

# REPORT OF THE 410<sup>th</sup> CELL EXCHANGE

## MAY 8, 2019

B-cell Lines	561-562
Cells	1637-1640
Sera	1265-1268

### B-cell Line Exchange #281

The results for B-cell Line Exchange #281 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. We would like to acknowledge and thank the labs performing NGS for

sharing their results and encourage other NGS labs to share their findings. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

**Ter-561.** The consensus type for this cell from a Caucasian donor is DRB1\*04:01-DRB1\*13:01-DRB3\*02:02-DRB4\*01:03-DQA1\*01:03-DQA1\*03:03-DQB1\*03:01-DQB1\*06:03-DPA1\*01:03-DPA1\*02-DPB1\*04:01-DPB1\*19:01/A\*02:01-A\*23:01-B\*44:09-B\*44:13-C\*04:01-C\*05:01. One likely association present in this cell is A\*02:01-B\*44:09-DRB1\*04:01-DQB1\*03:01. This rare association is observed exclusively in Caucasians, with HF = 0.00006. The other association present is then likely A\*23:01-B\*44:13-DRB1\*13:01-DQB1\*06:03.

This cell is AMI005AN, one of the reference cells for B\*44:13. It was typed several times in the Cell Exchange as extracts 573 (2013), 549 (2012), 271 (2003), and 202 (2002). In this present typing, B\*44:13 was reported by 95% of labs reporting at high resolution. B\*44:09 (100%) was reported as the second B-locus type. For DPA1, good agreement was achieved for DPA1\*01:03 (100%), with 4 labs assigning DPA1\*01:03:01. However, no agreement was achieved for the second DPA1 type, as DPA1\*02:07 (67%), DPA1\*02:02 (20%), and DPA1\*02:01 (13%) were assigned. DPA1\*02:07 differs from DPA1\*02:01 in exon 3 by a single nucleotide substitution at codon 91 (GTG → ATG), resulting in an amino acid change from valine to methionine. DPA1\*02:07, on the other hand, differs from DPA1\*02:02, in exon 2 by a single nucleotide substitution at codon 37 (GAC → GAT), which results in a synonymous substitution. As agreement for DPA1\*02:07 was < 90%, it was not graded.

**Ter-562.** The consensus type for this cell from a Caucasian donor is DRB1\*13:02-DRB1\*15:01-DRB3\*03:01-DRB5\*01:01-DQA1\*01:02-DQB1\*06:02-DQB1\*06:04-DPA1\*01:03-DPB1\*04:01/A\*02:01-A\*24:02-B\*07:02-B\*44:27-C\*07:02-C\*07:04. One likely association present in this cell is A\*02:01-B\*44:27-C\*07:04-DRB1\*15:01-DQB1\*06:02, observed in DKMS-LSL-B-1201, one of the reference cells for B\*44:27. The other likely association present is A\*24:02-B\*07:02-C\*07:02-DRB1\*13:02-DQB1\*06:04. The association of DRB1\*13:02-DQB1\*06:04 in this cell, is observed across all populations, with HF = 0.03208, in Caucasians.

This cell is FH48, one of reference cells for B\*44:27. It was studied in the workshops as IHW#9436 and in the Cell Exchange as extracts 449 (2009), 299 (2004), and 222 (2002). In this most recent study, B\*44:27 was reported in complete consensus, with 6 labs assigning B\*44:27:01. B\*07:02 (100%) was reported as the second B-locus type, with 6 labs reporting B\*07:02:01. The assigned DRB1 types were DRB1\*13:02 and DRB1\*15:01. Each were reported by 100% of labs reporting at high resolution, including 9 labs reporting DRB1\*13:02:01 and 8 labs reporting DRB1\*15:01:01. DQB1\*06:02 (100%) and DQB1\*06:04 (100%) were the reported DQB1 types, with 6 labs assigning DQB1\*06:02:01 and DQB1\*06:04:01.

**Table 1: Summary of the 281<sup>st</sup> B-cell Line Exchange**

**Ter-561**

DNA Typing - class II		DNA Typing - class I															
<b>30 labs High; 30 labs low-DRB1</b>	%(n)	<b>21 labs High; 22 labs Low-DRB3/4/5</b>	%(n)	<b>21 labs High; 27 labs Low-DQA1</b>	%(n)	<b>30 labs High; 28 labs Low-DQB1</b>	%(n)	<b>15 labs High; 15 labs Low-DPA1</b>	%(n)	<b>26 labs High; 16 labs Low-DPB1</b>	%(n)						
	DRB1*04:01:01		27(8)		DRB3*02:02:01:02		14(3)		DQA1*01:03:01:02		14(3)	DQB1*03:01:01:01	7 (2)	DPA1*01:03:01:04	20(3)	DPB1*04:01:01:01	4 (1)
	DRB1*04:01		73(22)		DRB3*02:02:01		10(2)		DQA1*01:03:01		10(2)	DQB1*03:01:01	13(4)	DPA1*01:03:01	7 (1)	DPB1*04:01:01	23(6)
	DRB1*04		100(30)		DRB3*02:02P		5 (1)		DQA1*01:03P		5 (1)	DQB1*03:01:01G	3 (1)	DPA1*01:03P	7 (1)	DPB1*04:01:01G	4 (1)
					DRB3*02:02		71(15)		DQA1*01:03		71(15)	DQB1*03:01P	3 (1)	DPA1*01:03	60(9)	DPB1*04:01P	4 (1)
					DRB3*02		73(16)		DQA1*01		100(27)	DQB1*03:01	73(22)	DPA1*03:02	7 (1)	DPB1*04:01	65(17)
					DRB3*PRESENT		27(6)					DQB1*03 (DQ7)	4 (1)	DPA1*01	100(15)	DPB1*04(DP401)	50(8)
												DQB1*03	96(27)			DPB1*04	50(8)
	<b>30 labs High; 30 labs low-DRB1</b>		%(n)		<b>21 labs High; 22 labs Low-DRB3/4/5</b>		%(n)		<b>21 labs High; 27 labs Low-DQA1</b>		%(n)	<b>30 labs High; 28 labs Low-DQB1</b>	%(n)	<b>15 labs High; 15 labs Low-DPA1</b>	%(n)	<b>26 labs High; 16 labs Low-DPB1</b>	%(n)
	DRB1*13:01:01		23(7)		DRB4*01:03:01		24(5)		DQA1*03:03:01:01		19(4)	DQB1*06:03:01:01	3 (1)	DPA1*02:07:01:01	13(2)	DPB1*19:01:01	23(6)
	DRB1*13:01		77(23)		DRB4*01:01P		5 (1)		DQA1*03:03:01		5 (1)	DQB1*06:03:01	20(6)	DPA1*02:07:01	7 (1)	DPB1*19:01:01G	4 (1)
	DRB1*13		100(30)		DRB4*01:03		71(15)		DQA1*03:01P		5 (1)	DQB1*06:03P	3 (1)	DPA1*02:02P	7 (1)	DPB1*19:01P	4 (1)
					DRB4*01		73(16)		DQA1*03:03		66(14)	DQB1*06:03	73(22)	DPA1*02:07	47(7)	DPB1*19:01	69(18)
		DRB4*PRESENT	27(6)	DQA1*03:01	5 (1)	DQB1*06	100(28)	DPA1*02:02	13(2)	DPB1*19	100(16)						
				DQA1*03	100(27)			DPA1*02:01	13(2)								
								DPA1*02	100(15)								
<b>21 labs High; 23 labs low- A</b>	%(n)	<b>23 labs High; 23 labs low- B</b>	%(n)	<b>21 labs High; 23 labs low- C</b>	%(n)	<b>21 labs High; 23 labs low- C</b>	%(n)	<b>21 labs High; 23 labs low- A</b>	%(n)	<b>22 labs High- B</b>	%(n)						
	A*02:01:01:01		5 (1)		B*44:09		100(23)		C*04:01:01:14		5 (1)	A*23:01:01	29(6)	B*44:13	95(21)	C*05:01:01:02	10(2)
	A*02:01:01		24(5)		B*44		100(23)		C*04:01:01:01		5 (1)	A*23:01P	5 (1)	B*44:03	5 (1)	C*05:01:01	19(4)
	A*02:01P		5 (1)						C*04:01:01		19(4)	A*23:01	66(14)			C*05:01P	5 (1)
	A*02:01		66(14)						C*04:01P		5 (1)	A*23	100(23)			C*05:01	66(14)
	A*02		100(23)						C*04:01		66(14)					C*05	100(23)
									C*04		100(23)						

**Table 2: Summary of the 281<sup>st</sup> B-cell Line Exchange**

**Ter-562**

<b>DNA Typing - class II</b>		<b>21 labs High; 22 labs Low-DRB3/4/5</b>		<b>21 labs High; 27 labs Low-DQA1</b>		<b>30 Labs High; 28 labs Low-DQB1</b>		<b>16 labs High; 15 labs Low-DPA1</b>		<b>26 labs High; 16 labs Low-DPB1</b>	
		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>	
<b>31 labs High; 30 labs low-DRB1</b>		<b>21 labs High; 22 labs Low-DRB3/4/5</b>		<b>21 labs High; 27 labs Low-DQA1</b>		<b>30 Labs High; 28 labs Low-DQB1</b>		<b>16 labs High; 15 labs Low-DPA1</b>		<b>26 labs High; 16 labs Low-DPB1</b>	
DRB1*13:02:01	29(9)	DRB3*03:01:01	24(5)	DQA1*01:02:01	24(5)	DQB1*06:02:01:01	7 (2)	DPA1*01:03:01:02	13(2)	DPB1*04:01:01:01	4 (1)
DRB1*13:02	71(22)	DRB3*03:01P	5 (1)	DQA1*01:02	76(16)	DQB1*06:02:01	13(4)	DPA1*01:03:01	13(2)	DPB1*04:01:01:02	4 (1)
DRB1*13	100(30)	DRB3*03:01	71(15)	DQA1*01	100(27)	DQB1*06:02:01G	3 (1)	DPA1*01:03P	6 (1)	DPB1*04:01:01	19(5)
		DRB3*03	73(16)			DQB1*06:02	77(23)	DPA1*01:03	68(11)	DPB1*04:01	73(19)
		DRB3*PRESENT	27(6)			DQB1*06	100(28)	DPA1*01	100(15)	DPB1*04(DP401)	31(8)
										DPB1*04	31(8)
<b>31 labs High; 30 labs low-DRB1</b>		<b>21 labs High; 22 labs Low-DRB3/4/5</b>									
DRB1*15:01:01:03	3 (1)	DRB5*01:01:01	24(5)								
DRB1*15:01:01:01	3 (1)	DRB5*01:01P	5 (1)								
DRB1*15:01:01	19(6)	DRB5*01:01	71(15)								
DRB1*15:01	74(23)	DRB5*01	73(16)								
DRB1*15	100(30)	DRB5*PRESENT	27(6)								
<b>21 labs High; 23 labs low- A</b>		<b>21 labs High; 23 labs low- B</b>		<b>21 labs High; 23 labs low- C</b>		<b>30 labs High-DQB1</b>					
A*02:01:01:01	5 (1)	B*07:02:01:01	14(3)	C*07:02:01:03	10(2)	DQB1*06:04:01	20(6)				
A*02:01:01	24(5)	B*07:02:01	14(3)	C*07:02:01	19(4)	DQB1*06:04:01G	3 (1)				
A*02:01P	5 (1)	B*07:02P	5 (1)	C*07:02P	5 (1)	DQB1*06:04P	3 (1)				
A*02:01	66(14)	B*07:02	68(14)	C*07:02	66(14)	DQB1*06:04	73(22)				
A*02	100(23)	B*07	100(23)	C*07	100(23)						
<b>21 labs High; 23 labs low- A</b>		<b>21 labs High; 23 labs low- B</b>		<b>21 labs High; 23 labs low- C</b>							
A*24:02:01:01	5 (1)	B*44:27:01	29(6)	C*07:04:01:01	10(2)						
A*24:02:01	24(5)	B*44:27	71(15)	C*07:04:01	19(4)						
A*24:02P	5 (1)	B*44	100(23)	C*07:04P	5 (1)						
A*24:02	66(14)			C*07:04	66(14)						
A*24	100(23)			C*07	100(23)						

**Table 3a: Individual laboratory results for B-cell #561 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
206	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19		
278	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19		
725	*04	13	3*PRESENT	4*PRESENT	*01	*03	*03	*06					SSP SSO	
731	*04	13			*01	*03	*03	*06					SSP SSO SBT	
735	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04(DP401)	*19	SSP SSO SBT	
747	*04	13	3*PRESENT	4*PRESENT	*01	*03	*03	*06	*01	*02	*04	*19	SSP SSO NGS	
771	*04	13			*01	*03	*03	*06					SSP SSO	
774	*04	13	3*02	4*01	*01	*03	*03	*06			*04(DP401)	*19	SSP SSO	
792	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19	SSP SSO SBT	
793	*04	13	3*02	4*01	*01	*03	*03	*06			*04(DP401)	*19	SSP	
794	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19	SSP SSO NGS	
2400	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19	RT-PCR	
2847	*04	13											SSO	
3519	*04	13			*01	*03	*03	*06	*01	*02	*04(DP401)	*19	SSP NGS RT-PCR	
3632	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04	*19	SSP SSO	
3753			3*02	4*01	*01	*03			*01	*02				
4079	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04(DP401)	*19	SSP SSO NGS	
4251	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	*04(DP401)	*19	SSO NGS	
4492	*04	13	3*PRESENT	4*PRESENT	*01	*03	*03	*06	*01	*02	*04(DP401)	*19	SSP SSO NGS	
5130	*04	13	3*02	4*01	*01	*03	*03	*06			*04	*19	SSO NGS	
5214	*04	13	3*02	4*01	*01	*03	*03 (DQ7)	*06	*01	*02	*04(DP401)	*19	RT-PCR	
5219	*04	13			*01	*03	*03	*06					SSO	
5451	*04	13	3*02	4*01	*01	*03	*03	*06					SSO SBT	
5462	*04	13	3*02	4*01	*01	*03	*03	*06	*01	*02	NT	NT	SSP RT-PCR	
5642	*04	13	3*PRESENT	4*PRESENT			*03	*06					SSP	
6649	*04	13											SSO	
8001	*04	13	3*PRESENT	4*PRESENT	*01	*03	*03	*06					SSP SSO	
8029	*04	13			*01	*03	*03	*06					SSO	
8043	*04	13			*01	*03	*03	*06					SSP SSO	
8068	*04	13			*01	*03	*03	*06					SSO	
9916	*04	13	3*PRESENT	4*PRESENT			*03	*06					SSP	

**Table 3b: Individual laboratory results for B-cell #561 - Class II**

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
230	*04:01	*13:01					*03:01	*06:03			*04:01	*19:01	SSO SBT	
278	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:07	*04:01	*19:01		
731	*04:01:01	*13:01					*03:01	*06:03					SSP SSO SBT	
735	*04:01	*13:01	3*02:02P	4*01:01P	*01:03P	*03:01P	*03:01P	*06:03P	*01:03P	*02:02P	*04:01P	*19:01P	SSP SSO SBT	
747	*04:01:01	*13:01:01	3*02:02:01:02	4*01:03:01	*01:03:01:02	*03:03:01:01	*03:01:01:01	*06:03:01	*01:03:01:04	*02:07	*04:01:01:01	*19:01	SSP SSO NGS	
762	*04:01:01	*13:01:01	3*02:02:01:02	4*01:03:01	*01:03:01:02	*03:03:01:01	*03:01:01:01	*06:03:01	*01:03:01:04	*02:07:01:01	*04:01:01	*19:01:01	NGS	
771	*04:01	*13:01					*03:01	*06:03					SSP SSO	
														DRB1*13:166 DRB1*04:175 DRB1*13:173 DRB1*13:186 DRB1*04:171 DQB1*03:73 DQB1*03:93 DQB1*03:92
774	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03			*04:01	*19:01	SSP SSO	
792	*04:01	*13:01					*03:01	*06:03			*04:01	*19:01	SSP SSO SBT	
793					*01:03	*03:03					*04:01	*19:01	SSP	
794	*04:01:01	*13:01:01	3*02:02:01	4*01:03:01	*01:03	*03:03	*03:01:01	*06:03:01			*04:01:01	*19:01:01	SSP SSO NGS RT-PCR	DQB1*03:01:41
2344	*04:01:01	*13:01:01					*03:01:01	*06:03:01			*04:01:01	*19:01:01	NGS	
2400	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:07	*04:01	*19:01		
3135	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:01	*03:01	*06:03	*03:02	*02:01	*04:01	*19:01		DQA1*03:02 DQA1*03:03
3224	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:07	*04:01	*19:01	NGS	
3511	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03			*04:01	*19:01	SSP SSO	
3519	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:01	*04:01	*19:01	SSP NGS RT-PCR	DPA1*01:04 DPA1*02:02 DPA1*02:07
3632	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:02	*04:01	*19:01	SSP SSO	

**Table 3b: Individual laboratory results for B-cell #561 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DQB1*03:10 DQB1*03:29 DQB1*03:69 DQB1*06:32 DQB1*06:145 DQB1*06:148 DPB1*278:01 DPB1*358:01 DQB1*03:194 DQB1*03:256 DQB1*03:264 DQB1*03:276N DQB1*03:292 DQB1*03:293 DQB1*03:294 DQB1*03:297 DQB1*06:221 DQB1*06:230
3753	*04:01	*13:01					*03:01	*06:03				*04:01:01G	*19:01:01G	
3966	*04:01	*13:01	3*02:02	4*01:03			*03:01	*06:03					SSP	
4079	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:07	*04:01	*19:01	SSP SSO NGS	
4251	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01:01G	*06:03	*01:03	*02:07	*04:01	*19:01	SSO NGS	
4337	*04:01	*13:01					*03:01	*06:03			*04:01	*19:01	SBT NGS	
4492	*04:01:01	*13:01:01	3*02:02	4*01:03	*01:03:01	*03:03:01:01	*03:01	*06:03:01	*01:03	*02:02	*04:01:01	*19:01:01	SSP SSO NGS	DPA1*02:06 DPA1*02:07
5130	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03			*04:01	*19:01	SSO NGS	DQB1*03:276N
5133	*04:01:01	*13:01:01	3*02:02:01:02	4*01:03:01	*01:03:01:02	*03:03:01:01	*03:01:01	*06:03:01:01	*01:03:01:04	*02:07:01:01	*04:01:01	*19:01:01	NGS	
5451	*04:01:01	*13:01:01											SSO SBT	
5488			3*02:02:01	4*01:03:01	*01:03:01	*03:03:01	*03:01:01	*06:03:01	*01:03:01	*02:07:01	*04:01:01	*19:01:01	SSO NGS	
5642	*04:01	*13:01					*03:01	*06:03					SSP	
8001	*04:01	*13:01	3*02:02	4*01:03			*03:01	*06:03			*04:01	*19:01	SSP SSO	
8021	*04:01	*13:01	3*02:02	4*01:03	*01:03	*03:03	*03:01	*06:03	*01:03	*02:07	*04:01	*19:01		
8043	*04:01	*13:01			*01:03	*03:03	*03:01	*06:03					SSP SSO	

**Table 4: Individual laboratory results for B-cell #561 - Class I**

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
206	*02	*23	*44	*44	*04	*05								
230							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSO SBT	
278	*02	*23	*44	*44	*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01		
725	*02	*23	*44	*44	*04	*05							SSP SSO	
735	*02	*23	*44	*44	*04	*05	*02:01P	*23:01P	*44:09	*44:13	*04:01P	*05:01P	SSP SSO SBT	
747	*02	*23	*44	*44	*04	*05	*02:01:01:01	*23:01:01	*44:09	*44:13	*04:01:01:01	*05:01:01:02	SSP SSO NGS	B*44:46 B*44:67
774	*02	*23	*44	*44	*04	*05			*44:09	*44:03			SSP SSO	B*44:13 B*44:19N B*44:67 B*44:137 B*44:155 B*44:46
792	*02	*23	*44	*45	*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSP SSO SBT	A*02:01:01:02L
793	*02	*23	*44		*04	*05							SSP	
794	*02	*23	*44		*04	*05	*02:01:01	*23:01:01	*44:09	*44:13	*04:01:01	*05:01:01	SSP SSO NGS	
2344							*02:01:01	*23:01:01	*44:09	*44:13	*04:01:01	*05:01:01	RT-PCR	
2400	*02	*23	*44	*44	*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	NGS	
2847	*02	*23	*44	*44	*04	*05								B*44:46 B*44:67
3135							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSO	
3224							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01		C*04:09N
3511							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	NGS	
3519	*02	*23	*44		*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSP SSO	
													SSP NGS RT-PCR	B*44:67 B*44:46
														A*02:36 A*02:46 A*02:76 A*02:90 A*02:95 A*02:174 A*23:04 A*02:40 A*23:12 A*23:14 A*23:80 A*23:82 C*04:223 C*05:78 C*05:141 A*23:57 A*23:64 B*44:46 B*44:67 C*04:07 C*04:10 C*04:15 C*04:33 C*04:103 C*04:120 C*04:129 C*05:09 C*05:18 C*05:25 C*05:29 C*05:46 C*05:64
3753							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01		
3966	*02	*23	*44	*44	*04	*05							SSP	
4079	*02	*23	*44		*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSP SSO NGS	
4251	*02	*23	*44	*44	*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSO NGS	
4337							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SBT NGS	
4492	*02	*23	*44		*04	*05	*02:01:01	*23:01:01	*44:09	*44:13	*04:01:01	*05:01:01	SSP SSO NGS	
5130	*02	*23	*44	*44	*04	*05	*02:01	*23:01	*44:09	*44:13	*04:01	*05:01	SSO NGS	B*44:67 B*44:46
5133							*02:01:01	*23:01:01	*44:09	*44:13	*04:01:01:14	*05:01:01:02	NGS	
5214	*02	*23	*44	45	*04	*05			*44:09 (B45)				RT-PCR	
5219	*02	*23	*44	*44	*04	*05							SSO	

**Table 4: Individual laboratory results for B-cell #561 - Class I**

Low resolution							High resolution				METHOD	Other Alleles		
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B				HLA-C	
5462	*02	*23	*44	*44	*04	*05							SSP RT-PCR	
5488							*02:01:01	*23:01:01	*44:09	*44:13	*04:01:01	*05:01:01	SSO NGS	B*44:46 B*44:67
8021							*02:01	*23:01	*44:09	*44:13	*04:01	*05:01		
8029	*02	*23	*44	44	*04	*05							SSO	
8068	*02	*23	*44	44	*04	*05							SSO	
9916	*02	*23	*44		*04	*05							SSP	



**Table 5a: Individual laboratory results for B-cell #562 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
206	*13	*15	3*03	5*01	*01		*06	*06	*01		*04			
278	*13	*15	3*03	5*01	*01	*01	*06	*06	*01	*01	*04	*04		
725	*13	*15	3*PRESENT	5*PRESENT	*01		*06						SSP SSO	
731	*13	*15			*01		*06	*06					SSP SSO SBT	
735	*13	*15	3*03	5*01	*01	*01	*06	*06	*01	*01	*04(DP401)	*04(DP401)	SSP SSO SBT	
747	*13	*15	3*PRESENT	5*PRESENT	*01	*01	*06	*06	*01	*01	*04	*04	SSP SSO NGS	
771	*13	*15			*01		*06	*06					SSP SSO	
774	*13	*15	3*03	5*01	*01		*06	*06			*04(DP401)		SSP SSO	
792	*13	*15	3*03	5*01	*01	*01	*06	*06	*01	*01	*04	*04	SSP SSO SBT	
793	*13	*15	3*03	5*01	*01		*06				*04(DP401)		SSP	
794	*13	*15	3*03	5*01	*01		*06		*01		*04		SSP SSO NGS	
2400	*13	*15	3*03	5*01	*01		*06	*06	*01		*04		RT-PCR	
2847	*13	*15											SSO	
3519	*13	*15			*01		*06	*06	*01	*01	*04(DP401)		SSP NGS RT-PCR	
3632	*13	*15	3*03	5*01	*01		*06	*06	*01		*04		SSP SSO	
3753			3*03	5*01	*01	*01			*01	*01				
4079	*13	*15	3*03	5*01	*01		*06		*01		*04(DP401)		SSP SSO NGS	
4251	*13	*15	3*03	5*01	*01	*01	*06	*06	*01	*01	*04(DP401)	*04(DP401)	SSO NGS	
4492	*13	*15	3*PRESENT	5*PRESENT	*01		*06		*01		*04(DP401)		SSP SSO NGS	
5130	*13	*15	3*03	5*01	*01	*01	*06	*06			*04	*04	SSO NGS	
5214	*13	*15	3*03	5*01	*01		*06		*01		*04(DP401)		RT-PCR	
5219	*13	*15			*01	*01	*06	*06					SSO	
5451	*13	*15	3*03	5*01	*01		*06	*06					SSO SBT	
5462	*13	*15	3*03	5*01	*01		*06	*06	*01		NT	NT	SSP RT-PCR	
5642	*13	*15	3*PRESENT	5*PRESENT			*06						SSP	
6649	*13	*15											SSO	
8001	*13	*15	3*PRESENT	5*PRESENT	*01		*06	*06					SSP SSO	
8029	*13	*15			*01	*01	*06	*06					SSO	
8043	*13	*15			*01		*06	*06					SSP SSO	
8068	*13	*15			*01	*01	*06	*06					SSO	
9916	*13	*15	3*PRESENT	5*PRESENT			*06						SSP	

**Table 5b: Individual laboratory results for B-cell #562 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*13:02	*15:01					*06:02	*06:04			*04:01	*04:01	SSO SBT	
278	*13:02	*15:01	3*03:01	5*01:01	*01:02	*01:02	*06:02	*06:04	*01:03	*01:03	*04:01	*04:01		
731	*13:02:01	*15:01					*06:02	*06:04					SSP SSO SBT	
735	*13:02	*15:01	3*03:01P	5*01:01P	*01:02	*01:02	*06:02	*06:04P	*01:03P	*01:03P	*04:01	*04:01	SSP SSO SBT	
747	*13:02:01	*15:01:01:03	3*03:01:01	5*01:01:01	*01:02:01	*01:02:01	*06:02:01	*06:04:01	*01:03:01:02	*01:03:01:04	*04:01:01:02	*04:01:01	SSP SSO NGS	DQB1*06:39 DQB1*06:84
762	*13:02:01	*15:01:01:01	3*03:01:01	5*01:01:01	*01:02:01		*06:02:01:01	*06:04:01	*01:03:01:02	*01:03:01:04	*04:01:01:01		NGS	
771	*13:02	*15:01					*06:02	*06:04					SSP SSO	
														DRB1*15:85 DRB1*15:86 DRB1*15:106 DRB1*15:107 DRB1*15:108 DRB1*15:111 DRB1*15:112 DRB1*15:114 DQB1*06:84 DQB1*06:159
774	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04			*04:01		SSP SSO	
792	*13:02	*15:01					*06:02	*06:04			*04:01	*04:01	SSP SSO SBT	
793											*04:01		SSP	
794	*13:02:01	*15:01:01	3*03:01:01	5*01:01:01	*01:02		*06:02:01	*06:04:01			*04:01:01		SSP SSO NGS RT-PCR	DQB1*06:04:11
2344	*13:02:01	*15:01:01					*06:02:01	*06:04:01			*04:01:01	*04:01:01	NGS	
2400	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01			
3135	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01			
3224	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01		NGS	
3511	*13:02	*15:01	3*03:01	5*01:01	*01:02	*01:02	*06:02	*06:04	*01:03	*01:03	*04:01	*04:01	SSP SSO	
													SSP NGS	
3519	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03	*01:03	*04:01		RT-PCR	
3632	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01		SSP SSO	

**Table 5b: Individual laboratory results for B-cell #562 - Class II**

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
3753	*13:02	*15:01					*06:02:01G	*06:04:01G			*04:01	*04:01		DQB1*06:08 DQB1*06:176 DQB1*06:13 DQB1*06:09 DQB1*06:148 DQB1*06:186 DQB1*06:206 DQB1*06:230 DQB1*06:281 DQB1*06:282 DQB1*06:11 DQB1*06:14 DQB1*06:27 DQB1*06:21 DQB1*06:22+
3966	*13:02	*15:01	3*03:01	5*01:01			*06:02	*06:04					SSP	
4079	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01		SSP SSO NGS	
4251	*13:02	*15:01	3*03:01	5*01:01	*01:02	*01:02	*06:02	*06:04	*01:03	*01:03	*04:01	*04:01	SSO NGS	
4337	*13:02	*15:01					*06:02	*06:04			*04:01	*04:01	SBT NGS	
4492	*13:02:01	*15:01:01	3*03:01	5*01:01	*01:02:01	*01:02:01	*06:02	*06:04	*01:03	*01:03	*04:01:01	*04:01:01	SSP SSO NGS	
5130	*13:02	*15:01	3*03:01	5*01:01	*01:02	*01:02	*06:02	*06:04			*04:01	*04:01	SSO NGS	
5133	*13:02:01	*15:01:01	3*03:01:01	5*01:01:01	*01:02:01		*06:02:01:01	*06:04:01	*01:03:01		*04:01:01		NGS	
5451	*13:02:01	*15:01:01											SSO SBT	
5488	*13:02:01	*15:01:01	3*03:01:01	5*01:01:01	*01:02:01		*06:02:01	*06:04:01	*01:03:01		*04:01:01		SSO NGS	
5642	*13:02	*15:01					*06:02	*06:04					SSP	
8001	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04			*04:01		SSP SSO	
8021	*13:02	*15:01	3*03:01	5*01:01	*01:02		*06:02	*06:04	*01:03		*04:01			
8043	*13:02	*15:01			*01:02		*06:02	*06:04					SSP SSO	

**Table 6: Individual laboratory results for B-cell #562 - Class I**

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
206	*02	*24	*07	*44	*07	*07								
230							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSO SBT	
278	*02	*24	*07	*44	*07	*07	*02:01	*24:02	*07:02	*44:27	*07:02	*07:04		
725	*02	*24	*07	*44	*07								SSP SSO	
731													SSP SSO SBT	
735	*02	*24	*07	*44	*07	*07	*02:01P	*24:02P	*07:02P	*44:27	*07:02P	*07:04P	SSP SSO SBT	
747	*02	*24	*07	*44	*07	*07	*02:01:01:01	*24:02:01:01	*07:02:01:01	*44:27:01	*07:02:01:03	*07:04:01:01	SSP SSO NGS	
774	*02	*24	*07	*44	*07								SSP SSO	
792	*02	*24	*07	*44	*07	*07	*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSP SSO SBT	A*02:01:01:02L A*24:02:01:02L
793	*02	*24	*07	*44	*07								SSP	
													SSP SSO NGS	
794	*02	*24	*07	*44	*07		*02:01:01	*24:02:01	*07:02:01	*44:27:01	*07:02:01	*07:04:01	RT-PCR	
2344							*02:01:01	*24:02:01	*07:02:01	*44:27:01	*07:02:01	*07:04:01	NGS	
2400	*02	*24	*07	*44	*07	*07	*02:01	*24:02	*07:02	*44:27	*07:02	*07:04		
2847	*02	*24	*07	*44	*07	*07							SSO	
3135							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04		
3224							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	NGS	
3511							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSP SSO	
3519	*02	*24	*07	*44	*07		*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSP NGS RT-PCR	
														B*07:281 B*07:312 C*07:611 B*44:22 B*44:02 B*44:53 B*44:78 B*44:84 B*44:91 B*44:106 C*07:45 C*07:199 C*07:260 B*07:25 B*07:28 B*07:57 B*07:68 B*07:73 B*07:114 B*07:153 B*07:177 B*07:271 B*44:206 B*44:221 A*02:04 A*02:12 A*02:37 A*02:17 A*02:36 A*02:46 A*02:58 A*02:70 A*02:76 A*02:86 A*02:87 A*02:90 A*02:92 A*02:95 A*02:110 A*02:118 A*02:226N A*02:417 A*02:628 A*24:03 A*24:13 A*24:14 A*24:28 A*24:29 A*24:30 A*24:52 A*24:53 A*24:93+
3753							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04		
3966	*02	*24	*07	*44	*07	*07							SSP	
4079	*02	*24	*07	*44	*07		*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSP SSO NGS	
4251	*02	*24	*07	*44	*07	*07	*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSO NGS	
4337							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SBT NGS	
4492	*02	*24	*07	*44	*07		*02:01:01	*24:02:01	*07:02:01:01	*44:27:01	*07:02:01	*07:04:01	SSP SSO NGS	
5130	*02	*24	*07	*44	*07	*07	*02:01	*24:02	*07:02	*44:27	*07:02	*07:04	SSO NGS	
5133							*02:01:01	*24:02:01	*07:02:01:01	*44:27:01	*07:02:01:03	*07:04:01:01	NGS	

**Table 6: Individual laboratory results for B-cell #562 - Class I**

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
5214	*02	*24	*07	*44	*07								RT-PCR	
5219	*02	*24	*07	*44	*07	*07							SSO	
5462	*02	*24	*07	*44	*07								SSP RT-PCR	
5488							*02:01:01	*24:02:01	*07:02:01	*44:27:01	*07:02:01	*07:04:01	SSO NGS	
8021							*02:01	*24:02	*07:02	*44:27	*07:02	*07:04		
8029	*02	*24	*07	*44	*07	*07							SSO	
8068	*02	*24	*07	*44	*07	*07							SSO	
9916	*02	*24	*07	*44	*07								SSP	

## CELL EXCHANGE #410

The results for Cell Exchange #410 are summarized in Table 7 and Table 8. Molecular typing results for individual laboratories are listed in Tables 9 -12 for each sample and individual serological results for each sample are listed

in Table 13. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Cell 1637.** The reported consensus type for this cell from a Japanese donor is A\*02:06(A2)-B\*51:01(B51)-B\*59:01(B59)-C\*01:02-C\*14:02. Family data from previous Exchange studies revealed the class I haplotypes in this cell to be A\*02:06-B\*59:01-C\*01:02 and A\*02:06-B\*51:01-C\*14:02. Each is observed exclusively in Asian populations, with respective HF = 0.00392 and 0.00747.

This cell is AT, one of the reference cells for B\*59:01. It has been examined in the Exchange as extract 444 (2009), and as cells 458 (1983) and 908 (1997). In this present study, A\*02:06, B\*51:01, B\*59:01, C\*01:02, and C\*14:02 were each reported in complete consensus by labs reporting at high resolution. A\*02:06:01:01, B\*51:01:01, and C\*14:02:01 were each reported by 4 labs, while B\*59:01:01 was reported by 5 labs. Good agreement was also observed for the serological assignments, with labs reporting A2 (100%), B51 (100%), and B59 (90%).

**Cell 1638.** The reported consensus type for this cell from a Chinese donor is A\*02:07(A2)-A\*11:01(A11)-B\*13:01(B13)-B\*46:01(B46)-C\*01:02-C\*03:04. Likely associations present in this cell are A\*02:07-B\*46:01-C\*01:02 and A\*11:01-B\*13:01-C\*03:04, with respective HF = 0.03251 and 0.00929, in Asians. A\*02:07, A\*11:01, B\*13:01, B\*46:01, C\*01:02, and C\*03:04 were each assigned in complete consensus, with 5 labs assigning B\*46:01:01; A\*02:07:01, A\*11:01:01:01, B\*13:01:01, C\*01:02:01, and C\*03:04:01 were each assigned by 4 labs. A2 (100%), A11 (100%), B13 (100%), and B46 (90%) were well assigned by serology.

**Cell 1639.** The reported consensus type for this cell from a Filipino donor is A\*24:02(A24)-A\*26:01(A26)-B\*15:13(B15)-B\*39:01(B39)-C\*07:02-C\*08:01. Likely associations present are B\*39:01-C\*07:02 and B\*15:13-C\*08:01, observed in Asian populations, with respective HF = 0.01194 and 0.00171. The association of B\*15:13-C\*08:01 was also observed in previous exchange cells, cell 1590 and cell 1131. A\*24:02, A\*26:01, B\*15:13, B\*39:01, C\*07:02, and C\*08:01 were each assigned in complete consensus, with 3 labs assigning A\*24:02:01, A\*26:01:01:01, B\*15:13:01, B\*39:01:01, C\*07:02:01, and C\*08:01:01:01. Good agreement was also achieved among serology labs, as A24, A26, and B39 were assigned in complete consensus. B15 was also reported in complete consensus, with 5 labs reporting B77.

**Cell 1640.** The reported consensus type for this cell from a Chinese donor is A\*02:01(A2)-A\*30(A30)-B\*13:02(B13)-B\*15:02(B15)-C\*06:02-C\*08:01. One likely association present is A\*02:01-B\*15:02-C\*08:01, observed in Asians, with HF = 0.00081. The other likely association present is A\*30-B\*13:02-C\*06:02. This cell was previously examined in the Exchange as cell 1589 (2017). In the 2017 study, Arnold, Askar, Fischer, Latham, Loewenthal, and Rees noted a new A\*30 allele was present. The new allele, now assigned as A\*30:109, differs from A\*30:01 by a single nucleotide substitution in exon 3 at codon 139 (GCG→GTG), which results in an amino acid change from alanine to valine. In this present retyping, A\*30:109 was reported by 65% (7 labs) of labs reporting at high resolution. As consensus for A\*30:109 was < 90%, the subtype for A\*30 was not graded. A2 (100%), A30 (75%), B13 (100%), and B75 (B63%) were assigned by serology.

**Table 7. Summary of the 410<sup>th</sup> Cell Exchange (Cell #1637-1640)**

**DNA typing**

<b>Cell 1637</b>	
17 low/14 high labs - A	%(n)
A*02:06:01:01	29(4)
A*02:06:01G	14(2)
A*02:06	57(8)
A*02	100(17)
17 low/13 high labs - B	%(n)
B*51:01:01:01	15(2)
B*51:01:01	15(2)
B*51:01:01G	8 (1)
B*51:01P	8 (1)
B*51:01	54(7)
B*51	100(17)
17 low/13 high labs - B	%(n)
B*59:01:01:01	8 (1)
B*59:01:01	31(4)
B*59:01	61(8)
B*59	100(17)
16 low/13 high Labs - C	%(n)
C*01:02:01:01	8 (1)
C*01:02:01	15(2)
C*01:02:01G	8 (1)
C*01:02	69(9)
C*01	100(16)
16 low/13 high Labs - C	%(n)
C*14:02:01:01	15(2)
C*14:02:01	15(2)
C*14:02	69(9)
C*14	100(16)

<b>Cell 1638</b>	
17 low/14 high labs - A	%(n)
A*02:07:01	29(4)
A*02:07:01G	7 (1)
A*02:07	64(9)
A*02	100(17)
17 low/13 high labs - A	%(n)
A*11:01:01:01	31(4)
A*11:01:01G	15(2)
A*11:01	54(7)
A*11	100(17)
17 low/13 high labs - B	%(n)
B*13:01:01:01	15(2)
B*13:01:01	15(2)
B*13:01:01G	8 (1)
B*13:01	62(8)
B*13	100(17)
17 low/13 high labs - B	%(n)
B*46:01:01	38(5)
B*46:01	62(8)
B*46	100(17)
16 low/13 high Labs - C	%(n)
C*01:02:01:01	8 (1)
C*01:02:01	23(3)
C*01:02:01G	8 (1)
C*01:02	61(8)
C*01	100(16)
16 low/14 high Labs - C	%(n)
C*03:04:01:02	14(2)
C*03:04:01	14(2)
C*03:04:01G	14(2)
C*03:04	57(8)
C*03(Cw10)	12(2)
C*03	88(14)

<b>Cell 1639</b>	
15 low/11 high labs - A	%(n)
A*24:02:01:01	18(2)
A*24:02:01	9 (1)
A*24:02:01G	9 (1)
A*24:02P	9 (1)
A*24:02	55(6)
A*24	100(15)
15 low/11 high labs - A	%(n)
A*26:01:01:01	21(3)
A*26:01:01G	18(2)
A*26:01	55(6)
A*26	100(15)
15 low/13 high labs - B	%(n)
B*15:13:01	23(3)
B*15:13	77(10)
B*15(B77)	13(2)
B*15	87(13)
15 low/11 high labs - B	%(n)
B*39:01:01:03	18(2)
B*39:01:01	9 (1)
B*39:01	72(8)
B*39	100(15)
14 low/12 high Labs - C	%(n)
C*07:02:01:15	8 (1)
C*07:02:01	17(2)
C*07:02:01G	8 (1)
C*07:04:01G	8 (1)
C*07:02	58(7)
C*07	100(14)
14 low/11 high Labs - C	%(n)
C*08:01:01:01	27(3)
C*08:01:01G	9 (1)
C*08:01	64(7)
C*08	100(14)

<b>Cell 1640</b>	
15 low/11 high labs - A	%(n)
A*02:01:01:01	18(2)
A*02:01:01	9 (1)
A*02:01:01G	18(2)
A*02:01	55(6)
A*02	100(15)
15 low/11 high labs - A	%(n)
A*30:109	64(7)
A*30:01	36(4)
A*30	100(15)
15 low/11 high labs - B	%(n)
B*13:02:01:01	18(2)
B*13:02:01	18(2)
B*13:02	64(7)
B*13	100(15)
15 low/13 high labs - B	%(n)
B*15:02:01:01	15(2)
B*15:02:01	15(2)
B*15:02:01G	8 (1)
B*15:02	62(8)
B*15(B75)	13(2)
B*15	87(13)
14 low/11 high labs - C	%(n)
C*06:02:01:01	18(2)
C*06:02:01	9 (1)
C*06:02:01G	18(2)
C*06:02	55(6)
C*06	100(14)
14 low/11 high labs - C	%(n)
C*08:01:01:01	18(2)
C*08:01:01	9 (1)
C*08:01:01G	18(2)
C*08:01	55(6)
C*08	100(14)

**Table 8. Summary of the 410<sup>th</sup> Cell Exchange (Cell #1637 - 1640)**

**Serological typing**

(Japanese) <b>Cell 1637</b> (10 Samples Typed)	
A2	100.0%
B51	100.0%
B59	90.0%
Cw1	50.0%
Bw4	100.0%
<b>Others Found</b>	
Bw6	20.0%
Cw14	10.0%
Cw3	10.0%
B8	10.0%
A28	10.0%

(Chinese) <b>Cell 1638</b> (10 Samples Typed)	
A2	100.0%
A11	90.0%
A11.1	10.0%
	[100.0%]
B13	100.0%
B46	90.0%
Cw1	50.0%
Cw3	40.0%
Cw10	10.0%
	[50.0%]
Bw4	100.0%
Bw6	70.0%
<b>Others Found</b>	

(Filipino) <b>Cell 1639</b> (8 Samples Typed)	
A24	100.0%
A26	100.0%
B77	62.5%
B15	37.5%
	[100.0%]
B39	100.0%
Cw7	50.0%
Cw8	37.5%
Bw4	100.0%
Bw6	100.0%
<b>Others Found</b>	

(Chinese) <b>Cell 1640</b> (8 Samples Typed)	
A2	100.0%
A30	75.0%
B13	100.0%
B75	62.5%
B62	12.5%
B15	25.0%
	[100.0%]
Cw6	37.5%
Cw8	37.5%
Bw4	100.0%
Bw6	100.0%
<b>Others Found</b>	
Cw3	12.5%



**Table 9. Individual laboratory results for Cell #1637**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*02	*51	*59	*01	*14	*02:06	*02:01	*51:01	*59:01	*01:02	*14:02		A*02:06
725	*02		*51	*59	*01	*14							SSO	
731	*02		*51	*59	*01	*14	*02:06:01G		*51:01:01G	*59:01:01	*01:02	*14:02	SSP SSO SBT	
745							*02:06:01:01	*02:06:01:04	*51:01:01	*59:01:01	*01:02:01	*14:02:01	SSP SBT NGS	
747	*02	*02	*51	*59	*01	*14	*02:06:01:01	*02:06:01:01	*51:01:01	*59:01:01:01	*01:02:01	*14:02:01:01	SSP SSO NGS	
762							*02:06:01:01	*02:06:01:04	*51:01:01:01	*59:01:01	*01:02	*14:02:01	NGS	
771	*02		*51	*59	*01	*14	*02:06		*51:01	*59:01	*01:02	*14:02	SSO SBT	
774	*02	*02	*51	*59	*01	*14	*02:06						SSP SSO	
3186	*02		*51	*59	*01	*14							SSO	
3545	*02		*51	*59	*01	*14	*02:06		*51:01	*59:01	*01:02	*14:02	SSO SBT	A*02:718 A*02:737 B*51:230 B*51:232 C*01:150 C*01:151 C*01:85 C*01:127 C*01:142 B*51:193 B*51:224
3632	*02		*51	*59	*01	*14	*02:06		*51:01	*59:01	*01:02	*14:02	SSP SSO	
3808	*02		*51	*59	*01	*14							SSP	
4079	*02		*51	*59	*01	*14	*02:06		*51:01	*59:01	*01:02	*14:02	SSP SSO	
4251	*02	*02	*51	*59	*01	*14	*02:06:01G	*02:06:01G	*51:01P	*59:01	*01:02:01G	*14:02	SSO SBT	
5133							*02:06:01:01	*02:06:01:04	*51:01:01:01	*59:01:01	*01:02:01:01	*14:02:01:01	NGS	
5214	*02		*51	*59	*01	*14							SSO	
5462	*02	*02	*51	*59	*01	*14	*02:06	*02:06	*51:01	*59:01	*01:02	*14:02	SSO NGS	
6649	*02		*51	*59									SSO	
8001	*02		*51	*59	*01	*14							SSO	
8043	*02		*51	*59	*01	*14	*02:06		*51:01	*59:01	*01:02	*14:02	SSP SSO	

**Table 10. Individual laboratory results for Cell #1638**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04		
725	*02	*11	*13	*46	*01	*03							SSO	
731	*02	*11	*13	*46	*01	*03	*02:07:01G	*11:01:01G	*13:01:01G	*46:01:01	*01:02	*03:04	SSP SSO SBT	
745							*02:07:01	*11:01:01:01	*13:01:01	*46:01:01	*01:02:01	*03:04:01	SSP SBT NGS	
747	*02	*11	*13	*46	*01	*03	*02:07:01	*11:01:01:01	*13:01:01	*46:01:01	*01:02:01	*03:04:01:02	SSP SSO NGS	
762							*02:07:01	*11:01:01:01	*13:01:01:01	*46:01:01	*01:02:01	*03:04:01:02	NGS	
771	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSO SBT	
774	*02	*11	*13	*46	*01	*03	*02:07						SSP SSO	A*02:219 A*02:335 A*02:426 A*02:429 A*02:432 A*02:437 A*02:449 A*02:450 A*02:452 A*02:477
3186	*02	*11	*13	*46	*01	*03							SSO	
3545	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSO SBT	C*01:150 C*01:151 C*03:376 C*03:387 A*11:263 A*11:270 A*11:278 A*11:280 C*01:85 C*01:127 C*01:142 C*03:358 C*03:359 B*46:16 B*46:22 B*46:35 B*46:37 B*46:49 B*46:50 B*46:52
3632	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSP SSO	
3808	*02	*11	*13	*46	*01	*03						*03:04:01G	SSP	
4079	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSP SSO	
4251	*02	*11	*13	*46	*01	*03	*02:07	*11:01:01G	*13:01	*46:01	*01:02:01G	*03:04:01G	SSO SBT	
5133							*02:07:01	*11:01:01:01	*13:01:01:01	*46:01:01	*01:02:01:01	*03:04:01	NGS	
5214	*02	*11	*13	*46	*01	*03 (Cw10)							SSO	
5462	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSO NGS	
6649	*02	*11	*13	*46									SSO	
8001	*02	*11	*13	*46	*01	*03 (Cw10)							SSO	
8043	*02	*11	*13	*46	*01	*03	*02:07	*11:01	*13:01	*46:01	*01:02	*03:04	SSP SSO	

**Table 11. Individual laboratory results for Cell #1639**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01		
725	*24	*26	*15	*39	*07	*08							SSO	
731	*24	*26	*15	*39	*07	*08	*24:02:01G	*26:01:01G	*15:13	*39:01	*07:02	*08:01	SSP SSO SBT	
745							*24:02:01:01	*26:01:01:01	*15:13:01	*39:01:01	*07:02:01	*08:01:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*24:02:01:01	*26:01:01:01	*15:13:01	*39:01:01:03	*07:02:01	*08:01:01:01	NGS	
771	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01	SSO SBT	
774	*24	*26	*15	*39	*07	*08			*15:13				SSP SSO	
3186	*24	*26	*15	*39	*07	*08							SSO	
														A*24:402 C*07:612 A*24:352 A*24:353 A*26:117 C*07:50 C*07:349 C*07:566 C*07:592 C*07:594 C*07:595 C*07:596 C*08:22 C*08:99 C*08:102
3545	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01	SSO SBT	
3632	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01	SSP SSO	
3808	*24	*26	*15	*39	*07	*08			*15:13		*07:04:01G		SSP	
4079	NT												SSP SSO	
4251	*24	*26	*15	*39	*07	*08	*24:02P	*26:01:01G	*15:13	*39:01	*07:02:01G	*08:01:01G	SSO SBT	
5133							*24:02:01	*26:01:01:01	*15:13:01	*39:01:01:03	*07:02:01:15	*08:01:01:01	NGS	
5214	*24	*26	*15 (B77)	*39	*07	*08							SSO	
5462	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01	SSO NGS	
6649	*24	*26	*15	*39									SSO	
8001	*24	*26	*15 (B77)	*39	*07	*08							SSO	
8043	*24	*26	*15	*39	*07	*08	*24:02	*26:01	*15:13	*39:01	*07:02	*08:01	SSP SSO	

**Table 12. Individual laboratory results for Cell #1640**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*30	*13	*15	*06	*08	*02:01	*30:01	*13:02	*15:02	*06:02	*08:01		
725	*02	*30	*13	*15	*06	*08							SSO	
731	*02	*30	*13	*15	*06	*08	*02:01:01G	*30:109	*13:02:01	*15:02:01	*06:02:01G	*08:01:01G	SSP SSO SBT	
745							*02:01:01:01	*30:109	*13:02:01	*15:02:01:01	*06:02:01:01	*08:01:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*02:01:01:01	*30:109	*13:02:01:01	*15:02:01	*06:02:01:01	*08:01:01:01	NGS	
771	*02	*30	*13	*15	*06	*08	*02:01	*30:01	*13:02	*15:02	*06:02	*08:01	SSO SBT	
774	*02	*30	*13	*15	*06	*08				*15:02			SSP SSO	B*15:214 B*15:302N
3186	*02	*30	*13	*15	*06	*08							SSO	
														A*02:294 A*02:327 A*02:629 A*02:642 A*02:665 A*02:686 A*02:689 A*02:704 C*06:83 C*06:213 C*06:214 C*08:22 C*08:99 C*08:102 A*02:716 A*02:719 A*02:722 A*02:724 A*02:740
3545	*02	*30	*13	*15	*06	*08	*02:01	*30:109	*13:02	*15:02	*06:02	*08:01	SSO SBT	
3632	*02	*30	*13	*15	*06	*08	*02:01	*30:01	*13:02	*15:02	*06:02	*08:01	SSP SSO	
3808	*02	*30	*13	*15	*06	*08				*15:02:01G			SSP	
4079	NT												SSP SSO	
4251	*02	*30	*13	*15	*06	*08	*02:01:01G	*30:109	*13:02	*15:02	*06:02:01G	*08:01:01G	SSO SBT	
5133							*02:01:01	*30:109	*13:02:01:01	*15:02:01:01	*06:02:01	*08:01:01	NGS	
5214	*02	*30	*13	*15 (B75)	*06	*08							SSO	
5462	*02	*30	*13	*15	*06	*08	*02:01	*30:109	*13:02	*15:02	*06:02	*08:01	SSO NGS	
6649	*02	*30	*13	*15									SSO	
8001	*02	*30	*13	*15 (B75)	*06	*08							SSO	
8043	*02	*30	*13	*15	*06	*08	*02:01	*30:01	*13:02	*15:02	*06:02	*08:01	SSP SSO	

**Table 13. Individual laboratory results for Cell #1637-1640 by serology**

Investigator	Days Old	Cell No 1637 (Japanese)							Cell No 1638 (Chinese)							Cell No 1639 (Filipino)							Cell No 1640 (Chinese)														
		Viab %	A2	B51	B59	Cw1	Bw4	OTHERS	Viab %	A2	A11	B13	B46	Cw1	Cw3	Bw4	Bw6	OTHERS	Viab %	A24	A26	B15	B39	Cw7	Cw8	Bw4	Bw6	OTHERS	Viab %	A2	A30	B13	B15	Cw6	Cw8	Bw4	Bw6
Cecka, J. Mic	4	>95	+	+	+		+		>95	+	+	+	+		+	+		>95	+	+	B77	+			+	+		>95	+	+	+	B75			+	+	
D'Orsogna , L		80	+	+	+	+	+	Bw6	85	+	+	+	+	+	+			85	+	+	B77	+	+	+	+	+	85	+	+	+	B75	+	+	+	+		
Fort, Marylis	4	98	+	+	+		+		97	+	+	+	+		+	+		NT									NT										
Latham, Katy	4	100	+	+	+		+		100	+	+	+	+		+	+		100	+	+	B77	+			+	+	100	+	+	+	B75			+	+		
Loewenthal ,		80	+	+	+	+	+	Bw6	85	+	+	+	+	+	+	+		75	+	+	B77	+	+	+	+	+	80	+		+	B75	+	+	+	+		
Permpikul, Ve	7	90	+	+	+		+		90	+	A11.1	+	+		+	+		90	+	+	B77	+			+	+	90	+	+	+	B75			+	+		
Renac, Virgin	4	100	+	+	+		+		100	+	+	+	+		+	+		100	+	+	+	+			+	+	100	+		+	+			+	+		
Shai, Isaac	10	88%	+	+	B8	+	+	A28, Cw3	90%	+	+	+		+	+			92%	+	+	+	+	+	+	+	+	90%	+	+	+	B62	+	+	+	+	Cw3	
Vidan-Jeras,	8	95	+	+	+	+	+		100	+	+	+	+	+	+			95	+	+	+	+	+		+	+	100	+	+	+	+			+	+		
Villard, Jean		95	+	+	+	+	+	Cw14	98	+	+	+	+	+	Cw10	+	+																				

## SERUM EXCHANGE #568

The results for **Serum Exchange 568 (sera 1265 - 1268)**, are summarized in Tables 14 - 21 and individual laboratory results by method are listed

in Tables 22 - 34. Sera positive to B12 (B44, B45) and 5C specificities were examined in this study.

1265	method	#abs	B44	B45	B12	B49	B50	B51	B52	B53	B35	B62	B70	B71	B72	B61	B60	B13	B41	B63	B75	B77	B78	B7801	B18	B56	B59	B57	B58	B64		
class I	NIH-Std	1			100%																											
	NIH-Ext	2	100%			100%	100%	51%		50%	50%	100%		50%																		
	AHG	2	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%		50%	50%	50%	50%	50%	50%												
	Luminex	29	97%	97%		97%	97%	93%	97%	97%	97%	93%		93%	93%	93%	90%	97%	97%	93%	93%	93%	93%	17%	97%	97%	97%	97%	93%	90%		
	Flow	2	no specificities assigned																													
	C1q	2	100%	100%		100%	100%	100%	100%	100%	100%	100%		100%	100%	100%	50%	100%	100%		100%	100%	100%			100%						
	Other	2	50%	50%		50%	50%	100%	100%	100%	100%	50%		50%	50%	50%	50%			50%	50%	50%	100%		100%		50%	50%	50%	50%		
1265	method	#abs	B46	B47	A24	A2403	B39	B3901	A23	B65	A2	A69	B37	B38	B55	B76	B48	B54	B8	B67	Cw10	Cw9	Cw15	B42	Cw4	A68	Cw1	Cw14	Cw5	B82	B81	
	AHG	2	50%	50%																												50%
	Luminex	29	93%	97%	83%	28%	79%	28%	76%	59%	55%	45%	97%	97%	97%	90%	86%	86%	79%	76%	62%	48%	45%	41%	34%	31%	21%	21%	21%	17%		
	Other	2			50%		50%		50%	50%	50%	50%																				

1265	method	#abs	DR17	DR18	DR52	DR14	DR13	DQ2	DQ4	DQ5	DR11	DR12	DQ6	DQA1*05
class II	NIH-Ext	1	undetermined											
	Luminex	26	96%	96%	88%	58%	58%	35%	23%	19%	19%	19%	15%	12%
	Flow	2	no specificities assigned											
	Other	2	100%	100%	100%									

For **Serum 1265**, anti-B12 (B44, B45) reactivity was reported by all methods, including 1 lab reporting by NIH-standard. In addition, reactivity to a number of 5C and 7C specificities was reported by multiple methods. Additional anti-B37, -B38, -B55, and -B76 reactivity was reported by Luminex (>90%), along with allele specific A\*24:03, B\*39:01, and B\*78:01 reactivity.

For class II, anti-DR3 (DR17, DR18) and anti-DR52 reactivity was reported by Luminex single antigen and Luminex PRA, with single antigen labs reporting reactivity to DR17 and DR18 with >90% agreement. Additional DR and DQ reactivity was also reported by Luminex, including 2 labs reporting allele specific DQB1\*05:02 reactivity.

1266	method	#abs	B44	B45	B12	B49	B50	B41	B47	B60	B61	B13	A1	A23	B76	B82	B8201	A24	Cw15	A32	B62		
class I	NIH-Std	1			100%																		
	NIH-Ext	2	100%	100%																			
	AHG	2	50%	50%	50%	50%	50%	50%	50%	50%	50%												
	Luminex	29	97%	97%		97%	97%	93%	93%	93%	90%	97%	97%	90%	90%	79%	17%	90%	76%		86%		
	Flow	2	no specificities assigned																				
	C1q	2	100%	100%		100%	100%					100%			100%	100%	100%						
	Other	2	100%	100%		100%	100%	50%	50%	100%	100%	50%	100%	100%				50%	50%	50%			
1266	method	#abs	Cw18	Cw6	Cw5	Cw17	Cw2	Cw4	B56	B72	B52	B35	B63	B71	B53	B75	B54	B55	B58	B59	A43	A80	A29
	Luminex	29	83%	90%	72%	69%	62%	34%	69%	69%	62%	55%	55%	48%	41%	38%	41%	34%	34%	24%	52%	21%	17%

1266	method	#abs	DQ7	DQ8	DQ9	DR4	DQ4	DR53	DR9	DQA1*03	DQA1*05	DR7	DQ2	DQA1*06
class II	NIH-Ext	1	undetermined											
	Luminex	26	96%	96%	96%	96%	27%	92%	46%	42%	31%	27%	19%	12%
	Flow	2	no specificities assigned											
	Other	2	100%	100%	100%	100%								

For **Serum 1266**, anti-B12 (B44, B45) reactivity was reported by all methods. Additional reactivity to B49 and B50, as well as reactivity to a number of 7C specificities was reported by several methods, with Luminex reporting each with > 90% agreement. In addition, anti-A1 and -A23 reactivity was reported by Luminex and PRA, while additional anti-B76 and -B82 reactivity was reported by Luminex and C1q. Reactivity to a number of C-locus anti-

gens was reported by Luminex. A few (17%) Luminex labs also reported allele specific B\*82:01 reactivity.

For class II, anti-DQ3 (DQ7, DQ8, DQ9) and -DR4 reactivity was reported by Luminex and PRA, with Luminex reporting each with > 90% agreement. Additional reactivity DR53 (92%) was also reported by Luminex, along with anti-DQA1\*03, -DQA1\*05, and -DQA1\*06 reactivity.

1267	method	#abs	B57	B58	A23	A32	B38	B44	B12	B49	B50	B51	B52	B27	B37	B47	B53	B35	B62	B63	A25	A24	A2403	B77	B13	Bw4	B59			
class I	NIH-Std	1							100%																					
	NIH-Ext	2	100%	100%	100%	50%	100%	100%		100%		100%	100%	100%			100%													
	AHG	2	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%		50%	50%	50%	50%	50%			50%	50%				
	Luminex	29	97%	93%	93%	93%	93%	93%		93%	93%	93%	93%	93%	93%	93%	93%	93%	83%	86%	93%	93%	28%	90%	83%	45%	97%			
	Flow	2	no specificities assigned																											
	C1q	2	100%	100%	100%	100%	100%	100%		100%		100%	100%	100%	100%	100%			100%	100%				100%			100%			
	Other	2	100%	100%	100%	100%	50%	50%		100%	50%	100%	100%	100%	100%	100%	100%	50%	50%	100%	100%	100%		50%	100%	50%	50%			
1267	method	#abs	Cw2	Cw4	Cw17	Cw6	Cw15	Cw18	B72	B71	B70	B75	A80	B56	B78	B7801	B46	B7	B18	Cw5	Cw10	Cw9	Cw1	Cw14	B55	B60	B61	B41	B45	
	AHG	2										50%		50%																
	Luminex	29	97%	97%	90%	86%	86%	83%	90%	86%		86%		93%	83%	21%	66%	41%	38%	69%	55%	34%	31%	24%	24%	24%	17%	17%	17%	
	C1q	2	50%	50%	50%	50%	50%	50%																						
	Other	2							50%	50%		50%																		

1267	method	#abs	DQ7	DQ8	DQ9	DR4	DR1	DR11	DR9	DQ4	DR53	DPw2	DPw3	DP18	DP28	DPw6	DP14	DP9
class II	NIH-Ext	1	undetermined															
	Luminex	26	92%	92%	92%	96%	96%	92%	81%	81%	92%	85%	85%	81%	81%	81%	77%	77%
	Flow	2	no specificities assigned															
	C1q	1	100%	100%	100%	100%												
	Other	2	100%	100%	100%	50%	50%	50%	50%	50%								
1267	method	#abs	DP17	DR14	DP10	DP20	DPw4	DP402	DQ2	DQA1*03	DR7	DR10	DQA1*05	DQA1*06	DQA1*04	DQA1*02	DPA1*01	DPA1*04
	Luminex	26	69%	69%	65%	62%	62%	46%	46%	42%	42%	38%	35%	27%	23%	15%	12%	12%

**Serum 1267** was reported as strongly positive to a number of class I specificities, including B57, B58, A23, A32, B44, B27, B37, B47, B49, A25, and A24, as well as to a number of 5C specificities. Additional C-locus reactivity was also reported by Luminex, with labs reporting anti-Cw2, -Cw4, and -Cw17 reactivity with > 90% agreement. Allele specific A\*24:03, B\*27:05 and B\*78:01 reactivity was also reported by Luminex.

Reactivity to a number of DQ and DR specificities was reported in this sample, with Luminex, Flow, C1q and PRA reporting anti-DQ7, -DQ8, -DQ9, and -DR4 reactivity. Reactivity to DR1, DR11, DR9, and DQ4 was also reported by Luminex and PRA. In addition, anti-DR53 (92%) and -DR14 (69%) reactivity, along with reactivity to a number of DP and DQA1 specificities was reported by Luminex.



1268	method	#abs	B57	B49	B51	B52	B53	B63	B44	B12	B38	B37	A25	A32	A24	A2403	A23	B58	B47	B13	B27	B59	Bw4	B35
class I	NIH-Std	1	100%							100%														100%
	NIH-Ext	2	50%	100%	100%	100%	50%	50%	50%		50%		50%	50%	50%									
	AHG	2	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%		50%	50%	50%	50%	50%		50%	50%
	Luminex	29	97%	93%	97%	93%	93%	90%	97%		97%	93%	93%	93%	97%	28%	97%	97%	93%	97%	90%	97%	48%	
	Flow	2	no specificities assigned																					
	C1q	2	100%	100%	100%	100%	100%	100%	100%		100%	100%	100%	100%	50%	50%	100%	100%	50%	100%	100%	100%		
	Other	2	50%	50%	50%	50%	50%	50%	50%		50%	50%	100%	100%	100%		100%	50%	50%	50%	50%	50%	50%	
1268	method	#abs	B77	Cw8	B64	B46	B78	B7801	Cw16	Cw1	Cw10	Cw14	Cw12	Cw9	Cw7	B65	B18	B73	B75	A3	A34	A43	A29	
	Luminex	29	90%	66%	55%	90%	86%	24%	83%	69%	66%	62%	55%	55%	31%	38%	52%	31%	31%	48%	38%	28%	17%	
	C1q	2	100%																					
	Other	2		50%	50%																			

1268	method	#abs	DQ2	DR7	DR9	DR4	DR53	DR10	DQ8	DQ5	DQ9	DQ4	DQA1*02	DQA1*03	DQ6	DQ7	DR14	DQA1*05
class II	NIH-Ext	1	100%															
	Luminex	26	93%	88%	88%	92%	92%	81%	88%	85%	77%	46%	65%	62%	46%	31%	19%	12%
	Flow	2	no specificities assigned															
	C1q	1	100%	100%	100%							100%						
	Other	2	100%	100%	50%	100%	100%	50%	50%	100%	50%							

For **Serum 1268**, anti-B57 and -B44 reactivity was reported by all methods except Flow. Additional reactivity to B38, B37 A25, A32, A24, and A23, as well as reactivity to a number of 5C and 7C specificities, was reported by multiple methods, including NIH and C1q. In addition, Luminex reported additional C-locus reactivity, along with allele specific A\*24:03, B\*27:05, and B\*78:01 reactivity.

Class II reactivity was reported in this sample, with NIH, Luminex, C1q, and PRA all reporting strong anti-DQ2 reactivity. Additional reactivity to DR4, DR53, DR10, DQ8, DQ5, and DQ9 was reported by Luminex and PRA, while anti-DQ4 reactivity was reported by Luminex and C1q. In addition, Luminex reported DQA1 reactivity, along with allele specific reactivity to DQB1\*06:09.

**NEXT MAILING DATE: August 7, 2019**

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**Table 14. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by NIH-Standard and NIH-Extended - class I**

Method: NIH-Standard											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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		

Method: NIH-Extended											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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
B49	100%	100%	B44	100%	80%	A23	100%	100%	B49	100%	100%
B50	100%	100%	B45	100%	50%	B27	100%	100%	B51	100%	100%
B44	100%	80%				B38	100%	100%	B52	100%	100%
B62	100%	75%				B49	100%	100%	A25	50%	100%
B27	50%	100%				B51	100%	100%	A32	50%	100%
B35	50%	100%				B52	100%	100%	B38	50%	100%
B51	50%	100%				B53	100%	100%	B53	50%	100%
B53	50%	100%				B57	100%	100%	B63	50%	100%
B71	50%	100%				B58	100%	100%	B44	50%	88%
						B44	100%	89%	A24	50%	62%
						A32	50%	67%	B57	50%	50%

**Table 15. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Antiglobulin and Flow Cytometry - class I**

Method: Antiglobulin												
*** Serum 1265 ***			*** Serum 1266 ***			*** Serum 1267 ***			*** Serum 1268 ***			
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs			
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	
B12	50%	100%	B12	50%	100%	A23	50%	100%	B57	100%	100%	
B13	50%	100%	B41	50%	100%	A24	50%	100%	A23	50%	100%	
B35	50%	100%	B44	50%	100%	A25	50%	100%	A24	50%	100%	
B41	50%	100%	B45	50%	100%	A32	50%	100%	A25	50%	100%	
B44	50%	100%	B47	50%	100%	A80	50%	100%	A32	50%	100%	
B45	50%	100%	B49	50%	100%	B12	50%	100%	B12	50%	100%	
B46	50%	100%	B50	50%	100%	B13	50%	100%	B13	50%	100%	
B47	50%	100%	B60	50%	100%	B27	50%	100%	B27	50%	100%	
B49	50%	100%	B61	50%	100%	B35	50%	100%	B35	50%	100%	
B50	50%	100%				B37	50%	100%	B37	50%	100%	
B51	50%	100%				B38	50%	100%	B38	50%	100%	
B52	50%	100%				B44	50%	100%	B44	50%	100%	
B53	50%	100%				B47	50%	100%	B47	50%	100%	
B60	50%	100%				B49	50%	100%	B49	50%	100%	
B61	50%	100%				B51	50%	100%	B51	50%	100%	
B62	50%	100%				B52	50%	100%	B52	50%	100%	
B63	50%	100%				B53	50%	100%	B53	50%	100%	
B70	50%	100%				B57	50%	100%	B58	50%	100%	
B72	50%	100%				B58	50%	100%	B63	50%	100%	
B81	50%	100%				B62	50%	100%	Bw4	50%	100%	
						B63	50%	100%				
						B70	50%	100%				
						Bw4	50%	100%				
						B50	50%	80%				

Method: Flow Cytometry												
*** Serum 1265 ***			*** Serum 1266 ***			*** Serum 1267 ***			*** Serum 1268 ***			
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs			
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 16. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Other - class I**

Method: Other											
*** Serum 1265 ***			*** Serum 1266 ***			*** Serum 1267 ***			*** Serum 1268 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B18	100%	100%	A1	100%	100%	A23	100%	100%	A23	100%	100%
B35	100%	100%	A23	100%	100%	A24	100%	100%	A24	100%	100%
B51	100%	100%	B44	100%	100%	A25	100%	100%	A25	100%	100%
B52	100%	100%	B45	100%	100%	A32	100%	100%	A32	100%	100%
B53	100%	100%	B49	100%	100%	B13	100%	100%	B13	50%	100%
B78	100%	100%	B50	100%	100%	B27	100%	100%	B27	50%	100%
A2	50%	100%	B60	100%	100%	B37	100%	100%	B37	50%	100%
A23	50%	100%	B61	100%	100%	B47	100%	100%	B38	50%	100%
A24	50%	100%	A24	50%	100%	B49	100%	100%	B44	50%	100%
A69	50%	100%	A32	50%	100%	B51	100%	100%	B47	50%	100%
B39	50%	100%	B13	50%	100%	B52	100%	100%	B49	50%	100%
B44	50%	100%	B41	50%	100%	B53	100%	100%	B51	50%	100%
B45	50%	100%	B47	50%	100%	B57	100%	100%	B52	50%	100%
B49	50%	100%	Cw15	50%	100%	B58	100%	100%	B53	50%	100%
B50	50%	100%				B63	100%	100%	B57	50%	100%
B57	50%	100%				B35	50%	100%	B58	50%	100%
B58	50%	100%				B38	50%	100%	B59	50%	100%
B59	50%	100%				B44	50%	100%	B63	50%	100%
B60	50%	100%				B50	50%	100%	B64	50%	100%
B61	50%	100%				B59	50%	100%	Bw4	50%	100%
B62	50%	100%				B62	50%	100%	Cw8	50%	100%
B63	50%	100%				B71	50%	100%			
B64	50%	100%				B72	50%	100%			
B65	50%	100%				B75	50%	100%			
B71	50%	100%				B77	50%	100%			
B72	50%	100%				Bw4	50%	100%			
B75	50%	100%									
B77	50%	100%									

Other = Luminex-PRA

**Table 17. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Luminex - class I**

Method: Luminex											
*** Serum 1265 ***			*** Serum 1266 ***			*** Serum 1267 ***			*** Serum 1268 ***		
29 typing Labs			29 typing Labs			29 typing Labs			29 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B13	97%	100%	A1	97%	100%	B57	97%	100%	A23	97%	100%
B18	97%	100%	B13	97%	100%	B59	97%	100%	A24	97%	100%
B35	97%	100%	B44	97%	100%	Cw2	97%	100%	B13	97%	100%
B37	97%	100%	B45	97%	100%	Cw4	97%	100%	B38	97%	100%
B38	97%	100%	B49	97%	100%	A23	93%	100%	B44	97%	100%
B41	97%	100%	B50	97%	100%	A25	93%	100%	B51	97%	100%
B44	97%	100%	B41	93%	100%	A32	93%	100%	B57	97%	100%
B45	97%	100%	B47	93%	100%	B35	93%	100%	B58	97%	100%
B47	97%	100%	B60	93%	100%	B37	93%	100%	B59	97%	100%
B49	97%	100%	A23	90%	100%	B38	93%	100%	A25	93%	100%
B50	97%	100%	B61	90%	100%	B44	93%	100%	A32	93%	100%
B52	97%	100%	B76	90%	100%	B47	93%	100%	B37	93%	100%
B53	97%	100%	Cw6	90%	92%	B49	93%	100%	B47	93%	100%
B55	97%	100%	A24	90%	50%	B50	93%	100%	B49	93%	100%
B56	97%	100%	B62	86%	67%	B51	93%	100%	B52	93%	100%
B57	97%	100%	Cw18	83%	33%	B52	93%	100%	B53	93%	100%
B59	97%	100%	B82	79%	100%	B53	93%	100%	B63	90%	100%
B46	93%	100%	Cw15	76%	50%	B56	93%	100%	B77	90%	100%
B51	93%	100%	Cw5	72%	100%	B58	93%	100%	B27	90%	80%
B58	93%	100%	Cw17	69%	100%	A24	93%	88%	B46	90%	50%
B61	93%	100%	B56	69%	50%	B27	93%	80%	B78	86%	100%
B62	93%	100%	B72	69%	33%	B77	90%	100%	Cw16	83%	100%
B63	93%	100%	Cw2	62%	100%	Cw17	90%	100%	Cw1	69%	100%
B71	93%	100%	B52	62%	0%	B72	90%	67%	Cw10	66%	100%
B72	93%	100%	B35	55%	100%	B63	86%	100%	Cw8	66%	100%
B75	93%	100%	B63	55%	100%	B71	86%	100%	Cw14	62%	100%
B77	93%	100%	A43	52%	100%	B75	86%	100%	B64	55%	100%
B78	93%	100%	B71	48%	100%	Cw6	86%	92%	Cw12	55%	100%
B60	90%	100%	B53	41%	100%	Cw15	86%	80%	Cw9	55%	100%
B64	90%	100%	B54	41%	100%	B13	83%	100%	B18	52%	100%
B76	90%	100%	B75	38%	100%	B62	83%	100%	A3	48%	100%
B48	86%	100%	B55	34%	100%	B78	83%	100%	Bw4	48%	100%
B54	86%	100%	B58	34%	100%	Cw18	83%	75%	A34	38%	100%
A24	83%	88%	Cw4	34%	100%	Cw5	69%	50%	B65	38%	100%
B39	79%	100%	B59	24%	100%	B46	66%	100%	B73	31%	100%

**Table 17. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Luminex - class I**

<b>Method: Luminex - cont.</b>											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</b>		
29 typing Labs			29 typing Labs			29 typing Labs			29 typing Labs		
B8	79%	100%	A80	21%	100%	Cw10	55%	100%	B75	31%	100%
A23	76%	100%	A29	17%	100%	Bw4	45%	100%	Cw7	31%	100%
B67	76%	100%	B8201	17%	100%	B7	41%	100%	A2403	28%	100%
Cw10	62%	100%				B18	38%	100%	A43	28%	100%
B65	59%	100%				Cw9	34%	100%	B7801	24%	100%
A2	55%	100%				Cw1	31%	100%	A29	17%	100%
Cw9	48%	100%				A2403	28%	100%			
A69	45%	100%				B55	24%	100%			
Cw15	45%	100%				B60	24%	100%			
B42	41%	100%				Cw14	24%	100%			
Cw4	34%	100%				B7801	21%	100%			
A68	31%	100%				B41	17%	100%			
A2403	28%	100%				B45	17%	100%			
B3901	28%	100%				B61	17%	100%			
Cw1	21%	100%									
Cw14	21%	100%									
Cw5	21%	100%									
B7801	17%	100%									
B82	17%	100%									

**Table 18. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by C1q - class I**

Method: C1q											
*** Serum 1265 ***			*** Serum 1266 ***			*** Serum 1267 ***			*** Serum 1268 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B13	100%	100%	B44	100%	100%	A23	100%	100%	A23	100%	100%
B35	100%	100%	B45	100%	100%	A25	100%	100%	A25	100%	100%
B41	100%	100%	B76	100%	100%	A32	100%	100%	A32	100%	100%
B44	100%	100%	B13	50%	100%	B27	100%	100%	B13	100%	100%
B45	100%	100%	B49	50%	100%	B37	100%	100%	B27	100%	100%
B49	100%	100%	B50	50%	100%	B38	100%	100%	B37	100%	100%
B50	100%	100%	B82	50%	100%	B44	100%	100%	B38	100%	100%
B51	100%	100%	B8201	50%	100%	B47	100%	100%	B44	100%	100%
B52	100%	100%				B49	100%	100%	B49	100%	100%
B53	100%	100%				B51	100%	100%	B51	100%	100%
B56	100%	100%				B52	100%	100%	B52	100%	100%
B61	100%	100%				B53	100%	100%	B53	100%	100%
B62	100%	100%				B57	100%	100%	B57	100%	100%
B71	100%	100%				B58	100%	100%	B58	100%	100%
B72	100%	100%				B59	100%	100%	B59	100%	100%
B75	100%	100%				B63	100%	100%	B63	100%	100%
B77	100%	100%				B77	100%	100%	B77	100%	100%
B78	100%	100%				Cw15	50%	100%	A24	50%	100%
B60	50%	100%				Cw17	50%	100%	A2403	50%	100%
						Cw18	50%	100%	B47	50%	100%
						Cw2	50%	100%			
						Cw4	50%	100%			
						Cw6	50%	100%			

**Table 19. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by NIH-Extended and Flow Cytometry - class II**

Method: NIH-Extended											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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
Undetermined			Undetermined			Undetermined			no consensus		

Method: Flow Cytometry											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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
no specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		



**Table 20. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Other and C1q- class II**

Method: Other											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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
DR17	100%	100%	DQ7	100%	100%	DQ7	100%	100%	DQ2	100%	100%
DR18	100%	100%	DQ8	100%	100%	DQ8	100%	100%	DQ5	100%	100%
DR52	50%	100%	DQ9	100%	100%	DQ9	100%	100%	DR4	100%	100%
			DR4	50%	100%	DQ4	50%	100%	DR53	100%	100%
						DR1	50%	100%	DR7	100%	100%
						DR11	50%	100%	DR9	100%	100%
						DR4	50%	100%	DQ8	50%	100%
						DR9	50%	100%	DQ9	50%	100%
									DR10	50%	100%

Other = Luminex PRA

Method: C1q											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</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 21. Summary of the 568<sup>th</sup> Serum Exchange (Serum #1265-1268) by Luminex - class II**

Method: Luminex											
<b>*** Serum 1265 ***</b>			<b>*** Serum 1266 ***</b>			<b>*** Serum 1267 ***</b>			<b>*** Serum 1268 ***</b>		
26 typing Labs			26 typing Labs			26 typing Labs			26 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR17	96%	100%	DQ7	96%	100%	DR1	96%	100%	DQ2	93%	100%
DR18	96%	100%	DQ8	96%	100%	DR4	96%	100%	DR4	92%	100%
DR52	88%	43%	DQ9	96%	100%	DQ7	92%	100%	DR53	92%	100%
DR14	58%	86%	DR4	96%	100%	DQ8	92%	100%	DR7	88%	100%
DR13	58%	62%	DR53	92%	71%	DQ9	92%	100%	DR9	88%	100%
DQ2	35%	60%	DR9	46%	100%	DR11	92%	100%	DQ8	88%	83%
DQ4	23%	50%	DQA1*03	42%	100%	DR53	92%	100%	DQ5	85%	70%
DQ5	19%	50%	DQA1*05	31%	100%	DPw2	85%	100%	DR10	81%	100%
DR11	19%	50%	DQ4	27%	100%	DPw3	85%	100%	DQ9	77%	78%
DR12	19%	50%	DR7	27%	100%	DP18	81%	100%	DQA1*02	65%	100%
DQ6	15%	50%	DQ2	19%	100%	DP28	81%	100%	DQA1*03	62%	100%
DQA1*05	12%	100%	DQA1*06	12%	100%	DPw6	81%	100%	DQ6	46%	100%
						DQ4	81%	100%	DQ4	46%	75%
						DR9	81%	100%	DQ7	31%	53%
						DP14	77%	100%	DR14	19%	100%
						DP9	77%	100%	DQA1*05	12%	100%
						DP17	69%	100%			
						DR14	69%	33%			
						DP10	65%	100%			
						DP20	62%	100%			
						DPw4	62%	100%			
						DP402	46%	100%			
						DQ2	46%	100%			
						DQA1*03	42%	100%			
						DR7	42%	100%			
						DR10	38%	100%			
						DQA1*05	35%	100%			
						DQA1*06	27%	100%			
						DQA1*04	23%	100%			
						DQA1*02	15%	100%			
						DPA1*01	12%	100%			
						DPA1*04	12%	100%			

**Table 22. Individual laboratory results for Serum #1265 - 1268 by NIH-Standard and NIH-Extended - class I**

		**** Serum 1265 ****					**** Serum 1266 ****			**** Serum 1267 ****										**** Serum 1268 ****										
Ctr	% POS	B12				Other	% POS	B12	Other	% POS	B12														% POS	B12	B35	B57	Other	Method
786		+						+			+															+	+	+		STD

STD = NIH-standard

		**** Serum 1265 ****						**** Serum 1266 ****			**** Serum 1267 ****											**** Serum 1268 ****						
Ctr	% POS	B49	B50	B44	B62	Other	% POS	B44	B45	Other	% POS	A23	B27	B38	B49	B51	B52	B53	B57	B58	B44	Other	% POS	B49	B51	B52	Other	Method
725	52	+	+	+	+	B27,B51,B71	17	+	+		57	+	+	+	+	+	+	+	+	+	+	A32	50	+	+	+	A24,B44,A25,B57	EXT
3753	56	+	+	+	+	B53,B35	9	+	+		69	+	+	+	+	+	+	+	+	+	+		46	+	+	+	B53,A32,B63,B38	EXT

Ext = NIH-extended

**Table 23. Individual laboratory results for Serum #1265 - 1268 by Antiglobulin and Flow Cytometry - class I**

**** Serum 1265 ****																	**** Serum 1266 ****																	
Ctr	% POS	B12	B13	B35	B41	B44	B45	B46	B47	B49	B50	B51	B52	B53	B60	B61	Other	% POS	B12	B41	B44	B45	B47	B49	B50	B60	B61				Other	Method		
774	76		+	+	+	+	+	+	+	+	+	+	+	+	+	+	B70,B62,B63,B72 >	52		+	+	+	+	+	+	+	+					Antiglobulin		
786		+																	+												Antiglobulin			

**** Serum 1267 ****																	**** Serum 1268 ****																		
Ctr	% POS	A23	A24	A25	A32	A80	B12	B13	B27	B35	B37	B38	B44	B47	B49	B51	Other	% POS	B57	A23	A24	A25	A32	B12	B13	B27	B35	B37	B38	B44	B47	B49	B51	Other	Method
774	77	+	+	+	+	+		+	+	+	+	+	+	+	+	+	B70,B62,B50,B52 >	62	+	+	+	+	+		+	+		+	+	+	+	+	+	B52,B53,B63,B58 >	Antiglobulin
786							+												+					+			+							Antiglobulin	

**** Serum 1265 ****																	**** Serum 1266 ****																	
Ctr	% POS																Other	% POS														Other	Method	
3224	94																	70															FC	
8067	95																	65															FC	

**** Serum 1267 ****																	**** Serum 1268 ****																	
Ctr	% POS																Other	% POS														Other	Method	
3224	90																	76															FC	
8067	86																	64															FC	

FC = Flow cytometry

**Table 24. Individual laboratory results for Serum #1265 - 1268 by Other - class I**

	**** Serum 1265 ****														**** Serum 1266 ****											
Ctr	% POS	B18	B35	B51	B52	B53	B78								Other	% POS	A1	A23	B44	B45	B49	B50	B60	B61	Other	Method
2400		+	+	+	+	+	+								A24,A2,A23,A69 >		+	+	+	+	+	+	+	+	A24,A32,Cw15	Other
3753	90	+	+	+	+	+	+								B60,B61,B62,B49 >	80	+	+	+	+	+	+	+	+	B13,B47,B41	Other

	**** Serum 1267 ****														**** Serum 1268 ****													
Ctr	% POS	A23	A24	A25	A32	B13	B27	B37	B47	B49	B51	B52	B53	B57	B58	B63	Other	% POS	A23	A24	A25	A32					Other	Method
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B50,B75,B35 >		+	+	+	+					B49,B13,B47,B44 >	Other
3753	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B44,B77,B38,B59 >	78	+	+	+	+					Bw4	Other

Other = Luminex PRA

**Table 25. Individual laboratory results for Serum #1265 by Luminex - class I**

**** Serum 1265 ****																																														
Ctr	% POS	B13	B18	B35	B37	B38	B41	B44	B45	B47	B49	B50	B52	B53	B55	B56	B57	B59	B46	B51	B58	B61	B62	B63	B71	B72	B75	B77	B78	B60	B64	B76	B48	B54	A24	B39	B8	A23	B67	Cw10	Other	Method				
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw4,A2,A66,A68,A6601>	LMX			
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B82,B703	LMX			
731	51	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,B40,B82,B7 >	LMX			
774	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX			
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A2,A25,A68 >	LMX			
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A68,A69,B65 >	LMX			
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX			
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A69,B65,B42 >	LMX			
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A203,A2,A68 >	LMX			
3632	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A69,B65 >	LMX			
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX		
3766	90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw9,A2403,Cw15,B7801>	LMX		
3966	74	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A69,B65,Cw9 >	LMX		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25 >	LMX		
5214	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A69,B65,B42	LMX		
5219	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A9,A2,B40,B15 >	LMX		
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2403,B7801,B3901,A*24:02	LMX		
6649	50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,B82,B7,B65	LMX		
8043	92	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A68	LMX		
8045	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B15,B14,B8201	LMX	
8058	35																																											LMX		
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A69,A43 >	LMX	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25 >	LMX	
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4	LMX	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A68,A69 >	LMX
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,A2403,B3901	LMX
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,Cw9,B5C	LMX
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B15,B82,B7 >	LMX
8112	Multi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A34 >	LMX	

**Table 26. Individual laboratory results for Serum #1266 by Luminex - class I**

**** Serum 1266 ****																															
Ctr	% POS	A1	B13	B44	B45	B49	B50	B41	B47	B60	A23	B61	B76	Cw6	A24	B62	Cw18	B82	Cw15	Cw5	Cw17	B56	B72	Cw2	B52	B35	B63	A43	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B75,B54,B55,A*24:02>	LMX	
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4	LMX	
731	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,B53,B54,B58 >	LMX	
774	53	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B75,B54 >	LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B75,B54,B55 >	LMX	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B71	LMX	
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B75,B54 >	LMX	
3632	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B75,B54,B55 >	LMX	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A*24:02	LMX	
3766	90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8201	LMX	
3966	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A26,A29,A80,B71	LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B27,B51,B53 >	LMX	
5214	83	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,B71	LMX	
5219	19	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,A9,B40,B15 >	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8201	LMX	
6649	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B54	LMX	
8043	68	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B48,A66,A74,A69 >	LMX	
8045	18	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B40,B15,B8201	LMX	
8058	37																													LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B75,B71	LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B75,B54 >	LMX
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B75,B54,B55 >	LMX
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,Cw403,B40,B15 >	LMX
8112	Multi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,B53,B75,B54 >	LMX

**Table 27. Individual laboratory results for Serum #1267 by Luminex - class I**

		**** Serum 1267 ****																																									
Ctr	% POS	B57	B59	Cw2	Cw4	A23	A25	A32	B35	B37	B38	B44	B47	B49	B50	B51	B52	B53	B56	B58	A24	B27	B77	Cw17	B72	B63	B71	B75	Cw6	Cw15	B13	B62	B78	Cw18	Cw5	B46	Cw10	Other	Method				
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B7,B45,B*27:05 >	LMX				
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX		
731	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,B15,A2403,B7801	LMX				
774	85	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX		
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B7,B45 >	LMX			
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7,Bw4	LMX			
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX			
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw9	LMX			
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B7,B45 >	LMX			
3632	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7,B18,Cw9	LMX			
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,B*27:05	LMX			
3766	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2403,B7801	LMX			
3966	44	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B18	LMX			
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B48,B7 >	LMX		
5214	90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7,B18,Bw4	LMX			
5219	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,A9,B15,B70 >	LMX			
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,A2403,B7801,B*27:05	LMX			
6649	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX			
8043	96	+	+	+	+				+						+				+		+				+			+		+	+	+	+	+	+	+	+	A11,B60,A66,B7 >	LMX				
8045	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,Bw4	LMX			
8058	54																																							LMX			
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7,B18,Bw4,Cw1 >	LMX			
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B48,B7 >	LMX		
8086	200	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+		+		+	+	+		+				+						+				LMX			
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7,B18,Cw1,Cw9 >	LMX		
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,A2403	LMX		
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,B15,A2403,B7801	LMX	
8112	Multi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B7,B55,B18 >	LMX	



**Table 28. Individual laboratory results for Serum #1268 by Luminex - class I**

		**** Serum 1268 ****																																									
Ctr	% POS	A23	A24	B13	B38	B44	B51	B57	B58	B59	A25	A32	B37	B47	B49	B52	B53	B63	B77	B27	B46	B78	Cw16	Cw1	Cw10	Cw8	Cw14	B64	Cw12	Cw9	B18	Other	Method										
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A34,A3,B65,B*27:05	LMX										
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX					
731	29	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2403,B7801	LMX								
774	71	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX		
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A29,A3 >	LMX					
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A33,A3 >	LMX					
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX						
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A34	LMX						
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A29,A33 >	LMX					
3632	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A3,A43,B65 >	LMX						
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,B*27:05	LMX						
3766	90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A34,A2403,B7801	LMX						
3966	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A3,B65,Cw7	LMX						
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,B75,A34,A29 >	LMX						
5214	73	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A3,B73,Bw4	LMX						
5219	28	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A9,B15,A10,B21 >	LMX						
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,A2403,B7801,B*27:05	LMX						
6649	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX						
8043	78	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A34,A29,A68 >	LMX						
8045	25	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,Bw4,B7801	LMX						
8058	100																																								LMX		
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A33,A3 >	LMX					
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A3,A43 >	LMX					
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							LMX
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A3,B65,B73 >	LMX					
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,A2403	LMX					
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A29,A43,Bw4	LMX					
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,A3,Bw4,A2403 >	LMX					
8112	Multi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,A34,A3,A43 >	LMX					

**Table 29. Individual laboratory results for Serum #1265 - 1268 by C1q - class I**

**** Serum 1265 ****																	**** Serum 1266 ****																								
Ctr	% POS	B13	B35	B41	B44	B45	B49	B50	B51	B52	B53	B56	B61	B62	B71	B72	B75	B77	B78	Other	% POS	B44	B45	B76																Other	Method
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+															B49,B50,B13,B8201	C1q	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60		+	+	+														B82	C1q		

**** Serum 1267 ****																	**** Serum 1268 ****																						
Ctr	% POS	A23	A25	A32	B27	B37	B38	B44	B47	B49	B51	B52	B53	B57	B58	B59	B63	B77	Other	% POS	A23	A25	A32	B13	B27	B37	B38	B44	B49	B51	B52	B53	B57	B58	B59	B63	B77	Other	Method
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Other		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Other	C1q
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw4,Cw6,Cw2,Cw17>		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B47	C1q

**Table 30. Individual laboratory results for Serum #1265 - 1268 by NIH-Extended and Other - class II**

**** Serum 1265 ****				**** Serum 1266 ****				**** Serum 1267 ****				**** Serum 1268 ****				Method
Ctr	% POS		Other	% POS		Other	% POS		Other	% POS	DQ2		Other			
3753	73			14			75			64	+			EXT		

Ext = NIH-extended

**** Serum 1265 ****				**** Serum 1266 ****				**** Serum 1267 ****				**** Serum 1268 ****				Method
Ctr	% POS		Other	% POS		Other	% POS		Other	% POS		Other				
3224	65			54			95			67			FC			
8067	66			56			99			53			FC			

FC = Flow cytometry

**Table 31. Individual laboratory results for Serum #1265 - 1268 by Other and C1q - class II**

Ctr	**** Serum 1265 ****					**** Serum 1266 ****					**** Serum 1267 ****						**** Serum 1268 ****						Method						
	% POS	DR17	DR18	DR52	Other	% POS	DQ7	DQ8	DQ9	DR4	Other	% POS	DQ7	DQ8	DQ9	DQ4	DR1	DR11	Other	% POS	DQ2	DQ5		DR4	DR53	DR7	DR9	Other	
2400		+	+	+			+	+	+				+	+	+							+	+	+	+	+	+	DR10	Other
3753	33	+	+			47	+	+	+	+		77	+	+	+	+	+	+	DR4,DR9	83	+	+	+	+	+	+	+	DQ8,DQ9	Other

Other = Luminex PRA

Ctr	**** Serum 1265 ****					**** Serum 1266 ****					**** Serum 1267 ****						**** Serum 1268 ****						Method							
	% POS				Other	% POS				Other	% POS	DQ7	DQ8	DQ9	DR4				Other	% POS	DQ2	DQ4		DR7	DR9				Other	
2400												+	+	+	+							+	+	+	+					C1q

**Table 32. Individual laboratory results for Serum #1265 - 1266 by Luminex - class II**

**** Serum 1265 ****										**** Serum 1266 ****												
Ctr	% POS	DR17	DR18	DR52	DR14	DR13	DQ2	DQ4	Other	% POS	DQ7	DQ8	DQ9	DR4	DR53	DR9	DQA1*03	DQA1*05	DQ4	DR7	Other	Method
615		+	+	+	+	+	+	+	DR11,DR12,DQ5,DQ6, DQB1*04:02, DQB1*05:02, DQB1*06:02		+	+	+	+	+	+	+	+	+	+	DQ2	LMX
774	31	+	+	+	+	+				49	+	+	+	+	+							LMX
910		+	+	+	+	+			DQA1*05,DQA1*05:01		+	+	+	+	+	+	+	+			DQA1*03:01, DQA1*03:03, DQA1*05:01	LMX
1647		+	+	+	+	+	+		DR11,DR12		+	+	+	+	+							LMX
2400		+	+	+							+	+	+	+	+				+			LMX
3224		+	+	+	+	+					+	+	+	+	+	+						LMX
3632	63	+	+	+		+				64	+	+	+	+	+				+		DQ2	LMX
3753		+	+						DRB3*01:01		+	+	+	+	+							LMX
3766	59	+	+	+	+	+		+	DRB3*01:01, DRB1*14:02, DRB1*13:01, DQA1*02:01/DQB1*04:01	67	+	+	+	+	+		+				DQA1*03:03	LMX
3966	9	+	+	+			+			22	+	+	+	+	+		+	+			DQA1*06	LMX
4322		+	+	+	+	+	+	+	DR4,DR8,DR11,DR12 >		+	+	+	+	+	+	+	+	+	+	DQ2,DQA1*02,DQA1*06	LMX
5214	66	+	+	+	+	+				58	+	+	+	+	+	+	+	+				LMX
5219	4	+	+	+					DR3	17	+	+	+	+	+						DQ3	LMX
5462		+	+	+							+	+	+	+	+		+					LMX
6649	10	+	+	+	+	+			DR1403,DR1404	19	+	+	+	+	+	+					+	LMX
8043	33	+	+				+			57	+	+	+	+								LMX
8045	6	+	+	+	+					18	+	+	+	+	+							LMX
8058	100									37												LMX
8062		+	+	+	+	+	+				+	+	+	+	+	+	+	+				LMX
8082		+	+	+	+	+	+	+	DR11,DR12,DQ5,DQ6>		+	+	+	+	+	+	+	+	+	+	DQ2,DQA1*06	LMX
8086	200	+	+	+	+	+	+	+	DR4,DR11,DR12,DQ5>	200	+	+	+	+	+							LMX
8090		+	+	+	+	+			DQB1*02:02, DQB1*05:02		+	+	+	+	+	+	+	+				LMX
8098		+	+	+							+	+	+	+	+	+					+	LMX
8100		+	+	+							+	+	+	+	+				+			LMX
8103		+	+	+					DR3		+	+	+	+	+	+					+	DQ3
8112	Multi	+	+	+	+	+	+	+	DQ5	Multi	+	+	+	+	+	+			+		DQ2	LMX

**Table 33. Individual laboratory results for Serum #1267 by Luminex - class II**

		**** Serum 1267 ****																													
Ctr	% POS	DR1	DR4	DQ7	DQ8	DQ9	DR11	DR53	DPw2	DPw3	DP18	DP28	DPw6	DQ4	DR9	DP14	DP9	DP17	DR14	DP10	DP20	DPw4	DP402	DQ2	DQA1*03	DR7	DR10	DQA1*05	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		DPB1*04:02, DRB1*14:02, DRB1*14:54	LMX	
774	91	+	+	+	+	+	+	+							+																LMX
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+		DQA1*03:01, DQA1*05:01	LMX	
1647		+	+				+	+	+	+	+	+	+		+	+	+			+	+	+									LMX
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+							LMX
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+										LMX
3632	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+						DQA1*02,DQA1*04,DQA1*06	LMX
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+								LMX
3766	92	+	+	+	+	+	+	+	+	+	+	+		+		+	+			+	+		+	+				+	DRB1*14:02, DPB1*04:02	LMX	
3966	49	+	+	+	+	+	+	+	+	+	+	+	+	+						+	+	+				+		+	DPA1*01,DPA1*04,DQA1*06	LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR103,DPA1*01,DPA1*02,DPA1*03 >	LMX
5214	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			+				LMX
5219	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+				+	+		DR5,DQ3,DQA1*06	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						DRB1*14:02	LMX	
6649	42	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+		DQA1*04,DQA1*06	LMX	
8043	77	+	+	+	+	+	+							+	+					+						+				LMX	
8045	48	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+				+						+	DQA1*02	LMX	
8058	58																													LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+			LMX	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	DR103,DQ6,DPA1*01,DPA1*04 >	LMX	
8086	200	+	+	+	+	+		+												+										LMX	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					+	+	+	DQA1*04, DQB1*02:02	LMX	
8098		+	+	+	+	+	+	+	+	+		+	+	+								+				+				LMX	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					LMX	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+					DQ3,DQA1*04,DQA1*06	LMX	
8112	Multi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			LMX	

**Table 34. Individual laboratory results for Serum #1268 by Luminex - class II**

**** Serum 1268 ****																	
Ctr	% POS	DQ2	DR4	DR53	DR7	DR9	DQ8	DQ5	DR10	DQ9	DQA1*02	DQA1*03	DQ6	DQ4	DQ7	Other	Method
615		+	+	+	+	+	+	+	+	+	+	+	+			DQB1*06:09	LMX
774	69	+	+	+	+	+	+	+		+	+				+		LMX
910		+	+	+	+	+		+	+		+	+				DR14, DQA1*02:01, DQA1*03:01, DQA1*03:03	LMX
1647		+	+	+	+	+	+	+	+	+	+	+		+			LMX
2400		+	+	+	+	+	+	+	+	+			+	+	+		LMX
3224		+	+	+	+	+	+	+	+	+	+	+				DR14	LMX
3632	85	+	+	+	+	+	+	+	+	+	+	+			+		LMX
3753		+	+	+	+	+	+			+	+	+	+			DQB1*06:09	LMX
3766	82	+	+	+	+	+	+	+	+	+	+	+	+	+		DQB1*06:09, DQA1*02:01, DQA1*03:01, DQA1*01:01/DQB1*05:01	LMX
3966	32	+	+	+	+	+	+	+	+	+	+	+		+		DQA1*05	LMX
4322		+	+	+	+	+	+	+	+	+	+	+	+	+		DR14,DPw4,DP401,DQA1*01 >	LMX
5214	73	+	+	+	+	+	+	+	+	+	+	+	+				LMX
5219	24	+	+	+	+	+	+		+		+	+				DQ3	LMX
5462		+	+	+	+	+	+	+		+	+	+	+	+		DQB1*06:09	LMX
6649	27	+	+	+	+	+	+		+		+	+					LMX
8043	83	+		+			+	+	+	+							LMX
8045	27	+	+					+	+							+	LMX
8058	100																LMX
8062		+	+	+	+	+	+	+	+	+	+	+	+	+			LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+		DR14,DQA1*05	LMX
8086	200	+	+	+	+	+	+		+					+	+		LMX
8090		+	+	+	+	+	+	+	+	+	+	+					LMX
8098		+	+	+	+	+	+	+	+	+			+	+	+		LMX
8100		+	+	+	+	+	+	+	+	+			+	+	+		LMX
8103		+	+	+	+	+	+	+	+							DQ3	LMX
8112	Multi	+	+	+	+	+	+	+	+	+			+	+	+	DR14	LMX