023), DR16 (6024), and DR9 (2813).

\*(median MFI)

1306	method	#labs	A2	A68	A69	B62	B75	B57	Cw15	Cw18	Cw2	Cw5	Cw6	B58	B35	B45	B46	B49	B50	B53	B56	B63	B71	B72	B76	B77
class I	NIH-Std	1	no consensus																							
	AHG	1	no consensus																							
	Flow	1	no specificities assigned																							
	C1q	2	100%	50%	100%	50%	50%	50%	50%	50%	50%	50%	50%													
	PRA	3	80%	60%	80%	80%	80%	80%	60%	60%	60%	60%	60%	80%	80%	80%	60%	60%	60%	80%	60%	60%	60%	80%	60%	80%
	SAB	24	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	76%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1306	method	#labs	Cw4	Cw17	A3	A74	B13	B51	B52	B78	B7801	B55	A24	A2403	A23	A32	B44	A29	A11	A1102	B67	Cw12	A31	B27	B2708	Cw10
	PRA	3	60%	60%	40%	40%	60%	80%	80%	80%		60%	40%		40%		40%	40%	40%		40%	40%		40%		40%
	SAB	24	100%	100%	90%	90%	90%	90%	90%	86%	14%	90%	86%	24%	57%	86%	86%	76%	76%	19%	67%	62%	57%	57%	19%	57%
1306	method	#labs	Cw10	Cw9	A34	B38	B64	A30	A33	B54	A203	A66	A6602	B39	B42	B59	A25	A43	B18	B41	B47	B61	Bw4	Cw403	A2C	B37
	PRA	3	40%	20%	40%	20%	40%	40%	40%	20%		40%		20%	20%	40%	20%	20%	20%	20%	20%					
	SAB	24	57%	57%	43%	43%	43%	38%	38%	38%	33%	29%	14%	29%	29%	29%	24%	24%	24%	19%	19%	14%	19%	19%	14%	14%

1306	method	#labs	DQ6	DQ8	DQ9	DR4	DR53	DQ5	DR9	DR1	DR7	DR14	DQ7	DR51	DQ2	DR10	DR15	DP19	DQ4	DQ3	DQA1*03	DQA1*01	DQA1*04	DQA1*02	
class II	Flow	1	no specificities assigned																						
	C1q	1	no consensus																						
	PRA	5	80%	80%	80%	60%	80%	80%	60%	80%	60%	40%	20%	20%	20%	40%	20%	20%							
	SAB	19	100%	100%	100%	100%	100%	95%	95%	89%	89%	53%	21%	16%	16%	11%	11%	5%	95%	11%	68%	37%	21%	11%	

**Serum 1306.** For this sample, strong anti-A2 (21998) reactivity was reported by all methods except Flow. In addition, labs reporting by C1q, PRA, and SAB reported reactivity to A68 (15662), A69 (17658), B62 (16181), B75 (13603), B57 (16292), Cw15 (16456), Cw18 (13244), Cw2 (14032), Cw5 (14525), and Cw6 (15130). Additional reactivity to B45, A3, A30, as well a reactivity to a number of 5C, 7C, and 10C specificities was reported by PRA and Luminex.

Strong anti-DR4 (17323), -DQ8 (13371), and -DQ9 (13571) reactivity was reported in this sample by C1q, PRA, and SAB labs. In addition, reactivity to a number of DR and DQ specificities, including anti-DR53 (10442), -DQ7 (10504), DQ5 (4292), and DQ6 (8736) reactivity, was reported by PRA and SAB labs.

1307	method	#labs	NEG	A23	Cw17	Cw6	Cw4	A29	B67	B76	Cw18
class I	NIH-Std	1	NT								
	AHG	2	NT								
	Flow	1	no consensus								
	C1q	2	50%								
	PRA	4	50%	50%	50%	50%	25%	25%			
	SAB	24	53%	41%	24%	18%	18%	5%	5%	5%	5%

1307	method	#labs	DR11	DR13	DR14	DR1403	DR1404	DR17	DR18	DR8	DQ2	DQ6	DR3	DQ1	DQA1*01	DQA1*05	DR5	DR6	
class II	Flow	1	no specificities assigned																
	C1q	1	no consensus																
	PRA	5	80%	80%	80%			80%	80%	80%	20%								
	SAB	19	100%	100%	100%	32%	32%	100%	100%	95%	5%	26%	11%	5%	5%	5%	5%	5%	

**Serum 1307.** This sample was reported as negative for class I by 53% of SAB labs, 50% of PRA labs, 1 C1q lab and 1 Flow lab. A few others reporting by PRA and SAB reported the presence of weak class I antibodies, including anti-A23 (2300) and -Cw17 (2802) reactivity. As consensus among SAB labs was < 90%, this sample was not graded for class I.

Weak class II reactivity was reported for this sample, with SAB and PRA labs reporting reactivity to a number of DR and DQ specificities, including DR11 (4168), DR13 (4096), DR14 (3960), DR17 (2991), DR18 (2252), and DR8 (3040). One lab reporting by C1q reported this sample as negative for class II.

1308	method	#labs	NEG	B27	B2705	B2708	B52	B13	B59	B38	B8	B44	B47	B7C	A24	B49	B77
class I	NIH-Std	1	NT														
	AHG	2	NT														
	Flow	1	no specificities assigned														
	C1q	2	50%														
	PRA	3	25%	50%			50%	25%	25%	25%					25%	25%	25%
	SAB	24	19%	81%	19%	5%	19%	14%	10%	14%	10%	5%	5%	5%			

1308	method	#labs	DQ7	DQ8	DQ9	DR1	DR10	DR103	DR14	DR1404	DR4	DR51	DR53	DR9	DR15	DR16
class II	Flow	1	no specificities assigned													
	C1q	1	no consensus													
	PRA	5	80%	80%	80%	80%	80%	80%	60%		80%	80%	80%	80%	80%	80%
	SAB	19	100%	100%	100%	100%	100%	100%	100%	32%	100%	100%	100%	100%	100%	74%
1308	method	#labs	DR7	DQ4	DQ2	DPA1*03	DQA1*03	DQA1*02	DQA1*06	DQA1*05	DQ3	DQ5	DQA1*04	DR2	DR6	
class II	Flow	1														
	C1q	1														
	PRA	5	80%	20%	20%	20%						20%				
	SAB	19	89%	42%	37%	5%	79%	42%	32%	26%	11%		5%	5%	5%	

**Serum 1308.** Weak anti-B27 (3464) reactivity was reported by 50% of PRA labs and 81% of SAB labs. The remaining labs reported this sample as negative for class I, along with 1 lab reporting by C1q. This sample was not graded for class I as consensus among SAB labs was < 90%.

By contrast, strong class II reactivity was reported for this sample. C1q, PRA, and SAB each reported reactivity to DQ7 (8819), DQ8 (11335), DQ9

(11433), DR1 (12244), DR10 (12505), DR4 (16015), DR51 (9565), DR53 (21603), and DR9 (7216). Additional reactivity to other DR and DQ specificities was also reported by PRA and SAB. In addition, strong reactivity to DQA1\*02 (14334), DQA1\*03 (11574), DQA1\*05 (10155), and DQA1\*06 (11547) was also reported by SAB labs.

## SERUM EXCHANGE #579

The results for Serum Exchange #579 are summarized in Tables 40 - 47 and individual listing of results are shown in tables 48 - 61. Strong reactivity

to A2, A3, A10 (A25, A26, A34, A66), as well as reactivity to a number of DR, DQ, and DP specificities, was examined in this study.

1309	method	#labs	A26	A66	A6601	A6602	A25	A34	B55	B60	B61	B7	B703	B13	B27	B2708	B2705	Cw8	Cw5	B81	B8101	B41	B65	B47	A11	
class I	NIH-Std	1	NT																							
	AHG	2	50%	50%				50%	50%	50%	50%	50%		50%	50%						50%		50%	50%	50%	
	Flow	1	no specificities assigned																							
	C1q	2	100%	100%			100%												100%	100%						
	PRA	4	75%	75%			75%	50%	50%	50%	50%	50%		50%	50%				50%	50%	50%		50%	50%	75%	
	SAB	21	100%	95%	19%	19%	100%	100%	100%	100%	100%	100%	24%	100%	95%	33%	19%	100%	95%	90%	19%	86%	71%	100%	95%	
1309	method	#labs	A1101	A1102	A1	A2	A203	A36	A43	A69	A80	B67	B42	B73	A68	B54	B48	B46	A33	B18	B38	B39	B3901	B64	B8	
	PRA	4			50%	75%		50%	50%	75%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%			50%	
	SAB	21	19%	19%	100%	100%	29%	100%	100%	100%	100%	95%	90%	86%	81%	81%	76%	71%	67%	67%	67%	67%	10%	86%	67%	
1309	method	#labs	Cw1	Cw10	A29	B59	Cw9	Cw14	Cw16	B45	Cw17	Cw12	B37	A32	B50	B56	B78	Cw6	A10C	A74	B40	B51	B71	B7C	B82	Cw18
	PRA	4	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%			50%				50%	
	SAB	21	67%	67%	57%	52%	67%	52%	52%	48%	48%	43%	33%	14%	14%	14%	14%	14%	10%	10%	10%	10%	10%	10%	10%	10%
1309	method	#labs	DR9	DQ5	DQ6	DR1	DR103	DR10	DR11	DR12	DR13	DR14	DR17	DR18	DR3	DR4	DR51	DR52	DR53	DR7	DR8					
class II	Flow	1	no specificities assigned																							
	C1q	2	100%	50%	50%																					
	PRA	4	75%	75%	75%	50%	50%	75%	75%	50%	75%	75%	75%	75%		50%	50%	50%	75%	50%	75%					
	SAB	19	100%	100%	100%	100%	95%	100%	100%	100%	100%	100%	100%	100%	11%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1309	method	#labs	DQ8	DQ7	DQ9	DQ3	DQA1*03	DQA1*01	DQ4	DR1403	DR1404	DQA1*05	DQA1*06	DP14	DP17	DP20	DP9	DPw2	DPw3	DPw6	DQ2	Dpw4				
	PRA	4	50%	50%	50%		25%	25%	25%			25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%		
	SAB	19	95%	89%	89%	11%	63%	53%	37%	26%	26%	21%	16%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%		

**Serum 1309.** For this sample, strong anti-A25 (15067), -A26 (14968), and -A66 (10052) reactivity was reported by antiglobulin, C1q, PRA, and SAB labs. Additional reactivity to A34 (6730), B65 (2500), A11 (6251), as well as reactivity to a number of 7C specificities was reported by various methods. PRA and SAB labs also reported reactivity to a number of C-locus, 5C, and 10C specificities.

Class II reactivity was reported in this sample, with C1q, PRA, and SAB each reporting strong reactivity to DR9 (17029), DQ5 (12578), and DQ6 (13886). Additional reactivity to other DR and DQ specificities, including DR13 (11587), DR14 (11224), DR17 (9359), DR18 (8733), and DR53 (16906), was reported by PRA and SAB labs.

\*(median MFI)

1310	method	#labs	A25	A26	A34	A66	A6601	A6602	A43	B57	B58	B63	B38	A11	A1101	A1102	A29	B54	B55	A33	A80	B39	B3901	
class I	NIH-Std	1	NT																					
	AHG	2	50%	50%	50%					50%	50%	50%	50%	50%										
	Flow	1	no specificities assigned																					
	C1q	2	100%	100%		100%				50%														
	PRA	4	75%	75%	75%	75%				75%	75%	75%	75%	75%	75%			75%	75%	75%	25%	75%	75%	
	SAB	21	100%	100%	100%	95%	19%	19%	100%	100%	100%	100%	95%	95%	19%	19%	100%	100%	86%	86%	81%	81%	29%	
1310	method	#labs	A36	A68	B67	A1	A69	A31	B56	B41	B42	B73	A74	B59	B8	Cw18	Cw6	Cw7	A3	A30	A10C	B15	B64	B65
	PRA	4	25%	25%	75%	50%	25%	25%	75%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%				25%	25%
	SAB	21	76%	76%	76%	62%	62%	48%	62%	52%	52%	48%	43%	38%	33%	19%	19%	19%	10%	71%	10%	10%		

1310	method	#labs	DPw2	DPw3	DPw6	DP9	DP20	DP18	DP28	DR10	DR11	DR12	DR13	DR14	DR1403	DR1404	
class II	Flow	1	no specificities assigned														
	C1q	2	50%	50%	50%	50%	50%										
	PRA	4	50%	25%	50%	25%	50%	50%	50%	50%	75%	95%	95%	95%			
	SAB	19	95%	95%	95%	89%	63%	95%	95%	95%	95%	95%	95%	95%	32%	32%	
1310	method	#labs	DR17	DR18	DR3	DR52	DR9	DP14	DP17	DR7	DQ6	DPw4	DQ8	DQ9	DQ7	DP10	
	PRA	4	95%	95%		95%	50%	25%	25%	95%	25%	50%	25%	50%	50%	50%	
	SAB	19	95%	95%	11%	95%	95%	89%	89%	89%	84%	79%	68%	68%	68/0%	57%	
1310	method	#labs	DQA1*05	DPA1*01	DPA1*04	DPw1	DQA1*06	DQA1*03	DPA1*02	DPw5	DR103	DR4	DQA1*01	DP402	DR8	DQ2	DR53
	PRA	4	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%				25%	25%
	SAB	19	32%	21%	21%	21%	21%	16%	11%	11%	11%	11%	53%	37%	11%		

**Serum 1310.** Anti-A25 (16018), -A26 (7846), and -A34 (7941) reactivity was reported for this sample by antiglobulin, C1q, PRA, and SAB. Additional reactivity to A66 (11460), B57 (11298), B58 (9364), B63 (9317), B38 (4271), and A11 (5753) was reported by various methods.

Strong reactivity to a number of DP specificities was reported for this

sample by C1q, PRA, and SAB labs, including reactivity to DP2 (16564), DP3 (17277), DP6 (16331), DP9 (16453), and DP20 (18720). Additional reactivity to other DP specificities, as well as reactivity to a number of DR, DQA, and DPA specificities, including strong anti-DR11 (14446), -DR17 (9159), and -DR18 (8248) reactivity, was reported by SAB and Luminex.

1311	method	#abs	A25	A26	A29	A3	A31	A32	A33	A34	A66	A6601	A6602	A11	A1101	A1102	A68	A69	A28	
class I	NIH-Std	1	no consensus																	
	AHG	2	50%	50%	50%	50%	50%	50%	50%	100%	50%			50%			50%		50%	
	Flow	1	no specificities assigned																	
	C1q	3	100%	33%	67%	100%	67%	100%	100%	100%	100%			100%			33%	33%		
	PRA	4	75%	75%	75%	75%	75%	75%	75%	75%	75%			75%			75%	75%		
	SAB	21	100%	100%	100%	100%	100%	100%	100%	100%	95%	24%	24%	95%	19%	19%	100%	100%		

  

1311	method	#abs	A30	A43	A74	A80	B18	A36	A1	Cw12	A24	A2403	A23	Cw17	Cw6	A2	A10C	A1C
	AHG	2														50%		
	PRA	4	75%	50%	75%	50%	50%	50%	50%	50%	50%		50%	50%	50%			
	SAB	21	100%	100%	100%	100%	90%	71%	62%	57%	52%	10%	10%	43%	33%		19%	14%

1311	method	#abs	NEG
class II	Flow	1	no consensus
	C1q	2	100%
	PRA	3	100%
	SAB	14	93%

**Serum 1311.** For this sample, strong anti-A25 (17214), -A3 (21675), -A34 (16253), and -A66 (20766) reactivity was reported by all methods except Flow. Additional reactivity to a number of other 1C and 10C specificities, including strong reactivity to A26 (14136), A29 (18190), A32 (20043), and A33

(18316), was also reported by AHG, C1q, PRA, and SAB.

This sample was reported as negative for class II by Flow, C1q, PRA, and SAB.

1312	method	#labs	A3	A2	A203	A68	A69	A28	A74	A33	A31	B27	B2705	B2708	B60	B61	B7	B703	A34	A66	A6602	Cw7	Cw6	A29	A30	B13
class I	NIH-Std	1	no consensus																							
	AHG	2	50%	50%		50%		50%	50%	50%		50%			50%	50%	50%		50%							
	Flow	1	no specificities assigned																							
	C1q	3	100%	67%		33%			33%	33%	33%									33%		33%	33%			
	PRA	4	75%	75%		75%	75%		75%	75%	75%	50%			75%	50%	75%		50%	50%		50%	50%	75%	75%	50%
	SAB	21	100%	100%	33%	100%	100%		100%	100%	100%	100%	24%	43%	100%	100%	100%	29%	81%	81%	33%	95%	71%	100%	100%	100%

  

1312	method	#labs	B81	B8101	B47	B48	B42	A80	A32	B67	A11	A1101	A36	B55	B73	B56	A25	B8	B82	A24	A2403	A10C	B40	B41	B51	B54	Cw2
	PRA	4	75%		50%	50%	50%	50%	25%	25%	25%		25%	25%	25%	25%	25%	25%	25%	25%				25%	25%	25%	25%
	SAB	21	95%	19%	95%	81%	62%	62%	48%	43%	38%	10%	38%	29%	29%	19%	14%	14%	10%	10%	10%	10%	10%				

1312	method	#labs	DQ2	DR15	DR16	DR7	DR9	DR12	DP11	DP15	DP14	DP17	DP9	DPA1*02	DR51	DPw5	DQA1*02	DP13	DPA1*04							
class II	Flow	1	no specificities assigned																							
	C1q	2	100%	100%	100%	100%																				
	PRA	4	75%	75%	75%	75%	75%	50%	50%	25%	25%	25%	25%	25%	75%	50%	25%	25%								
	SAB	20	100%	100%	100%	100%	100%	100%	95%	84%	74%	74%	74%	74%	63%	58%	58%	47%	47%							

  

1312	method	#labs	DP10	DQ5	DR103	DP19	DP28	DPw1	DQ4	DPw6	DQA1*05	DP18	DPw3	DQ8	DPw4	DQ6	DPw2	DQ7	DQ9
	PRA	4	25%	50%	25%		25%	25%	25%	25%	25%	25%		25%			25%	25%	25%
	SAB	20	42%	37%	37%	32%	32%	26%	26%	21%	21%	16%	16%	16%	11%	11%			

**Serum 1312.** For this sample, strong anti-A3 (22196) reactivity was reported by all methods, except Flow. Additional reactivity to A2 (16140), as well as reactivity to a number of C-locus, 7C, and 10C specificities was reported by various methods.

Strong class II reactivity was also reported for this sample, with C1q,

PRA, and SAB each reporting reactivity to DQ2 (14972), DR15 (21188), DR16 (19201), and DR7 (21412). Additional reactivity to other DR specificities, as well as DP, was also reported by PRA and SAB, including reactivity to DR9 (5430), DR12 (3682), DP11 (8900), and DP15 (6221). Strong anti-DQA1\*05 (26466) reactivity was also reported by some labs.

**NEXT MAILING DATE: March 3, 2021**

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**Table 21. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by NIH-Standard - class I**

Method: NIH-Standard											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			NT			NT		

**Table 22. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by Antiglobulin and Flow Cytometry - class I**

Method: Antiglobulin											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			NT			NT		

Method: Flow Cytometry											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no consensus			no specificities assigned		

**Table 23. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by C1q - class I**

Method: C1q											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B35	100%	100%	A2	100%	100%	NEG	50%	-	NEG	50%	-
B51	100%	100%	A69	100%	100%						
B53	100%	100%	A68	50%	100%						
B77	50%	100%	B57	50%	100%						
B78	50%	100%	B62	50%	100%						
			B75	50%	100%						
			Cw15	50%	100%						
			Cw18	50%	100%						
			Cw2	50%	100%						
			Cw5	50%	100%						
			Cw6	50%	100%						

**Table 24. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by PRA- class I**

Method: Luminex - PRA											
*** Serum 1305 ***			*** Serum 1306 ***			*** Serum 1307 ***			*** Serum 1308 ***		
5 typing Labs			5 typing Labs			4 typing Labs			4 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B18	80%	100%	A2	80%	100%	NEG	50%	100%	B27	50%	100%
B27	80%	100%	A69	80%	100%	A23	50%	100%	B52	50%	100%
B35	80%	100%	B35	80%	100%	Cw17	50%	100%	NEG	25%	100%
B38	80%	100%	B45	80%	100%	Cw6	50%	100%	A24	25%	100%
B39	80%	100%	B51	80%	100%	A29	25%	100%	B13	25%	100%
B44	80%	100%	B52	80%	100%	Cw4	25%	100%	B38	25%	100%
B45	80%	100%	B53	80%	100%				B49	25%	100%
B49	80%	100%	B57	80%	100%				B59	25%	100%
B50	80%	100%	B58	80%	100%				B77	25%	100%
B51	80%	100%	B62	80%	100%						
B52	80%	100%	B72	80%	100%						
B53	80%	100%	B75	80%	100%						
B54	80%	100%	B77	80%	100%						
B55	80%	100%	B78	80%	100%						
B56	80%	100%	A68	60%	100%						
B57	80%	100%	B13	60%	100%						
B59	80%	100%	B46	60%	100%						
B62	80%	100%	B49	60%	100%						
B71	80%	100%	B50	60%	100%						
B72	80%	100%	B55	60%	100%						
B77	80%	100%	B56	60%	100%						
B78	80%	100%	B63	60%	100%						
A24	60%	100%	B71	60%	100%						
A25	60%	100%	B76	60%	100%						
A26	60%	100%	Cw15	60%	100%						
A29	60%	100%	Cw17	60%	100%						
A32	60%	100%	Cw18	60%	100%						
A33	60%	100%	Cw2	60%	100%						
A34	60%	100%	Cw4	60%	100%						
A66	60%	100%	Cw5	60%	100%						
A68	60%	100%	Cw6	60%	100%						
A80	60%	100%	A11	40%	100%						
B13	60%	100%	A23	40%	100%						
B37	60%	100%	A24	40%	100%						
B46	60%	100%	A29	40%	100%						

**Table 24. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by PRA- class I**

Method: Luminex - PRA, cont.					
*** Serum 1305 ***			*** Serum 1306 ***		
5 typing Labs			5 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B47	60%	100%	A3	40%	100%
B48	60%	100%	A30	40%	100%
B58	60%	100%	A31	40%	100%
B63	60%	100%	A32	40%	100%
B75	60%	100%	A33	40%	100%
B76	60%	100%	A34	40%	100%
B8	60%	100%	A66	40%	100%
A11	40%	100%	A74	40%	100%
A23	40%	100%	B27	40%	100%
A3	40%	100%	B44	40%	100%
A30	40%	100%	B59	40%	100%
A31	40%	100%	B64	40%	100%
A43	40%	100%	B67	40%	100%
B64	40%	100%	Cw10	40%	100%
B65	40%	100%	Cw12	40%	100%
Cw5	40%	100%	A25	20%	100%
A36	20%	100%	A43	20%	100%
A74	20%	100%	B18	20%	100%
B67	20%	100%	B38	20%	100%
Cw12	20%	100%	B39	20%	100%
Cw14	20%	100%	B41	20%	100%
Cw15	20%	100%	B42	20%	100%
Cw16	20%	100%	B47	20%	100%
Cw18	20%	100%	B54	20%	100%
Cw6	20%	100%	B60	20%	100%
Cw8	20%	100%	B61	20%	100%
			B7	20%	100%
			Cw9	20%	100%

**Table 25. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by Single Antigen - class I**

Method: Luminex - SAB											
*** Serum 1305 ***			*** Serum 1306 ***			*** Serum 1307 ***			*** Serum 1308 ***		
21 typing Labs			21 typing Labs			17 typing Labs			21 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A23	100%	100%	A2	100%	100%	NEG	53%	-	B27	81%	33%
A24	100%	100%	A68	100%	100%	A23	41%	100%	NEG	19%	-
A25	100%	100%	A69	100%	100%	Cw17	24%	100%	B2705	19%	100%
A32	100%	100%	B35	100%	100%	Cw4	18%	100%	B52	19%	100%
B18	100%	100%	B46	100%	100%	Cw6	18%	100%	B13	14%	100%
B35	100%	100%	B49	100%	100%	A29	5%	100%	B38	14%	100%
B37	100%	100%	B50	100%	100%	B67	5%	100%	B59	10%	100%
B38	100%	100%	B53	100%	100%	B76	5%	100%	B8	10%	100%
B49	100%	100%	B56	100%	100%	Cw18	5%	100%	B2708	5%	100%
B50	100%	100%	B57	100%	100%				B44	5%	100%
B51	100%	100%	B58	100%	100%				B47	5%	100%
B52	100%	100%	B62	100%	100%				B7C	5%	100%
B53	100%	100%	B63	100%	100%						
B54	100%	100%	B71	100%	100%						
B56	100%	100%	B72	100%	100%						
B57	100%	100%	B75	100%	100%						
B58	100%	100%	B76	100%	100%						
B62	100%	100%	B77	100%	100%						
B63	100%	100%	Cw15	100%	100%						
B71	100%	100%	Cw17	100%	100%						
B72	100%	100%	Cw18	100%	100%						
B75	100%	100%	Cw2	100%	100%						
B76	100%	100%	Cw4	100%	100%						
B77	100%	100%	Cw5	100%	100%						
B59	95%	100%	Cw6	100%	100%						
B78	95%	100%	A3	90%	100%						
B44	90%	100%	A74	90%	100%						
B55	90%	100%	B13	90%	100%						
A80	86%	100%	B51	90%	100%						
B45	86%	100%	B52	90%	100%						
B46	86%	67%	B55	90%	100%						
B27	81%	80%	A24	86%	100%						
A29	76%	100%	A32	86%	100%						
A33	76%	100%	B78	86%	100%						
B39	76%	100%	B44	86%	83%						
A26	71%	100%	A29	76%	100%						
A34	71%	100%	B45	76%	100%						

**Table 25. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by Single Antigen - class I**

Method: Luminex - SAB, cont.											
*** Serum 1305 ***			*** Serum 1306 ***			*** Serum 1307 ***			*** Serum 1308 ***		
21 typing Labs			21 typing Labs			21 typing Labs			21 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A68	71%	100%	A11	76%	79%						
B13	71%	60%	B67	67%	100%						
A11	67%	100%	Cw12	62%	100%						
B47	67%	100%	A23	57%	100%						
A3	62%	100%	A31	57%	100%						
A43	62%	100%	B27	57%	100%						
A31	57%	100%	Cw10	57%	100%						
B48	57%	100%	Cw9	57%	100%						
B64	57%	100%	A34	43%	100%						
B67	57%	100%	B38	43%	100%						
A66	52%	100%	B64	43%	100%						
B65	52%	100%	A30	38%	100%						
B8	52%	100%	A33	38%	100%						
Cw1	52%	100%	B54	38%	100%						
Cw15	48%	100%	A203	33%	100%						
Bw4	48%	97%	A66	29%	100%						
A30	43%	100%	B39	29%	100%						
A6601	33%	100%	B42	29%	100%						
Cw12	33%	100%	B59	29%	100%						
Cw5	33%	100%	A2403	24%	100%						
A1	29%	100%	A25	24%	100%						
A2403	29%	100%	A43	24%	100%						
Cw14	24%	100%	B18	24%	100%						
B3901	19%	100%	A1102	19%	100%						
B7801	19%	100%	B2708	19%	100%						
Cw18	19%	100%	B41	19%	100%						
Cw7	19%	100%	B47	19%	100%						
B2705	14%	100%	Bw4	19%	100%						
B5C	14%	100%	Cw403	19%	100%						
Cw16	14%	100%	A2C	14%	100%						
Cw4	14%	100%	A6602	14%	100%						
Cw6	14%	100%	B37	14%	100%						
Cw8	14%	100%	B61	14%	100%						
A10C	10%	100%	B65	14%	100%						
A1101	10%	100%	B7801	14%	100%						
A1102	10%	100%	A26	10%	100%						
A1C	10%	100%	B15	10%	100%						
A2C	10%	100%	B5C	10%	100%						

**Table 26. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by Flow Cytometry and C1q - class II**

Method: Flow Cytometry											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		

Method: C1q											
<b>*** Serum 1305 ***</b>			<b>*** Serum 1306 ***</b>			<b>*** Serum 1307 ***</b>			<b>*** Serum 1308 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		



**Table 27. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by PRA - class II**

Method: Luminex-PRA											
*** Serum 1305 ***			*** Serum 1306 ***			*** Serum 1307 ***			*** Serum 1308 ***		
5 typing Labs			5 typing Labs			5 typing Labs			5 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR103	80%	100%	DQ4	80%	100%	DR11	80%	100%	DQ7	80%	100%
DR15	80%	100%	DQ5	80%	100%	DR13	80%	100%	DQ8	80%	100%
DR16	80%	100%	DQ6	80%	100%	DR14	80%	100%	DQ9	80%	100%
DR51	80%	100%	DQ8	80%	100%	DR17	80%	100%	DR1	80%	100%
DR9	80%	100%	DQ9	80%	100%	DR18	80%	100%	DR10	80%	100%
DR1	60%	100%	DR1	80%	100%	DR8	80%	100%	DR103	80%	100%
DR14	40%	100%	DR53	80%	100%	DQ2	20%	100%	DR15	80%	100%
DR4	40%	100%	DR4	60%	100%				DR16	80%	100%
DQ5	20%	100%	DR7	60%	100%				DR4	80%	100%
DQ6	20%	100%	DR9	60%	100%				DR51	80%	100%
			DR10	40%	100%				DR53	80%	100%
			DR14	40%	100%				DR7	80%	100%
			DP19	20%	100%				DR9	80%	100%
			DQ2	20%	100%				DR14	60%	100%
			DQ7	20%	100%				DQ2	20%	100%
			DR15	20%	100%				DQ4	20%	100%
			DR51	20%	100%				DQ5	20%	100%
									DQA1*03	20%	100%

**Table 28. Summary of the 578<sup>th</sup> Serum Exchange (Serum #1305-1308) by Single Antigen - class II**

Method: Luminex - SAB											
*** Serum 1305 ***			*** Serum 1306 ***			*** Serum 1307 ***			*** Serum 1308 ***		
19 typing Labs			19 typing Labs			19 typing Labs			19 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR1	100%	100%	DQ6	100%	100%	DR11	100%	88%	DQ7	100%	100%
DR15	100%	100%	DQ8	100%	100%	DR13	100%	75%	DQ8	100%	100%
DR16	100%	100%	DQ9	100%	100%	DR14	100%	71%	DQ9	100%	100%
DR51	100%	100%	DR4	100%	100%	DR17	100%	50%	DR1	100%	100%
DR9	100%	100%	DR53	100%	94%	DR18	100%	25%	DR10	100%	100%
DR103	100%	67%	DQ4	95%	91%	DR8	95%	100%	DR103	100%	100%
DR4	68%	100%	DQ5	95%	90%	DR1403	32%	100%	DR14	100%	100%
DQ6	58%	17%	DR9	95%	86%	DR1404	32%	100%	DR15	100%	100%
DR14	53%	100%	DR1	89%	100%	DQ6	26%	100%	DR4	100%	100%
DQ5	37%	100%	DR7	89%	86%	DR3	11%	100%	DR51	100%	100%
DQA1*01	16%	100%	DQA1*03	68%	100%	DQ1	5%	100%	DR53	100%	100%
DR2	5%	100%	DR14	53%	100%	DQA1*01	5%	100%	DR9	100%	100%
			DQA1*01	37%	100%	DQA1*05	5%	100%	DR7	89%	100%
			DQ7	21%	100%	DR5	5%	100%	DQA1*03	79%	100%
			DQA1*04	21%	100%	DR6	5%	100%	DR16	74%	100%
			DR51	16%	100%	DQ2	5%	20%	DQA1*02	42%	100%
			DQ2	16%	20%				DQ4	42%	25%
			DQ3	11%	100%				DQ2	37%	20%
			DQA1*02	11%	100%				DQA1*06	32%	100%
			DR10	11%	100%				DR1404	32%	100%
			DR15	11%	100%				DQA1*05	26%	100%
			DP19	5%	100%				DQ3	11%	100%
			DQ1	5%	100%				DPA1*03	5%	100%
			DQA1*05	5%	100%				DQA1*04	5%	100%
			DQA1*06	5%	100%				DR2	5%	100%
			DR12	5%	100%				DR6	5%	100%

**Table 29. Individual laboratory results for Serum #1305 - #1308 by NIH-Standard - class**

		**** Serum 1305 ****					**** Serum 1306 ****					**** Serum 1307 ****					**** Serum 1308 ****					
Ctr	% POS	B35	B5	B53	Other	% POS	A2			Other	% POS				Other	% POS				Other	Method	
786		+	+	+			+														STD	

STD = NIH-Standard

**Table 30. Individual laboratory results for Serum #1305 - #1308 by Antiglobulin and Flow Cytometry - class I**

**** Serum 1305 ****						**** Serum 1306 ****				**** Serum 1307 ****				**** Serum 1308 ****				
Ctr	% POS	B35	B51	B53	Other	% POS	A2		Other	% POS			Other	% POS			Other	Method
786		+	+	+			+			NT				NT				Antiglobulin

**** Serum 1305 ****						**** Serum 1306 ****				**** Serum 1307 ****				**** Serum 1308 ****				
Ctr	% POS				Other	% POS			Other	% POS			Other	% POS			Other	Method
786	99					99				0				31				FC

FC = Flow cytometry

**Table 31. Individual laboratory results for Serum #1305 - #1308 by C1q - class I**

Ctr	**** Serum 1305 ****							**** Serum 1306 ****								**** Serum 1307 ****				**** Serum 1308 ****				Method				
	% POS	B35	B51	B53	B77	B78	Other	% POS	A2	A69	A68	B57	B62	B75	Cw15	Cw18	Other	% POS				Other	% POS					Other
786	+	+	+					+	+									NT					NT					C1q
2400	+	+	+	+	+			+	+	+	+	+	+	+	+	+	Cw6,Cw2,Cw5	0					0					C1q



**Table 33. Individual laboratory results for Serum #1305 by Luminex SAB - class I**

		**** Serum 1305 ****																																										
Ctr	% POS	A23	A24	A25	A32	B18	B35	B37	B38	B49	B50	B51	B52	B53	B54	B56	B57	B58	B62	B63	B71	B72	B75	B76	B77	B59	B78	B44	B55	A80	B45	B46	B27	A29	A33	B39	A26	A34						
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
774	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
3766	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
3808	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
3966	65	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
5219	34	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6649	70	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8045	52	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8103	24	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

**Table 33. Individual laboratory results for Serum #1305 by Luminex SAB - class I, cont.**

		**** Serum 1305 ****																									
Ctr	% POS	A68	B13	A11	B47	A3	A43	A31	B48	B64	B67	A66	B65	B8	Cw1	Cw15	Bw4	A30	A6601	Cw12	Cw5	A1	A2403	Cw14	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+		+	Cw4,Cw6,B61,B82 >	LMX-SAB
725		+		+	+		+					+															LMX-SAB
774	95		+		+												+										LMX-SAB
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+		+	A36,Cw7,Cw18	LMX-SAB
910		+	+	+	+	+	+	+	+	+	+	+	+	+			+	+					+			B2705	LMX-SAB
2400			+									+															LMX-SAB
3753		+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+								LMX-SAB
3766	99	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+			+				B2705,B7801,A1101,A1102 >	LMX-SAB
3808	35																		+				+			B7801	LMX-SAB
3966	65	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+									LMX-SAB
4322		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+		Cw4,Cw6,Cw2,Cw7 >	LMX-SAB
5214		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+						LMX-SAB
5219	34	+		+	+	+						+					+							+		A9,B15,B70,A10 >	LMX-SAB
6649	70	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+				LMX-SAB
8045	52	+		+		+						+												+		B3901	LMX-SAB
8082		+	+		+	+	+	+	+	+	+		+	+	+	+	+		+	+	+			+		Cw4,Cw6,Cw7,Cw8 >	LMX-SAB
8086	200		+						+						+												LMX-SAB
8098		+	+	+	+	+	+	+		+	+	+	+		+		+	+			+			+	+	B82,Bw6,B12C,B5C >	LMX-SAB
8100		+	+	+		+	+	+		+	+	+		+	+	+	+									B5C	LMX-SAB
8103	24																							+		B15,B7801	LMX-SAB
8121																								+			LMX-SAB





**Table 34. Individual laboratory results for Serum #1306 by Luminex SAB - class I, cont.**

**** Serum 1306 ****														
Ctr	A30	A33	B54	A203	A66	B39	B42	B59	A2403	A25	A43	B18	Other	Method
615	+	+	+		+	+	+	+		+	+	+	B60,B61,B48,B47, B*4002 >	LMX-SAB
725													B2708	LMX-SAB
774														LMX-SAB
786	+	+	+		+	+	+	+		+	+	+	B47,B41	LMX-SAB
910	+		+					+		+				LMX-SAB
2400														LMX-SAB
3753	+	+	+		+	+	+					+		LMX-SAB
3766	+	+	+	+	+		+	+	+	+	+		B2705,B2708,B7801,A1101 >	LMX-SAB
3808				+					+				B7801,A1102	LMX-SAB
3966	+	+	+		+	+				+			A26	LMX-SAB
4322		+	+			+	+	+			+	+	B61,B47,B65,B37 >	LMX-SAB
5214														LMX-SAB
5219				+					+				Cw403,A9,B15,B70 >	LMX-SAB
6649	+	+			+							+		LMX-SAB
8045				+					+				Cw403,B2708	LMX-SAB
8082		+	+			+	+	+				+	B61,B47,B65,B37 >	LMX-SAB
8086														LMX-SAB
8098				+					+				Cw403,Bw4,Bw6,B12C >	LMX-SAB
8100	+												A2C	LMX-SAB
8103				+									Cw403,B15	LMX-SAB
8121				+										LMX-SAB

**Table 35. Individual laboratory results for Serum #1307 - 1308 by Luminex SAB - class I**

Ctr	**** Serum 1307 ****				**** Serum 1308 ****					Method
	% POS	A23	Cw17	Other	% POS	B27	B2705	B52	Other	
615						+		+	B38,B59	LMX-SAB
725						+				LMX-SAB
774	0				2	+				LMX-SAB
786		+	+			+		+	B38,B59	LMX-SAB
910		+					+			LMX-SAB
2400	0					+				LMX-SAB
3753		+				+				LMX-SAB
3766					32	+	+	+	B8,B2708	LMX-SAB
3808	0				0					LMX-SAB
3966	9	+	+	Cw4,Cw6,B67,A29 >	9	+		+	B13,B38,B8	LMX-SAB
4322		+	+	Cw4,Cw6		+			B13,B47,B44	LMX-SAB
5214		+					+			LMX-SAB
5219	0				0	+				LMX-SAB
6649	0				1		+			LMX-SAB
8045	0				0					LMX-SAB
8082		+	+	Cw4,Cw6		+			B13	LMX-SAB
8086	200				200					LMX-SAB
8098						+			B7C	LMX-SAB
8100	0					+				LMX-SAB
8103	0				0					LMX-SAB
8121	0					+				LMX-SAB

**Table 36. Individual laboratory results for Serum #1305 - 1308 by Flow cytometry and C1q - class I**

		**** Serum 1305 ****				**** Serum 1306 ****				**** Serum 1307 ****				**** Serum 1308 ****								
Ctr	% POS			Other	% POS			Other	% POS			Other	% POS							Other	Method	
5214	64				96				67				88								FC	

FC = Flow cytometry

		**** Serum 1305 ****				**** Serum 1306 ****				**** Serum 1307 ****				**** Serum 1308 ****											
Ctr	% POS	DR51		Other	% POS	DQ8	DQ9	DR4	Other	% POS			Other	% POS	DQ7	DQ8	DQ9	DR1	DR10	DR4	DR51	DR53	DR9	Other	Method
2400		+				+	+	+		0					+	+	+	+	+	+	+	+	+		C1q

**Table 37. Individual laboratory results for Serum #1305 - #1308 Luminex PRA- class II**

**** Serum 1305 ****													**** Serum 1306 ****																			
Ctr	% POS	DR103	DR15	DR16	DR51	DR9	DR1	DR14	DR4	DQ5	DQ6	Other	% POS	DQ4	DQ5	DQ6	DQ8	DQ9	DR1	DR53	DR4	DR7	DR9	DR10	DR14					Other	Method	
1647		+	+	+	+	+	+							+	+	+	+	+	+	+	+											LMX-PRA
2400	57												86																			LMX-PRA
8058	21	+	+	+	+	+		+	+	+	+		41	+	+	+	+	+	+	+		+	+	+	+					DR15,DR51,DQ2,DQ7 >	LMX-PRA	
3753	50	+	+	+	+	+	+						83	+	+	+	+	+	+	+	+	+	+									LMX-PRA
8112		+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+	+	+							LMX-PRA

**** Serum 1307 ****													**** Serum 1308 ****																				
Ctr	% POS	DR11	DR13	DR14	DR17	DR18	DR8	DQ2				Other	% POS	DQ7	DQ8	DQ9	DR1	DR10	DR103	DR15	DR16	DR4	DR51	DR53	DR7	DR9	DR14	DQ2	DQ4	Other	Method		
1647		+	+	+	+	+	+							+	+	+	+	+	+	+	+	+	+	+	+	+	+			DQA1*03	LMX-PRA		
2400	63												91																				LMX-PRA
8058	12	+	+	+	+	+	+	+					44	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX-PRA
3753	53	+	+	+	+	+	+						90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX-PRA
8112		+	+	+	+	+	+							+	+	+	+	+	+	+	+	+	+	+	+	+	+						LMX-PRA

**Table 38. Individual laboratory results for Serum #1305 - 1306 by Luminex - class II**

**** Serum 1305 ****														**** Serum 1306 ****															
Ctr	% POS	DR1	DR15	DR16	DR51	DR9	DR103	DR4	DQ6	DR14	DQ5	Other	% POS	DQ6	DQ8	DQ9	DR4	DR53	DQ4	DQ5	DR9	DR1	DR7	DQA1*03	DR14	DQA1*01	DQ7	Other	Method
615		+	+	+	+	+	+	+	+	+	+	DQB1*06:02, DQB1*06:03, DRB1*04:01, DRB1*04:04, DRB1*04:05, DRB1*14:02		+	+	+	+	+	+	+	+	+	+	+	+			DRB1*14:02	LMX-SAB
774	57	+	+	+	+	+	+						89	+	+	+	+	+	+	+	+	+	+	+	+				LMX-SAB
910		+	+	+	+	+	+	+	+	+		DQA1*01:01, DQB1*06:02, DQB1*06:03 DRB1*04:01, DRB1*04:04, DRB1*04:05, DRB1*14:02		+	+	+	+	+	+	+	+	+	+	+			DRB1*14:02, DQA1*03:01	LMX-SAB	
2400		+	+	+	+	+	+		+					+	+	+	+	+	+	+	+	+	+	+				LMX-SAB	
3753		+	+	+	+	+	+	+	+	+	+	DQB1*06:02, DQB1*06:03, DRB1*04:01, DRB1*04:04, DRB1*04:05, DRB1*14:02		+	+	+	+	+	+	+	+	+	+	+	+		DRB1*14:02	LMX-SAB	
3766	47	+	+	+	+	+	+	+	+	+	+		93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR51	LMX-SAB
3808	11	+	+	+	+	+	+						28	+	+	+	+	+	+	+	+	+	+		+		DQA1*04	LMX-SAB	
3966	17	+	+	+	+	+	+	+	+	+			29	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQA1*02	LMX-SAB
4322		+	+	+	+	+	+	+	+	+	+	DQA1*01		+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR10,DR15,DR51	LMX-SAB
5214		+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+				LMX-SAB
5219	11	+	+	+	+	+	+	+				DR2	28	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQ1,DQ3,DQA1*04	LMX-SAB
6649	21	+	+	+	+	+	+	+		+			35	+	+	+	+	+	+	+	+	+	+	+	+				LMX-SAB
8045	14	+	+	+	+	+	+	+					33	+	+	+	+	+	+	+	+	+	+	+		+			LMX-SAB
8082		+	+	+	+	+	+	+	+	+	+	DQA1*01		+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR10,DR12,DR15,DR51 >	LMX-SAB
8086	200	+	+	+	+	+	+		+				200	+	+	+	+	+	+	+	+	+	+				DQ2	LMX-SAB	
8098		+	+	+	+	+	+	+						+	+	+	+	+	+	+	+	+	+	+	+	+	DQ2,DQA1*04	LMX-SAB	
8100		+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	DQ2	LMX-SAB	
8103	10	+	+	+	+	+	+						23	+	+	+	+	+	+	+	+	+	+	+	+	+	DQ3,DQA1*02,DQA1*04, DQA1*05>	LMX-SAB	
8121		+	+	+	+	+	+							+	+	+	+	+											LMX-SAB



**Table 40. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by NIH-Standard - class I**

Method: NIH-Standard											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
NT			NT			no consensus			no consensus		



**Table 41. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by Antiglobulin and Flow Cytometry - class I**

<b>Method: Antiglobulin</b>											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A11	50%	100%	A11	50%	100%	A34	100%	71%	A2	50%	100%
A26	50%	100%	A25	50%	100%	A11	50%	100%	A28	50%	100%
A34	50%	100%	A26	50%	100%	A25	50%	100%	A3	50%	100%
A66	50%	100%	A34	50%	100%	A26	50%	100%	A33	50%	100%
B13	50%	100%	B57	50%	100%	A28	50%	100%	A34	50%	100%
B27	50%	100%	B58	50%	100%	A29	50%	100%	A68	50%	100%
B41	50%	100%	B63	50%	100%	A3	50%	100%	A74	50%	100%
B60	50%	100%	B38	50%	67%	A31	50%	100%	B27	50%	100%
B61	50%	100%				A32	50%	100%	B60	50%	100%
B65	50%	100%				A33	50%	100%	B61	50%	100%
B7	50%	100%				A66	50%	100%	B7	50%	100%
B81	50%	100%				A68	50%	100%			
B55	50%	83%				A2	50%	61%			

<b>Method: Flow Cytometry</b>											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		

**Table 42. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by C1q- class I**

Method: C1q											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
2 typing Labs			2 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A25	100%	100%	A25	100%	100%	A11	100%	100%	A3	100%	100%
A26	100%	100%	A26	100%	100%	A25	100%	100%	A2	67%	100%
A66	100%	100%	A66	100%	100%	A3	100%	100%	A31	33%	100%
Cw5	100%	100%	A43	50%	100%	A32	100%	100%	A33	33%	100%
Cw8	100%	100%				A33	100%	100%	A66	33%	100%
						A34	100%	100%	A68	33%	100%
						A66	100%	100%	A74	33%	100%
						A29	67%	100%	Cw6	33%	100%
						A31	67%	100%	Cw7	33%	100%
						A74	67%	100%			
						A26	33%	100%			
						A30	33%	100%			
						A43	33%	100%			
						A68	33%	100%			
						A69	33%	100%			

**Table 43. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by PRA- class I**

Method: Luminex - PRA											
*** Serum 1309 ***			*** Serum 1310 ***			*** Serum 1311 ***			*** Serum 1312 ***		
4 typing Labs			4 typing Labs			4 typing Labs			4 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A11	75%	100%	A25	75%	100%	A11	75%	100%	A2	75%	100%
A2	75%	100%	A26	75%	100%	A25	75%	100%	A29	75%	100%
A25	75%	100%	A34	75%	100%	A26	75%	100%	A3	75%	100%
A26	75%	100%	A66	75%	100%	A29	75%	100%	A30	75%	100%
A66	75%	100%	B57	75%	100%	A3	75%	100%	A31	75%	100%
A69	75%	100%	B58	75%	100%	A30	75%	100%	A33	75%	100%
A1	50%	100%	B63	75%	100%	A31	75%	100%	A68	75%	100%
A33	50%	100%	A11	50%	100%	A32	75%	100%	A69	75%	100%
A34	50%	100%	A29	50%	100%	A33	75%	100%	A74	75%	100%
A36	50%	100%	A30	50%	100%	A34	75%	100%	B60	75%	100%
A43	50%	100%	A43	50%	100%	A66	75%	100%	B7	75%	100%
B13	50%	100%	A80	50%	100%	A68	75%	100%	B81	75%	100%
B18	50%	100%	B38	50%	100%	A69	75%	100%	A34	50%	100%
B27	50%	100%	B39	50%	100%	A74	75%	100%	A66	50%	100%
B38	50%	100%	B54	50%	100%	A1	50%	100%	A80	50%	100%
B39	50%	100%	B55	50%	100%	A36	50%	100%	B13	50%	100%
B41	50%	100%	B56	50%	100%	A43	50%	100%	B27	50%	100%
B42	50%	100%	B67	50%	100%	A80	50%	100%	B42	50%	100%
B45	50%	100%	A1	25%	100%	B18	50%	100%	B47	50%	100%
B46	50%	100%	A3	25%	100%	Cw12	50%	100%	B48	50%	100%
B47	50%	100%	A31	25%	100%	Cw17	50%	100%	B61	50%	100%
B48	50%	100%	A33	25%	100%	A23	25%	100%	Cw6	50%	100%
B54	50%	100%	A36	25%	100%	A24	25%	100%	Cw7	50%	100%
B55	50%	100%	A68	25%	100%	Cw6	25%	100%	A11	25%	100%
B59	50%	100%	A69	25%	100%				A24	25%	100%
B60	50%	100%	A74	25%	100%				A25	25%	100%
B61	50%	100%	B37	25%	100%				A32	25%	100%
B64	50%	100%	B41	25%	100%				A36	25%	100%
B65	50%	100%	B42	25%	100%				B41	25%	100%
B67	50%	100%	B59	25%	100%				B51	25%	100%
B7	50%	100%	B64	25%	100%				B54	25%	100%
B73	50%	100%	B65	25%	100%				B55	25%	100%
B8	50%	100%	B73	25%	100%				B56	25%	100%
B81	50%	100%	B8	25%	100%				B67	25%	100%
Cw1	50%	100%	Cw18	25%	100%				B73	25%	100%

**Table 43. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by PRA- class I**

Method: Luminex - PRA, cont.								
*** Serum 1309 ***			*** Serum 1310 ***			*** Serum 1312 ***		
4 typing Labs			4 typing Labs			4 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
Cw10	50%	100%	Cw6	25%	100%	B8	25%	100%
Cw14	50%	100%	Cw7	25%	100%	B82	25%	100%
Cw16	50%	100%				Cw2	25%	100%
Cw17	50%	100%						
Cw5	50%	100%						
Cw8	50%	100%						
Cw9	50%	100%						
A29	25%	100%						
A32	25%	100%						
A68	25%	100%						
A74	25%	100%						
A80	25%	100%						
B37	25%	100%						
B50	25%	100%						
B51	25%	100%						
B56	25%	100%						
B78	25%	100%						
B82	25%	100%						
Cw12	25%	100%						
Cw6	25%	100%						

**Table 44. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by Single Antigen - class I**

Method: Luminex - SAB											
*** Serum 1309 ***			*** Serum 1310 ***			*** Serum 1311 ***			*** Serum 1312 ***		
21 typing Labs			21 typing Labs			21 typing Labs			21 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A1	100%	100%	A25	100%	100%	A25	100%	100%	A2	100%	100%
A2	100%	100%	A26	100%	100%	A26	100%	100%	A29	100%	100%
A25	100%	100%	A29	100%	100%	A29	100%	100%	A3	100%	100%
A26	100%	100%	A34	100%	100%	A3	100%	100%	A30	100%	100%
A34	100%	100%	A43	100%	100%	A30	100%	100%	A31	100%	100%
A36	100%	100%	B54	100%	100%	A31	100%	100%	A33	100%	100%
A43	100%	100%	B57	100%	100%	A32	100%	100%	A68	100%	100%
A69	100%	100%	B58	100%	100%	A33	100%	100%	A69	100%	100%
A80	100%	100%	B63	100%	100%	A34	100%	100%	A74	100%	100%
B13	100%	100%	A66	95%	100%	A43	100%	100%	B13	100%	100%
B47	100%	100%	B38	95%	100%	A68	100%	100%	B27	100%	100%
B55	100%	100%	A11	95%	92%	A69	100%	100%	B60	100%	100%
B60	100%	100%	B55	86%	100%	A74	100%	100%	B61	100%	100%
B61	100%	100%	A33	86%	75%	A80	100%	100%	B7	100%	100%
B7	100%	100%	A80	81%	100%	A11	95%	100%	B81	95%	100%
Cw8	100%	85%	B39	81%	100%	A66	95%	100%	Cw7	95%	86%
A11	95%	100%	A36	76%	100%	B18	90%	100%	B47	95%	50%
A66	95%	100%	A68	76%	100%	A36	71%	100%	A66	81%	100%
B27	95%	100%	B67	76%	100%	A1	62%	100%	B48	81%	100%
B67	95%	100%	A30	71%	83%	Cw12	57%	100%	A34	81%	75%
Cw5	95%	100%	A1	62%	100%	A24	52%	100%	Cw6	71%	77%
B42	90%	100%	A69	62%	100%	Cw17	43%	100%	B42	62%	100%
B81	90%	100%	B56	62%	50%	Cw6	33%	100%	A80	62%	50%
B41	86%	100%	B41	52%	100%	A6601	24%	100%	A32	48%	100%
B64	86%	100%	B42	52%	100%	A6602	24%	100%	B2708	43%	100%
B73	86%	100%	A31	48%	100%	A10C	19%	100%	B67	43%	100%
A68	81%	100%	B73	48%	100%	A1101	19%	100%	A11	38%	100%
B54	81%	100%	A74	43%	100%	A1102	19%	100%	A36	38%	100%
B48	76%	100%	B59	38%	100%	A1C	14%	100%	A203	33%	100%
B46	71%	100%	B8	33%	100%	A23	10%	100%	A6602	33%	100%
B65	71%	100%	B3901	29%	100%	A2403	10%	100%	B55	29%	100%
A33	67%	100%	A1101	19%	100%				B703	29%	100%
B18	67%	100%	A1102	19%	100%				B73	29%	100%
B38	67%	100%	A6601	19%	100%				B2705	24%	100%
B39	67%	100%	A6602	19%	100%				B56	19%	100%

**Table 44. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by Single Antigen - class I**

<b>Method: Luminex - SAB, cont.</b>											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
21 typing Labs			21 typing Labs			21 typing Labs			21 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B8	67%	100%	Cw18	19%	100%				B8101	19%	100%
Cw1	67%	100%	Cw6	19%	100%				A25	14%	100%
Cw10	67%	100%	Cw7	19%	100%				B8	14%	100%
Cw9	67%	100%	A10C	10%	100%				A10C	10%	100%
A29	57%	100%	A3	10%	100%				A1101	10%	100%
B59	52%	100%	B15	10%	100%				A24	10%	100%
Cw14	52%	100%							A2403	10%	100%
Cw16	52%	100%							B40	10%	100%
B45	48%	100%							B82	10%	100%
Cw17	48%	100%									
Cw12	43%	100%									
B2708	33%	100%									
B37	33%	100%									
A203	29%	100%									
B703	24%	100%									
A1101	19%	100%									
A1102	19%	100%									
A6601	19%	100%									
A6602	19%	100%									
B2705	19%	100%									
B8101	19%	100%									
A32	14%	100%									
B50	14%	100%									
B56	14%	100%									
B78	14%	100%									
Cw6	14%	100%									
A10C	10%	100%									
A74	10%	100%									
B3901	10%	100%									
B40	10%	100%									
B51	10%	100%									
B71	10%	100%									
B7C	10%	100%									
B82	10%	100%									
Cw18	10%	100%									

**Table 45. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by Flow Cytometry and C1q - class II**

Method: Flow Cytometry											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no consensus			no specificities assigned		

Method: C1q											
<b>*** Serum 1309 ***</b>			<b>*** Serum 1310 ***</b>			<b>*** Serum 1311 ***</b>			<b>*** Serum 1312 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR9	100%	100%	DP20	50%	100%	NEG	100%	-	DQ2	100%	100%
DQ5	50%	100%	DP9	50%	100%				DR15	100%	100%
DQ6	50%	100%	DPw2	50%	100%				DR16	100%	100%
			DPw3	50%	100%				DR7	100%	100%
			DPw6	50%	100%						

**Table 46. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by PRA- class II**

Method: Luminex - PRA											
*** Serum 1309 ***			*** Serum 1310 ***			*** Serum 1311***			*** Serum 1312 ***		
4 typing Labs			4 typing Labs			3 typing Labs			4 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ5	75%	100%	DR11	75%	100%	NEG	100%	-	DQ2	75%	100%
DQ6	75%	100%	DR12	75%	100%				DR15	75%	100%
DR10	75%	100%	DR13	75%	100%				DR16	75%	100%
DR11	75%	100%	DR14	75%	100%				DR51	75%	100%
DR13	75%	100%	DR17	75%	100%				DR7	75%	100%
DR14	75%	100%	DR18	75%	100%				DR9	75%	100%
DR17	75%	100%	DR52	75%	100%				DP11	50%	100%
DR18	75%	100%	DR7	75%	100%				DPw5	50%	100%
DR53	75%	100%	DP10	50%	100%				DQ5	50%	100%
DR8	75%	100%	DP18	50%	100%				DR12	50%	100%
DR9	75%	100%	DP20	50%	100%				DP10	25%	100%
DQ7	50%	100%	DP28	50%	100%				DP13	25%	100%
DQ8	50%	100%	DPw2	50%	100%				DP14	25%	100%
DQ9	50%	100%	DPw4	50%	100%				DP15	25%	100%
DR1	50%	100%	DPw6	50%	100%				DP17	25%	100%
DR103	50%	100%	DQ7	50%	100%				DP18	25%	100%
DR12	50%	100%	DQ9	50%	100%				DP28	25%	100%
DR4	50%	100%	DR10	50%	100%				DP9	25%	100%
DR51	50%	100%	DR9	50%	100%				DPA1*02	25%	100%
DR52	50%	100%	DP14	25%	100%				DPw1	25%	100%
DR7	50%	100%	DP17	25%	100%				DPw2	25%	100%
DP14	25%	100%	DP9	25%	100%				DPw6	25%	100%
DP17	25%	100%	DPA1*01	25%	100%				DQ4	25%	100%
DP20	25%	100%	DPA1*02	25%	100%				DQ7	25%	100%
DP9	25%	100%	DPA1*04	25%	100%				DQ8	25%	100%
DPw2	25%	100%	DPw1	25%	100%				DQ9	25%	100%
DPw3	25%	100%	DPw3	25%	100%				DQA1*02	25%	100%
DPw4	25%	100%	DPw5	25%	100%				DQA1*05	25%	100%
DPw6	25%	100%	DQ2	25%	100%				DR103	25%	100%
DQ2	25%	100%	DQ6	25%	100%						
DQ4	25%	100%	DQ8	25%	100%						
DQA1*01	25%	100%	DQA1*03	25%	100%						
DQA1*03	25%	100%	DQA1*05	25%	100%						
DQA1*05	25%	100%	DQA1*06	25%	100%						
DQA1*06	25%	100%	DR103	25%	100%						



**Table 47. Summary of the 579<sup>th</sup> Serum Exchange (Serum #1309-1312) by Single Antigen - class II**

Method: Luminex - SAB											
*** Serum 1309 ***			*** Serum 1310 ***			*** Serum 1311 ***			*** Serum 1312 ***		
19 typing Labs			19 typing Labs			14 typing Labs			19 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ5	100%	100%	DP18	95%	100%	NEG	93%	-	DQ2	100%	100%
DQ6	100%	100%	DP28	95%	100%	DP10	7%	100%	DR15	100%	100%
DR1	100%	100%	DPw2	95%	100%	DP14	7%	100%	DR16	100%	100%
DR10	100%	100%	DPw3	95%	100%	DP17	7%	100%	DR7	100%	100%
DR11	100%	100%	DPw6	95%	100%	DP18	7%	100%	DR9	100%	100%
DR12	100%	100%	DR10	95%	100%	DP20	7%	100%	DR12	100%	80%
DR13	100%	100%	DR11	95%	100%	DP28	7%	100%	DP11	95%	100%
DR14	100%	100%	DR12	95%	100%	DP402	7%	100%	DP15	84%	100%
DR17	100%	100%	DR13	95%	100%	DP9	7%	100%	DP14	74%	100%
DR18	100%	100%	DR14	95%	100%	DPA1*01	7%	100%	DP17	74%	100%
DR4	100%	100%	DR17	95%	100%	DPw2	7%	100%	DP9	74%	100%
DR51	100%	100%	DR18	95%	100%	DPw3	7%	100%	DPA1*02	74%	100%
DR52	100%	100%	DR52	95%	100%	DPw6	7%	100%	DR51	63%	100%
DR53	100%	100%	DR9	95%	100%	DQ7	7%	100%	DPw5	58%	100%
DR7	100%	100%	DP14	89%	100%	DQ8	7%	100%	DQA1*02	58%	100%
DR8	100%	100%	DP17	89%	100%	DQ9	7%	100%	DP13	47%	100%
DR9	100%	100%	DP9	89%	100%	DR10	7%	100%	DPA1*04	47%	100%
DQ8	95%	100%	DR7	89%	100%	DR11	7%	100%	DP10	42%	100%
DR103	95%	100%	DQ6	84%	100%	DR13	7%	100%	DQ5	37%	100%
DQ7	89%	100%	DPw4	79%	92%	DR14	7%	100%	DR103	37%	100%
DQ9	89%	100%	DQ8	68%	100%	DR17	7%	100%	DP19	32%	100%
DQA1*03	63%	100%	DQ9	68%	100%	DR18	7%	100%	DP28	32%	100%
DQA1*01	53%	100%	DQ7	68%	92%	DR52	7%	100%	DPw1	26%	100%
DQ4	37%	100%	DQ7	68%	92%				DQ4	26%	100%
DR1403	26%	100%	DP20	63%	100%				DPw6	21%	100%
DR1404	26%	100%	DP10	57%	100%				DQA1*05	21%	100%
DQA1*05	21%	100%	DQA1*01	53%	100%				DP18	16%	100%
DQA1*06	16%	100%	DP402	37%	100%				DPw3	16%	100%
DP14	11%	100%	DQA1*05	32%	100%				DQ8	16%	100%
DP17	11%	100%	DR1403	32%	100%				DPw4	11%	100%
DP20	11%	100%	DR1404	32%	100%				DQ6	11%	100%
DP9	11%	100%	DPA1*01	21%	100%						
DPw2	11%	100%	DPA1*04	21%	100%						
DPw3	11%	100%	DPw1	21%	100%						
DPw6	11%	100%	DQA1*06	21%	100%						
			DQA1*03	16%	100%						

**Table 48. Individual laboratory results for Serum #1309 - #1312 by NIH-Standard - class I**

		**** Serum 1309 ****				**** Serum 1310 ****				**** Serum 1311 ****					**** Serum 1312 ****				
Ctr	% POS			Other	% POS			Other	% POS	A25	A3	A34	A66	Other	% POS	A3		Other	Method
786	NT				NT					+	+	+	+			+			STD

NIH=Standard

**Table 49. Individual laboratory results for Serum #1309 - #1312 by Antiglobulin and Flow Cytometry - class**

**** Serum 1309 ****														**** Serum 1310 ****															
Ctr	% POS	A11	A26	A34	A66	B13	B27	B41	B60	B61	B65	B7	B81	B55	Other	% POS	A11	A25	A26	A34	B57	B58	B63	B38				Other	Method
774	76	+	+	+	+	+	+	+	+	+	+	+	+	+		52	+	+	+	+	+	+	+	+					Antiglobulin
786	NT															NT													Antiglobulin

**** Serum 1311 ****														**** Serum 1312 ****															
Ctr	% POS	A34	A11	A25	A26	A28	A29	A3	A31	A32	A33	A66	A68	A2	Other	% POS	A2	A28	A3	A33	A34	A68	A74	B27	B60	B61	B7	Other	Method
774	83	+	+		+	+	+		+	+	+		+	+		89	+	+		+	+	+	+	+	+	+	+		Antiglobulin
786		+		+				+				+		+				+											Antiglobulin

**** Serum 1309 ****														**** Serum 1310 ****															
Ctr	% POS															% POS													Method
5214	99															96													FC

**** Serum 1311 ****														**** Serum 1312 ****															
Ctr	% POS															% POS													Method
5214	99															96													FC

FC = Flow Cytometry

**Table 50. Individual laboratory results for Serum #1309 - #1312 by C1q - class I**

Ctr	**** Serum 1309 ****							**** Serum 1310 ****				**** Serum 1311 ****										**** Serum 1312 ****				Method		
	% POS	A25	A26	A66	Cw5	Cw8	Other	% POS	A25	A26	A66	Other	% POS	A11	A25	A3	A32	A33	A34	A66	A29	A31	A74	Other	% POS		A3	A2
786	NT								NT					+	+	+	+	+	+	+	+	+	+		+	NT		C1q
2400		+	+	+	+	+			+	+	+	A43		+	+	+	+	+	+	+					+	+	Cw6,A66,A31,A33 >	C1q
3753		+	+	+	+	+			+	+	+			+	+	+	+	+	+	+	+	+	+	A26,A30,A68,A69 >	+	+		C1q





**Table 52. Individual laboratory results for Serum #1309 by Luminex SAB - class I, cont.**

**** Serum 1309 ****					
Ctr	B37	A203	B703	Other	Method
615	+			Cw6,B78,B50,B51, B*51:01 >	Luminex-SAB
725					Luminex-SAB
774					Luminex-SAB
786	+				Luminex-SAB
910	+				Luminex-SAB
1647					Luminex-SAB
2400					Luminex-SAB
3753					Luminex-SAB
3766	+	+		B8101,B2705,A1101,A1102 >	Luminex-SAB
3808		+	+	B8101,B2705,A1101,A1102 >	Luminex-SAB
3966	+			Cw6,B50,B56,A32	Luminex-SAB
4322	+			Cw6,B78,B50,B51 >	Luminex-SAB
5214					Luminex-SAB
5219		+	+	B40,A10,B22,A28 >	Luminex-SAB
6649					Luminex-SAB
8045					Luminex-SAB
8082	+			B78	Luminex-SAB
8098		+	+	Bw4,Bw6,B12C,B5C >	Luminex-SAB
8100					Luminex-SAB
8103		+	+	B40,B8101,B2705,A1101 >	Luminex-SAB
8121		+	+		Luminex-SAB

**Table 53. Individual laboratory results for Serum #1310 by Luminex SAB - class I**

		**** Serum 1310 ****																																
Ctr	% POS	A25	A26	A29	A34	A43	B54	B57	B58	B63	A66	B38	A11	B55	A33	A80	B39	A36	A68	B67	A30	A1	A69	B56	B41	B42	A31	B73	A74	B59	B8	B3901	Other	Method
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw6,A3,Cw7,Cw18	Luminex-SAB
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
774	70	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw6,Cw7,Cw18	Luminex-SAB
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
3766	77	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A1101,A1102,A6601,A6602	Luminex-SAB
3808	17	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ A1101,A1102,A6601,A6602	Luminex-SAB
3966	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw6,Cw7,Cw18	Luminex-SAB
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw6,A3,Cw7,Cw18	Luminex-SAB
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
5219	11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B15,A10,B22,A19 >	Luminex-SAB
6649	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
8045	16	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	Luminex-SAB
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ Bw4,Bw6,B5C,B8C >	Luminex-SAB
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Luminex-SAB
8103	16	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ B15,A1101,A1102,A6601 >	Luminex-SAB
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	Luminex-SAB



**Table 54. Individual laboratory results for Serum #1311 by Luminex SAB - class I**

		**** Serum 1311 ****																											
Ctr	% POS	A25	A26	A29	A3	A30	A31	A32	A33	A34	A43	A68	A69	A74	A80	A11	A66	B18	A36	A1	Cw12	A24	Cw17	Cw6	A6601	A6602	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			A23	Luminex-SAB	
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+						Luminex-SAB
774	86	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+										Luminex-SAB
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				Luminex-SAB
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				Luminex-SAB
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+					Luminex-SAB
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					Luminex-SAB
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+						Luminex-SAB
3766	93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A1101,A1102	Luminex-SAB
3808	23	+	+	+	+	+	+	+	+	+	+	+	+	+	+											+	+	A1101,A1102	Luminex-SAB
3966	30	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						Luminex-SAB
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			A23	Luminex-SAB
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+		Luminex-SAB
5219	22	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						+	+	A10,A19,A28,A1C >	Luminex-SAB
6649	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				Luminex-SAB	
8045	25	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+					A2403,A10C	Luminex-SAB
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+				Luminex-SAB
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							Bw4,Bw6,A2403,B5C >	Luminex-SAB
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							A1C,A10C	Luminex-SAB
8103	22	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						+	+	A1101,A1102	Luminex-SAB
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								Luminex-SAB

**Table 55. Individual laboratory results for Serum #1312 by Luminex SAB - class I**

		**** Serum 1312 ****																																						
Ctr	% POS	A2	A29	A3	A30	A31	A33	A68	A69	A74	B13	B27	B60	B61	B7	B81	Cw7	B47	A66	B48	A34	Cw6	B42	A80	A32	B2708	B67	A11	A36	A203	A6602	B55	B703	B73	B2705	Other	Method			
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+			+						A24,B82,B56,A25, A*24:03 >	Luminex-SAB	
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+														Luminex-SAB
774	80	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+															Luminex-SAB	
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+			+						B56,A25	Luminex-SAB	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+								+		Luminex-SAB	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+							Luminex-SAB	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+														Luminex-SAB	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+										Luminex-SAB	
3766	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8101,A1101,A1102,A6601	Luminex-SAB		
3808	29	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8101	Luminex-SAB		
3966	46	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B56,B59,B8	Luminex-SAB		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B82,B54,B56,A25 >	Luminex-SAB		
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Luminex-SAB		
5219	27	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,A10,A19,A28 >	Luminex-SAB		
6649	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Luminex-SAB		
8045	26	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Luminex-SAB		
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A1101	Luminex-SAB		
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,Bw6,B12C,B7C >	Luminex-SAB		
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Luminex-SAB		
8103	30	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B8101	Luminex-SAB		
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Luminex-SAB		

**Table 56. Individual laboratory results for Serum #1309 - 1312 by Flow Cytometry and C1q - class I**

		**** Serum 1309 ****				**** Serum 1310 ****				**** Serum 1311 ****				**** Serum 1312 ****							
Ctr	% POS					% POS					% POS					% POS					Method
5214	99					99					0					83					FC

FC = Flow Cytometry

		**** Serum 1309 ****					**** Serum 1310 ****					**** Serum 1311 ****				**** Serum 1312 ****							
Ctr	% POS	DR9	DQ5	DQ6	Other	% POS	DP20	DP9	DPw2	DPw3	DPw6	Other	% POS			Other	% POS	DQ2	DR15	DR16	DR7	Other	Method
2400		+	+	+			+	+	+	+	+		0					+	+	+	+		C1q
3753		+				0							0					+	+	+	+		C1q

**Table 57. Individual laboratory results for Serum #1309 - 1312 by Luminex PRA - class II**

**** Serum 1309 ****																								
Ctr	% POS	DQ5	DQ6	DR10	DR11	DR13	DR14	DR17	DR18	DR53	DR8	DR9	DQ7	DQ8	DQ9	DR1	DR103	DR12	DR4	DR51	DR52	DR7	Other	Method
2400	100																							
3753	99	+	+	+	+	+	+	+	+	+	+	+												
8058	69	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQ2,DQ4,DPw2,DPw3 >
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQA1*01,DQA1*03,DQA1*05,DQA1*06

**** Serum 1310 ****																								
Ctr	% POS	DR11	DR12	DR13	DR14	DR17	DR18	DR52	DR7	DP10	DP18	DP20	DP28	DPw2	DPw4	DPw6	DQ7	DQ9	DR10	DR9			Other	Method
2400	97																							
3753	67	+	+	+	+	+	+	+	+															
8058	57	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR103,DR4,DR53,DQ2 >
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DPA1*01,DPA1*02,DPA1*04,DQA1*03>

**** Serum 1311 ****																									
Ctr	% POS																							Other	Method
2400	0																								
3753	0																								
8058	0																								
8112	NT																								

**** Serum 1312 ****																									
Ctr	% POS	DQ2	DR15	DR16	DR51	DR7	DR9	DP11	DPw5	DQ5	DR12													Other	Method
2400	69																								
3753	53	+	+	+	+	+	+																		
8058	42	+	+	+	+	+	+	+	+	+	+													DR103,DQ4,DQ7,DQ8 >	
8112		+	+	+	+	+	+	+	+	+	+													DPA1*02,DQA1*02,DQA1*05	

**Table 58. Individual laboratory results for Serum #1309 by Luminex SAB - class II**

		**** Serum 1309 ****																												
Ctr	% POS	DQ5	DQ6	DR1	DR10	DR11	DR12	DR13	DR14	DR17	DR18	DR4	DR51	DR52	DR53	DR7	DR8	DR9	DQ8	DR103	DQ7	DQ9	DQA1*03	DQA1*01	DQ4	DR1403	DR1404	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			DPw2,DPw3,DPw6,DP9 >	LMX-SAB	
774	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+					LMX-SAB
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					DQA1*03:01, DQA1*03:03	LMX-SAB	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX-SAB
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX-SAB
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					DRB1*06:01, DRB1*06:03	LMX-SAB	
3766	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					DQA1*05,DQA1*06	LMX-SAB	
3808	52	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+		LMX-SAB	
3966	55	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				DQA1*05	LMX-SAB	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				DR16,DPw1,DPw2,DPw3 >	LMX-SAB	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						LMX-SAB
5219	49	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	DR3,DR5,DR6,DQ1 >	LMX-SAB	
6649	56	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX-SAB
8045	55	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+					LMX-SAB
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				DQA1*05,DQA1*06	LMX-SAB	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						LMX-SAB
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					DQ2	LMX-SAB	
8103	52	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	DR3,DQ3	LMX-SAB	
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB

**Table 59. Individual laboratory results for Serum #1310 by Luminex SAB - class II**

		**** Serum 1310 ****																																
Ctr	% POS	DP18	DP28	DPw2	DPw3	DPw6	DR10	DR11	DR12	DR13	DR14	DR17	DR18	DR52	DR9	DP14	DP17	DP9	DR7	DQ6	DPw4	DQ8	DQ9	DQ7	DP20	DP10	DQA1*01	DP402	DQA1*05	DR1403	DR1404	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			DPw1, DQB1*06:01, DQB1*06:03, DRB1*09:01	LMX-SAB	
774	97	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									LMX-SAB
910		+	+	+	+	+										+	+	+			+	+	+	+	+	+	+					DQA1*01:03, DPB1*04:02	LMX-SAB	
1647							+	+	+	+	+	+	+	+	+						+		+	+	+							DR1,DR103,DR4,DR8 >	LMX-SAB	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						DPw1	LMX-SAB	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			DRB1*06:01, DRB1*06:03	LMX-SAB	
3766		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DPw1,DPA1*01,DPA1*04,DQA1*06	LMX-SAB	
3808	92	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					LMX-SAB
3966	53	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DPw5,DPA1*01,DPA1*02,DPA1*04 >	LMX-SAB	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DR103,DR4,DPw1,DPw5 >	LMX-SAB	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+						LMX-SAB
5219	30	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR3,DR5,DR6,DQ1	LMX-SAB	
6649	51	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX-SAB
8045	34	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	DR8	LMX-SAB	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+		DPA1*01,DPA1*04,DQA1*03,DQA1*06	LMX-SAB		
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+			LMX-SAB
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX-SAB
8103	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR3	LMX-SAB	
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB

**Table 60. Individual laboratory results for Serum #1311 by Luminex SAB - class II**

**** Serum 1311 ****			
Ctr	% POS	Other	Method
615		no specificities defined	LMX-SAB
774	0		LMX-SAB
910	0		LMX-SAB
1647		DP10,DR10,DR11,DR13,DR14 >	LMX-SAB
2400	0		LMX-SAB
3753	0		LMX-SAB
3766	0		LMX-SAB
3808	0		LMX-SAB
3966			LMX-SAB
4322			LMX-SAB
5214			LMX-SAB
5219	0		LMX-SAB
6649	0		LMX-SAB
8045	0		LMX-SAB
8082	0		LMX-SAB
8098			LMX-SAB
8100	0		LMX-SAB
8103	0		LMX-SAB
8121	0		LMX-SAB

**Table 61. Individual laboratory results for Serum #1311 by Luminex SAB - class II**

		**** Serum 1312 ****																										
Ctr	% POS	DQ2	DR15	DR16	DR7	DR9	DR12	DP11	DP15	DP14	DP17	DP9	DPA1*02	DR51	DPw5	DQA1*02	DP13	DPA1*04	DP10	DQ5	DR103	DP19	DP28	DPw1	DQ4	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+						LMX-SAB	
774	66	+	+	+	+	+	+	+	+																		LMX-SAB	
910		+	+	+	+	+	+	+					+	+		+					+					DRB5*01:01, DQA1*02:01, DQB1*05:01, DPA1*02:01, DPA1*02:02	LMX-SAB	
1647		+	+	+	+	+	+	+					+			+											LMX-SAB	
2400		+	+	+	+	+	+	+	+	+	+	+			+		+		+	+				+		DPw3,DPw6,DP18	LMX-SAB	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+											LMX-SAB	
3766	69	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+	DPw3,DPw6,DP18,DQA1*05	LMX-SAB	
3808	33	+	+	+	+	+	+	+	+	+	+	+	+				+	+					+	+			LMX-SAB	
3966	43	+	+	+	+	+	+						+	+	+	+		+			+					DQA1*05	LMX-SAB	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	DPw6,DQA1*01,DQA1*04,DQA1*05	LMX-SAB
5214		+	+	+	+	+	+	+	+	+	+	+	+		+					+		+				DQA1*02:01, DQA1*01/DQB1*05:01, DPA1*04:01, DRB5*01:01	LMX-SAB	
5219	31	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+				+	+			DR2,DR5	LMX-SAB	
6649	40	+	+	+	+	+	+	+	+					+		+											LMX-SAB	
8045	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+						+	+	+	DQ8,DPw4,DQ6	LMX-SAB	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					DQA1*05	LMX-SAB	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+				LMX-SAB	
8100		+	+	+	+	+	+	+	+	+	+	+		+	+		+		+	+				+	+	DQ7,DQ8,DQ9,DPw3 >	LMX-SAB	
8103	30	+	+	+	+	+	+	+	+	+	+	+	+										+	+			LMX-SAB	
8121		+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+				+	+	+	+	DQ8,DPw4,DQ6	LMX-SAB	