

REPORT OF THE 424th CELL EXCHANGE

OCTOBER 6, 2021

B-cell Line	589 - 590
Cells	1693 - 1696
Serum	1321 - 1324

B-CELL LINE EXCHANGE #295

The results for B-cell Line Exchange #295 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 **Welsh Blood Service, Pontyclun** and to **Fred Hutchinson Research Center, Seattle** for generously sharing the valuable reference cells examined in this study.

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

Ter-589. The reported HLA type for this cell from a donor of mixed Caucasian and Black Caribbean descent is DRB1*04:01-DRB1*04-DRB4*01:03-DQA1*03:01-DQA1*03:03-DQB1*03:01-DQB1*03:02-DPA1*01:03-DPB1*03:01-DPB1*04:02-A*03:01-A*33:03-B*07:02-B*15:107-C*01:02-C*07:02. Based on family studies (1) and data from the Exchanges, the haplotypes in the cell are A*33:03-B*15:107-C*01:02-DRB1*04-DRB4*01:03-DQA1*03-DQB1*03:02-DPA1*01:03-DPB1*04:02 and A*03:01-B*07:02-C*07:02-DRB1*04:01-DRB4*01:03-DQA1*03-DQB1*03:01-DPA1*01:03-DPB1*03:01.

This cell is 13890190, a reference cell for B*15:107. It was previously examined for class I in the Exchange as Extract 482 (2010). In this present re-typing, B*15:107 was reported by 100% of labs reporting at high resolution. B*15:107 is expressed serologically as B62 (1).

Good agreement was achieved for all other allele assignments, except DRB1*04. DRB1*04:07 was assigned by 12 labs, DRB1*04:92 was assigned by 6 labs, DRB1*04:07:01G was assigned by 5 labs, and DRB1*04:07:01 was assigned by 2 labs. DRB1*04:92 differs from DRB1*04:07 by a single nucleotide substitution in exon 4 at codon 207 (GTG → ATG), which results in amino acid substitution from valine to methionine in DRB1*04:92 (2).

References:

1. Hammond L, Street J, Johnson J, et al. A new HLA-B*15 variant – B*9507. *Tissue Antigens* 2007;70:515-530.
2. Balas A, Garcia-Sanchez F, Vicario, L. Characterization of three novel HLA-DRB1 alleles, DRB1*03:55, *11:46:02 and *04:92, by exon 2, 3 and 4 sequencing-based typing. *International Journal of Immunogenetics* 2001;38:435-436.

Ter-590. The reported HLA type for this cell from a donor of Chinese descent is DRB1*04:05-DRB1*08:14-DRB4*01:03-DQA1*01:03-DQA1*03:03-DQB1*04:01-DQB1*06:01-DPA1*02:02-DPB1*02:02-DPB1*05:01-A*02:03-A*11:01-B*15:02-B*38:02-C*07:02-C*08. One likely association present in this cell is A*11:01-B*15:02-DRB1*04:05-DQB1*04:01, observed exclusively in Asians, with HF = 0.00089. The other likely association present is A*02:03-B*38:02-DRB1*08:14-DQB1*06:01.

This cell is KE, a reference cell for DRB1*08:14. It was examined in the workshop as IHW9432 and in the Exchange as Ter 522 (2015), Ter 467 (2012), Ter 384 (2007), and Ter 334 (2004). In this most recent re-typing, DRB1*08:14 was assigned by 96% of labs reporting at high resolution.

Good agreement (> 90%) was also achieved for all other allele assignments, except C*08. In the 2015 study, 4 labs indicated a new C-locus allele was likely present. The new allele, now known as C*08:147, differs from C*08:01:01, by 2 nucleotide substitutions in exon 4. The first is at codon 232, position 766, (GAG → AAG), in which glutamic acid is replaced by lysine in C*08:147. The other is a synonymous substitution at codon 261, position 855, (GTG → GTA) (3). In this present study, C*08:147 was assigned by 15 labs, 3 labs assigned C*08:01, and 1 lab assigned C*08:14.

3. Yang KL and Lin PY. Detection of HLA-C*08:147, an HLA-C*08 variant, in a Taiwanese hematopoietic stem cell donor. *HLA* 2019;93:237-238.

Table 2: Summary of the 295th B-cell Line Exchange

Ter-590

DNA Typing - class II		DNA Typing - class I																			
<u>25 labs High; 22 labs low-DRB1</u> DRB1*04:05:01 DRB1*04:05 DRB1*04 DRB1*08:14 DRB1*04:05 DRB1*08 DRB1*04	%(n) 28(7) 72(18) 100(22) 96(24) 4 (1) 91(20) 9 (2)	<u>17 labs High; 18 labs Low-DRB3/4/5</u> DRB4*01:03:01 DRB4*01:01:01G DRB4*01:03 DRB3*01:03 DRB4*01 DRB4*PRESENT	%(n) 18(3) 6 (1) 70(12) 6 (1) 78(14) 22(4)																		
				<u>19 labs High; 20 labs Low-DQA1</u> DQA1*01:03:01 DQA1*01:03 DQA1*01 DQA1*03:03:01 DQA1*03:01:01G DQA1*03:03 DQA1*03	%(n) 21(4) 79(15) 100(20) 21(4) 5 (1) 74(14) 100(20)																
						<u>24 labs High; 21 labs Low-DQB1</u> DQB1*04:01:01 DQB1*04:01 DQB1*04 DQB1*06:01:01 DQB1*06:01 DQB1*06	%(n) 25(6) 75(18) 100(21) 25(6) 75(18) 100(21)														
								<u>13 labs High; 11 labs Low-DPA1</u> DPA1*02:02:02 DPA1*02:02:02G DPA1*02:02P DPA1*02:02 DPA1*02	%(n) 31(4) 8 (1) 15(2) 46(6) 100(11)												
										<u>19 labs High; 21 labs low- B</u> B*15:02:01:01 B*15:02:01 B*15:02 B*15(B75) B*15 B*38:02:01:01 B*38:02:01 B*38:02:01G B*38:02 B*38	%(n) 5 (1) 32(6) 63(12) 43(9) 57(12)										
												<u>19 labs High; 21 labs low- C</u> C*07:02:01:01 C*07:02:01 C*07:02P C*07:02 C*07 C*08:147 C*08:01 C*08:14 C*08	%(n) 5 (1) 26(5) 5 (1) 63(12) 100(21)								
														<u>23 labs High; 12 labs Low-DPB1</u> DPB1*02:02:01 DPB1*02:02P DPB1*02:02 DPB1*02(DP202) DPB1*02 DPB1*05:01:01 DPB1*05:01:01G DPB1*05:01P DPB1*05:01 DPB1*05	%(n) 26(6) 4 (1) 70(16) 50(6) 50(6)						
																<u>19 labs High; 21 labs low- A</u> A*11:01:01:01 A*11:01:01 A*11:01P A*11:01 A*11	%(n) 5 (1) 26(5) 5 (1) 63(12) 100(21)				
																		<u>19 labs High; 21 labs low- B</u> B*38:02:01:01 B*38:02:01 B*38:02:01G B*38:02 B*38	%(n) 5 (1) 26(5) 5 (1) 63(12) 100(21)		
																				<u>19 labs High; 21 labs low- C</u> C*08:147 C*08:01 C*08:14 C*08	%(n) 79(15) 16(3) 5 (1) 100(21)

Table 3a: Individual laboratory results for B-cell #589 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*04	*04	4*01	4*01	*03	*03	*03	*03	*01	*01	*03	*04		
725	*04		4*PRESENT		*03		*03(DQ7)	*03(DQ8)					SSO	
747	*04	*04	4*01	4*01	*03	*03	*03	*03	*01	*01	*03	*04	SSP SSO SBT	
792	*04	*04	4*01	4*01	*03	*03	*03	*03	*01	*01	*03	*04	SSO NGS	
793	*04	*04	4*PRESENT		*03	*03	*03(DQ7)	*03(DQ8)			*03	*04(DP402)	SSP	
794	*04		4*01		*03		*03		*01		*03	*04	SSP SSO NGS	
2400	*04	*04	4*01		*03	*03	*03	*03	NT	NT	*03	*04	RT-PCR	
2847	*04	*04											SSO	
3224	*04	*04		4*01	*03	*03	*03(DQ7)	*03(DQ8)	*01	*01	*03	*04(DP402)	SSP NGS	
3519	*04		4*01		*03		*03(DQ7)	*03(DQ8)	*01		*03	*04(DP402)	RT-PCR	
3753			4*01	4*01	*03	*03			*01	*01			SSO SBT	
4079	*04	*04	4*01		*03	*03	*03(DQ7)	*03(DQ8)	*01	*01	*03	*04(DP402)	SSO	
5130	*04	*04	4*01		*03	*03	*03	*03			*03	*04	SSO NGS	
5214	*04	*04	4*01		*03		*03(DQ7)	*03(DQ8)	*01		*03	*04(DP402)	SSO	
5219	*04	*04			*03	*03	*03	*03					SSO NGS	
5451	*04	*04	4*01		*03	*03	*03	*03					SSO SBT	
5462	*04	*04	4*01		*03		*03	*03	*01		NT	NT	SSO	
5488			4*01										SSO SBT NGS	
5642	*04	*04	4*PRESENT				*03(DQ7)	*03(DQ8)					SSP	
6649	*04						*03						SSO	
8029	*04	*04			*03	*03	*03	*03					SSO	
8043	*04	*04			*03	*03	*03	*03					SSP SSO	
8068	*04	*04			*03	*03	*03	*03					SSO	
8123	*04	*01	4*01	4*01	*03	*03	*03(DQ7)	*03(DQ8)	*01	*01	*03	*04(DP402)	SSO	

Table 3b: Individual laboratory results for B-cell #589 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*04:274	*04:07	4*01:03	4*01:03	*03:01	*03:03	*03:01	*03:02	*01:03	*01:03	*03:01	*04:02	NGS	
278	*04:01	*04:07	4*01:03	4*01:03	*03:01	*03:03	*03:01	*03:02	*01:03	*01:03	*03:01	*04:02		
747	*04:01:01	*04:92	4*01:03:01	4*01:03:01	*03:01:01	*03:03:01	*03:01:01	*03:02:01	*01:03:01	*01:03:01	*03:01:01	*04:02:01	SSP SSO SBT	DQB1*03:289 DRB1*04:07 DPB1*463:01 DQB1*03:416 DPB1*350:01
762	*04:01	*04:92	4*01:03		*03:01	*03:03	*03:01	*03:02	*01:03		*03:01	*04:02	NGS	DRB1*04:07 DRB1*04:274
774	*04:01	*04:07	4*01:01:01G	4*01:01:01G	*03:01	*03:03	*03:01	*03:02			*03:01	*04:02		
792	*04:01:01G	*04:07:01G	4*01:03	4*01:03	*03:01	*03:03	*03:01	*03:02	*01:03	*01:03	*03:01:01G	*04:02:01G	SSO NGS	
793					*03:01	*03:03					*03:01	*04:02	SSP	
794	*04:01	*04:07	4*01:03		*03:01:01	*03:03:01	*03:01:01	*03:02:01	*01:03:01		*03:01	*04:02	SSP SSO NGS RT-PCR	DRB1*04:92 DRB1*04:274 DPB1*351:01 DPB1*463:01 DRB4*01:134
2344	*04:01:01	*04:07:01	NT	NT	NT	NT	*03:01:01	*03:02:01	NT	NT	*03:01:01	*04:02:01	NGS	DPB1*351:01 DPB1*463:01:01 DRB1*04:274 DRB1*04:92
2400	*04:01:01G	*04:07:01G	4*01:03		*03:01	*03:03	*03:01	*03:02	NT	NT	*03:01:01G	*04:02:01G	SSO NGS	DQB1*03:276N DQB1*03:289 DQB1*03:416
3135	*04:01:01G	*04:07	4*01:03		*03:01:01G		*03:01	*03:02	*01:03		*03:01P	*04:02		
3511	*04:01	*04:07	4*01:03		*03:01	*03:03	*03:01	*03:02	*01:03	*01:03	*03:01	*04:02	SSP SSO RT-PCR	
3519	*04:01	*04:92	4*01:03		*03:01	*03:03	*03:01	*03:02	*01:03		*03:01P	*04:02P	SSP NGS RT-PCR	DRB1*04:07 DPB1*351:01 DPB1*463:01 DRB1*04:274

Table 3b: Individual laboratory results for B-cell #589 - Class II

High resolution															
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
														DQB1*03:295 DQB1*03:296 DQB1*03:321 DQB1*03:369 DQB1*03:379 DQB1*03:386 DQB1*03:415 DRB1*04:192 DQB1*03:276N DRB1*04:92 DQB1*03:256 DQB1*03:292 DQB1*03:293 DQB1*03:294 DQB1*03:297 DQB1*03:326 DQB1*03:389 DQB1*03:419 DQB1*03:426+	
3753	*04:01	*04:07					*03:01	*03:02				*03:01	*04:02	SSO SBT	
3966	*04:01	*04:07	4*01:03				*03:01	*03:02						SSP	
4337	*04:01	*04:07					*03:01	*03:02				*03:01	*04:02	SSP SBT NGS	
5130	*04:01	*04:92	4*01:03		*03:01	*03:03	*03:01	*03:02				*03:01	*04:02	SSO NGS	DRB1*04:274 DRB1*04:07 DQB1*03:02 DPB1*351:01 DPB1*463:01
5133	*04:01:01	*04:92	4*01:03:01		*03:01:01	*03:03:01	*03:01:01	*03:02:01	*01:03:01			*03:01:01	*04:02:01	NGS	DRB1*04:274 DRB1*04:07:01 DPB1*351:01 DPB1*463:01:01
5219	*04:274	*04:07:01					*03:01:01	*03:02:01				*03:01:01	*04:02:01	SSO NGS	
5451	*04:01:01G	*04:07:01G												SSO SBT	DRB1*04:01:01G

Table 3b: Individual laboratory results for B-cell #589 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DPB1*727:01 DPB1*792:01N DPB1*829:01 DPB1*876:01N DPB1*883:01 DPB1*917:01N DPB1*935:01Q DPB1*938:01 DPB1*946:01 DPB1*948:01 DPB1*950:01N DPB1*952:01 DPB1*983:01 DPB1*1000:01 DPB1*1014:01 DPB1*1030:01 DPB1*1049:01 DPB1*1090:01 DPB1*958:01+
5462	NT	NT	NT		NT		NT	NT	NT			*03:01	*04:02	SSO
5488	*04:01:01G	*04:07:01G			*03:01:01	*03:03:01	03:01:01G	*03:02:01	*01:03:01			*03:01:01G	*04:02:01G	SSO SBT NGS
5642	*04:01	*04:07					*03:01	*03:02						SSP
8021	*04:01	*04:92	4*01:03		*03:01	*03:03	*03:01	*03:02	*01:03			*03:01	*04:02	
8043	*04:01	*04:07			*03:01	*03:03	*03:01	*03:02						SSP SSO
8086	*04:01	*04:07	4*01:03	4*01:03	*03:01	*03:03	*03:01	*03:02	*01:03:01G	*01:03:01G	*03:01	*04:02		SBT
8122	*04:01:01G	*04:07:01G	4*01:03		*03:01	*03:03	*03:01	*03:02	*01:03			*03:01	*04:02	NGS
														DPB1*351:01 DPB1*463:01

Table 4: Individual laboratory results for B-cell #589- Class I

Table 4: Individual laboratory results for B-cell #589- Class I														
Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	NGS	
278	*03	*33	*07	*15	*01	*07	*03:01	*33:03	*07:02	*15:107	*01:02	*07:02		
725	*03	*33	*07	*15(B62)	*01	*07							SSO	
747	*03	*33	*07	*15	*01	*07	*03:01:01	*33:03:01	*07:02:01	*15:107	*01:02:30:01	*07:02:01	SSP SSO SBT	
774	*03	*33	*07	*15(B62)	*01	*07								
792	*03	*33	*07	*15	*01	*07	*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSO NGS	
793	*03	*33	*07	*15(B62)	*01	*07							SSP	
794	*03	*33	*07	*15	*01	*07	*03:01:01	*33:03:01	*07:02:01	*15:107	*01:02:30:01	*07:02:01	SSP SSO NGS	
2344							*03:01:01	*33:03:01	*07:02:01	*15:107	*01:02:30:01	*07:02:01	RT-PCR	
2400	*03	*33	*07	*15(B62)	*01	*07	*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	NGS	
2847	*03	*33	*07	*15	*01	*07							SSO NGS	
3135													SSO	
3224	*03	*33	*07	*15	*01	*07	*03:01P	*33:03P	*07:02P	*15:107	*01:02P	*07:02P		
													RT-PCR	
3511							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSP SSO	
													RT-PCR	
3519	*03	*33	*07	*15(B62)	*01	*07	*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSP NGS	
													RT-PCR	B*07:374N
														B*07:371 B*07:355 B*07:382 B*07:381 B*07:390 C*01:22 C*01:54 C*01:58 C*01:60 C*01:77 C*07:17 C*07:29 C*07:37 C*07:51 C*07:566 C*07:684 C*07:722 C*07:736 C*07:789 C*07:809 A*33:145 B*07:312 B*07:339 B*07:354 A*33:203 B*07:402
3753							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSO SBT	
3966	*03	*33	*07	*15	*01	*07							SSP	
4079	*03	*33	*07	*15(B62)	*01	*07							SSO	
4337							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSP SBT NGS	
5130	*03	*33	*07	*15	*01	*07	*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SSO NGS	
5133							*03:01:01:01	*33:03:01:01	*07:02:01:01	*15:107	*01:02:30:01	*07:02:01:03	NGS	
5214	*03	*33	*07	*15(B62)	*01	*07							SSO	
5219	*03	*33	*07	*15	*01	*07	*03:01:01	*33:03:01	*07:02:01	*15:107	*01:02:30:01	*07:02:01	SSO NGS	
5462	*03	*33	*07	*15	*01	*07	NT	NT	NT	NT	NT	NT	SSO	
5488							*03:01:01	*33:03:01	*07:02:01	*15:107	*01:02:30	*07:02:01	SSO SBT NGS	
8021							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02		
8029	*03	*33	*07	*15	*01	*07							SSO	
8043	*03	*33	*07	*15	*01	*07							SSP SSO	
8068	*03	*33	*07	*15	*01	*07							SSO	

Table 4: Individual laboratory results for B-cell #589- Class I

Table 4: Individual laboratory results for B-cell #589- Class I														
Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
8086							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	SBT	
8122							*03:01	*33:03	*07:02	*15:107	*01:02	*07:02	NGS	
8123	*03	*33	*07	*15(B62)	*01	*07							SSO	

Table 5a: Individual laboratory results for B-cell #590 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*04	*08	4*01	NT	*01	*03	*04	*06	*02	*02	*02	*05		
725	*04	*08	4*PRESENT		*01	*03	*04	*06					SSO	
747	*04	*08	4*PRESENT		*01	*03	*04	*06	*02	*02	*02	*05	SSP SSO SBT	
792	*04	*08	4*01		*01	*03	*04	*06	*02	*02	*02	*05	SSO NGS	
793	*04	*08	4*PRESENT		*01	*03	*04	*06			*02(DP202)	*05	SSP	
794	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO NGS	
2400	*04	*08	4*01		*01	*03	*04	*06	NT	NT	*02	*05	RT-PCR	
2847	*04	*08											SSO	
3224	*04	*08	4*01		*01	*03	*04	*06	*02		*02(DP202)	*05	SSO NGS	
3519	*04	*08	4*01		*01	*03	*04	*06	*02		*02(DP202)	*05	RT-PCR	
3753			4*01	NP	*01	*03			*02	*02			SSP	
4079	*04	*08	4*01		*01	*03	*04	*06	*02	*02	*02(DP202)	*05	SSO	
5130	*04	*08	4*01		*01	*03	*04	*06			*02	*05	SSO NGS	
5214	*04	*08	4*01		*01	*03	*04	*06	*02		*02(DP202)	*05	SSO	
5219	*04	*08			*01	*03	*04	*06					SSO NGS	
5451	*04	*08	4*01		*01	*03	*04	*06					SSO SBT	
5462	*04	*08	4*01	NP	*01	*03	*04	*06	*02		NT	NT	SSO	
5488			4*01										SSO SBT NGS	
5642	*04	*08	4*PRESENT				*04	*06					SSP	
6649	*04	*08					*04	*06					SSO	
8029	*04	*04			*01	*03	*04	*06					SSO	
8043	*04	*08			*01	*03	*04	*06					SSP SSO	
8068	*04	*04			*01	*03	*04	*06					SSO	
8123	*04	*08	4*01		*01	*03	*04	*06	*02	*02	*02(DP202)	*05	SSO	

Table 5b: Individual laboratory results for B-cell #590 - Class II

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
230	*04:05	*08:14	4*01:03	4*01:03	*01:03	*03:03	*04:01	*06:01	*02:02	*02:02	*02:02	*05:01	NGS	
278	*04:05	*08:14	4*01:03	NT	*01:03	*03:03	*04:01	*06:01	*02:02	*02:02	*02:02	*05:01		
747	*04:05:01	*08:14	4*01:03:01		*01:03:01	*03:03:01	*04:01:01	*06:01:01	*02:02:02	*02:02:02	*02:02:01	*05:01:01	SSP SSO SBT	DQB1*06:01:15
762	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	*02:02		*02:02	*05:01	NGS	DPB1*547:01 DPB1*744:01
774	*04:05	*08:14	4*01:01:01G		*01:03	*03:03	*04:01	*06:01			*02:02	*05:01		
792	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	*02:02	*02:02	*02:02	*05:01	SSO NGS	DPB1*744:01 DPB1*547:01
793					*01:03	*03:03					*02:02	*05:01	SSP	
794	*04:05:01	*08:14	4*01:03:01		*01:03:01	*03:03:01	*04:01:01	*06:01:01	*02:02:02		*02:02	*05:01	SSP SSO NGS RT-PCR	DPB1*744:01 DPB1*547:01
2344	*04:05:01	*08:14	NT	NT	NT	NT	*04:01:01	*06:01:01	NT	NT	*02:02:01	*05:01:01	NGS	DPB1*547:01 DPB1*744:01
2400	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	NT	NT	*02:02:01	*05:01:01G	SSO NGS	DPB1*547:01
3135	*04:05	*08:14	3*01:03		*01:03	*03:01:01G	*04:01	*06:01	*02:02P		*02:02	*05:01		
3511	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	*02:02P	*02:02P	*02:02	*05:01	SSP SSO RT-PCR	
3519	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01			*02:02P	*05:01P	SSP NGS RT-PCR	DPB1*547:01 DPB1*744:01
3753	*04:05	*08:14					*04:01	*06:01			*02:02	*05:01	SSO SBT	DRB1*04:213 DRB1*04:86 DRB1*04:103 DQB1*06:285 DQB1*06:307 DQB1*06:309 DPB1*547:01 DPB1*744:01 DRB1*08:71 DRB1*08:102 DRB1*08:14 DRB1*08:18 DRB1*08:03
3966	*04:05	*08:14	4*01:03				*04:01	*06:01					SSP	
4337	*04:05	*04:05					*04:01	*06:01			*02:02	*05:01	SSP SBT NGS	
5130	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01			*02:02	*05:01	SSO NGS	DPB1*744:01 DPB1*547:01
5133	*04:05:01	*08:14	4*01:03:01		*01:03:01	*03:03:01	*04:01:01	*06:01:01	*02:02:02		*02:02:01	*05:01:01	NGS	DPB1*22:01 DPB1*1026:01 DPB1*100:01 DPB1*547:01 DPB1*744:01
5219	*04:05:01	*08:14					*04:01:01	*06:01:01			*02:02:01	*05:01:01	SSO NGS	
5451	*04:05:01	*08:14											SSO SBT	

Table 5b: Individual laboratory results for B-cell #590 - Class II

High resolution															
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
														DPB1*547:01 DPB1*766:01 DPB1*928:01 DPB1*135:01 DPB1*729:01 DPB1*744:01 DPB1*778:01 DPB1*847:01 DPB1*851:01 DPB1*860:01 DPB1*951:01 DPB1*1018:01 DPB1*1117:01 DPB1*1118:01 DPB1*1119:01 DPB1*1120:01 DPB1*1143:01 DPB1*1156:01	
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT			*02:02	*05:01	SSO	
5488	*04:05:01	*08:14			*01:03:01	*03:03:01	*04:01:01	*06:01:01	*02:02:02			*02:02:01	*05:01:01	SSO SBT NGS	DPB1*547:01 DPB1*744:01
5642	*04:05	*08:14					*04:01	*06:01						SSP	
8021	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	*02:02			*02:02	*05:01		
8043	*04:05	*08:14			*01:03	*03:03	*04:01	*06:01						SSP SSO	
8086	*04:05	*08:14	4*01:03		*01:03	*03:03	*04:01	*06:01	*02:02:02G	*02:02:02G		*02:02	*05:01	SBT	
8122	*04:05	*08:14	4*01:03	NP	*01:03	*03:03	*04:01	*06:01	*02:02			*02:02	*05:01	NGS	

Table 6: Individual laboratory results for B-cell #590- Class I

Table 6: Individual laboratory results for B-cell #590- Class I														
Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*02:03	*11:01	*15:02	*38:02	*07:02	*08:14	NGS	
278	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:01		
725	*02	*11	*15(B75)	*38	*07	*08							SSO	
747	*02	*11	*15	*38	*07	*08	*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01	*08:147	SSP SSO SBT	
774	*02	*11	*15(B75)	*38	*07	*08								
792	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	SSO NGS	
793	*02	*11	*15(B75)	*38	*07	*08							SSP	
794	*02	*11	*15	*38	*07	*08	*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01	*08:147	SSP SSO NGS	
2344							*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01	*08:147	RT-PCR	
2400	*02	*11	*15(B75)	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	NGS	
2847	*02	*11	*15	*38	*07	*08							SSO NGS	
3135							*02:03:01	*11:01P	*15:02:01	*38:02:01G	*07:02P	*08:147	SSO	
3224	*02	*11	*15(B75)	*38	*07	*08							RT-PCR	
3511							63(12)	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO	
3519	*02	*11	*15(B75)	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	RT-PCR	
3753							*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	SSP NGS	A*11:12 A*11:295 A*11:303 A*11:324 A*11:328 A*11:353 B*39:149 C*07:161 C*07:260 C*08:16 C*08:72 A*02:267 A*02:280 A*02:355 A*02:427 A*02:447 A*11:20 A*11:73 A*11:199 B*15:89 B*39:05
3966	*02	*11	*15	*38	*07	*08							RT-PCR	
4079	*02	*11	*15(B75)	*38	*07	*08							SSO SBT	
4337							*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP	
5130	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	SSP SBT NGS	
5133							*02:03:01	*11:01:01:01	*15:02:01:01	*38:02:01:01	*07:02:01:01	*08:147	SSO NGS	
5214	*02	*11	*15(B75)	*38	*07	*08							SSO	
5219	*02	*11	*15	*38	*07	*08	*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01	*08:147	SSO NGS	
5462	*02	*11	*15	*38	*07	*08	NT	NT	NT	NT	NT	NT	SSO	
5488							*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01	*08:147	SSO SBT NGS	
8021							*02:03	*11:01	*15:02	*38:02	*07:02	*08:147		
8029	*02	*11	*15	*38	*07	*08							SSO	
8043	*02	*11	*15	*38	*07	*08							SSP SSO	
8068	*02	*11	*15	*38	*07	*08							SSO	
8086							*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	SSO	
8122							*02:03	*11:01	*15:02	*38:02	*07:02	*08:147	SSO	
8123	*02	*11	*15(B75)	*38	*07	*08							SSO	

CELL EXCHANGE #424

The results for Cell Exchange #424 are summarized in Table 7 - 10. Molecular typing results for individual laboratories are listed in Tables 11 – 18 for each sample.

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

Cell 1693. The reported HLA type for this cell from a donor of Asian Indian descent is A*02:06-A*24:02-B*08:01-B*52:01-C*07:02-C*12:02-DRB1*04:18-DRB1*15:02-DRB4*01-DRB5*01:02-DQA1*01:03-DQA1*03:01-DQB1*03:02-DQB1*06:01-DPA1*01:03-DPB1*02:01-DPB1*04:01. Likely associations present in this cell are A*02:06-B*08:01-C*07:02 and A*24:02-B*52:01-C*12:02, with respective HF = 0.00024 and 0.01150, in Asian populations

The rare DRB1*04:18 allele was identified in this cell. Typed for the first time in the Exchange, it was assigned by 100% of labs reporting at high resolution. Good agreement (> 90%) was also achieved for all other allele assignments, except DRB4*01. Two labs assigned DRB4*01:03:01, 2 labs assigned DRB4*01:01:01G, and 3 labs assigned DRB4*01:03.

Cell 1694. The reported HLA type for this cell from a Caucasian donor is A*02:02-A*33:01-B*14:02-B*41:01-C*08:02-C*17:01-DRB1*01:02-DRB1*04:05-DRB4*01-DQA1*01:01-DQA1*03:03-DQB1*02:02-DQB1*05:01-DPA1*01:03-DPB1*04:01-DPB1*03:01/*104:01. Likely associations present in this cell are A*02:02-B*41:01-DRB1*04:05 and A*33:01-B*14:02-DRB1*01:02, observed in Caucasians, with respective HF = 0.00032 and 0.00730.

Greater than 80% agreement was achieved for all allele assignments, except DRB4*01 and DPB1*03/*104. For DRB4*01, 3 labs reported DRB4*01:03, 2 labs reported DRB4*01:01:01G, and 2 labs reported DRB4*01:03:01. For DPB1*03/*104, 7 labs assigned DPB1*104:01, 1 lab assigned DPB1*104:01:01, 1 lab assigned DPB1*03:01:01G, 1 lab assigned DPB1*03:01P, and 1 lab assigned DPB1*03:01.

Cell 1695. The reported HLA type for this cell from a Black donor is A*33:03-A*68:02-B*15:37-B*35:01-C*03:04-C*04:01-DRB1*07:01-DRB1*11:02-DRB3*0202-DRB4*01:01-DQA1*03:03-DQA1*05:05-DQB1*02:02-DQB1*03:19-DPA1*02:01-DPA1*03:01-DPB1*13:01-DPB1*04/105. Likely associations present in this cell are A*33:03-B*35:01-C*04:01 and A*68:02-B*15:37-C*03:04, observed in African Americans, with respective HF = 0.00417 and 0.00042.

B*15:37 was reported by 100% of labs reporting at high resolution. This is only the second time B*15:37 has been examined in the Exchange. The first typing was in 1997, in which 57% of labs reporting by serology assigned B70, with an additional 11% assigning B71.

Greater than 80% agreement was achieved for all other allele assignments, except DPB1*04/*105. Six labs assigned DPB1*105:01, 1 lab assigned DPB1*105:01:01, 1 lab assigned DPB1*04:02P, and 1 lab reported DPB1*04:02.

Cell 1696. The reported HLA type for this cell from a Hispanic donor is A*02:01-A*02:02-B*38:01-B*53:01-C*04:01-C*12:03-DRB1*04:11-DRB1*08:06-DRB4*01-DQA1*01:02-DQA1*03:01-DQB1*03:02-DQB1*06:02-DPA1*01:03-DPA1*02:02-DPB1*03:01-DPB1*05:01. Likely associations present in this cell are A*02:01-B*38:01-C*12:03 and A*02:02-B*53:01-C*04:01, observed in Hispanics, with respective HF = 0.00157 and 0.00085.

This cell was previously examined as 1243 (2005). In this present retyping, good agreement (> 90%) was achieved for all allele assignment assignments, except DRB4*01. DRB4*01:03 was assigned by 2 labs, 2 labs assigned DRB4*01:01:01G, and 1 lab assigned DRB4*01:03:01.

Table 7: Summary of the 424th Cell Exchange - DNA Typing

Cell 1693

DNA Typing - class I		<u>11 labs High; 10 labs low- A</u>		<u>11 labs High; 10 labs low- B</u>		<u>11 labs High; 8 labs low- C</u>												
			%(n)		%(n)		%(n)											
	A*02:06:01:01	9	(1)	B*08:01:01:02	9	(1)	C*07:02:01:01	9	(1)									
	A*02:06:01	9	(1)	B*08:01:01	9	(1)	C*07:02:01	9	(1)									
	A*02:06	82	(9)	B*08:01	73	(8)	C*07:02	82	(9)									
	A*02	100	(10)	B*08:02	9	(1)	C*07	100	(8)									
				B*08	100	(1)												
DNA Typing - class II		<u>11 labs High; 6 labs low-DRB1</u>		<u>7 labs High; 3 labs low-DRB3/4/5</u>		<u>9 labs High; 4 labs Low-DQA1</u>		<u>11 labs High; 6 labs Low-DQB1</u>		<u>7 labs High; 3 labs Low-DPA1</u>		<u>11 labs High; 4 labs Low-DPB1</u>						
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)					
	DRB1*04:18	100	(11)	DRB4*01:03:01	29	(2)	DQA1*01:03:01	22	(2)	DQB1*03:02:01	18	(2)	DPA1*01:03:01	29	(2)	DPB1*02:01:02	18	(2)
	DRB1*04	83	(5)	DRB4*01:01:01G	29	(2)	DQA1*01:03	78	(7)	DQB1*03:02:01G	9	(1)	DPA1*01:03	71	(5)	DPB1*02:01:02G	9	(1)
	DRB1*13	17	(1)	DRB4*01:03	42	(3)	DQA1*01	100	(4)	DQB1*03:02	73	(8)	DPA1*01	100	(3)	DPB1*02:01	73	(8)
				DRB4*01	67	(2)				DQB1*03(DQ8)	17	(1)				DPB1*02(DP201)	25	(1)
				DRB4*PRESENT	33	(1)				DQB1*03	66	(4)				DPB1*02	75	(3)
										DQB1*02	17	(1)						
DNA Typing - class II		<u>11 labs High; 6 labs low-DRB1</u>		<u>7 labs High; 3 labs low-DRB3/4/5</u>		<u>9 labs High; 4 labs Low-DQA1</u>		<u>11 labs High; 6 labs Low-DQB1</u>		<u>7 labs High; 3 labs Low-DPA1</u>		<u>11 labs High; 4 labs Low-DPB1</u>						
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)					
	DRB1*15:02:02	18	(2)	DRB5*01:02:01G	14	(1)	DQA1*03:01:01	22	(2)	DQB1*06:01:01	18	(2)				DPB1*04:01:01	18	(2)
	DRB1*15:02	82	(9)	DRB5*01:02	86	(6)	DQA1*03:01	78	(7)	DQB1*06:01:01G	9	(1)				DPB1*04:01:01G	9	(1)
	DRB1*15	100	(6)	DRB5*01	67	(2)	DQA1*03	100	(4)	DQB1*06:01	73	(8)				DPB1*04:01	73	(8)
				DRB5*PRESENT	33	(1)				DQB1*06	100	(6)				DPB1*04(DP401)	25	(1)
																DPB1*04	75	(3)

Table 8: Summary of the 424th Cell Exchange - DNA Typing

Cell 1694

DNA Typing - class I	<u>12 labs High; 10 labs low- A</u>		<u>12 labs High; 10 labs low- B</u>		<u>12 labs High; 9 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*02:02:01:01	8 (1)	B*14:02:01:01	8 (1)	C*08:02:01:01	8 (1)
	A*02:02:01	8 (1)	B*14:02:01	8 (1)	C*08:02:01	8 (1)
	A*02:02	83(10)	B*14:02	83(10)	C*08:02	83(10)
	A*02	100(10)	B*14	100(10)	C*08	100(9)
DNA Typing - class I	<u>11 labs High; 10 labs low- A</u>		<u>11 labs High; 9 labs low- B</u>		<u>11 labs High; 8 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*33:01:01:01	9 (1)	B*41:01:01:01	9 (1)	C*17:01:01:05	9 (1)
	A*33:01:01	9 (1)	B*41:01:01	9 (1)	C*17:01:01	9 (1)
	A*33:01	73(8)	B*41:01	82(9)	C*17:01	82(9)
	A*33:03	9 (1)	B*41	100(9)	C*17	100(8)
	A*33	100(10)				

DNA Typing - class II	<u>11 labs High; 6 labs low-DRB1</u>		<u>7 labs High; 3 labs low-DRB3/4/5</u>		<u>8 labs High; 4 labs Low-DQA1</u>		<u>11 labs High; 6 labs Low-DQB1</u>		<u>7 labs High; 3 labs Low-DPA1</u>		<u>11 labs High; 4 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*01:02:01	18(2)	DRB4*01:03:01	29(2)	DQA1*01:01:02	25(2)	DQB1*02:02:01	18(2)	DPA1*01:03:01	29(2)	DPB1*04:01:01	18(2)
	DRB1*01:02	82(9)	DRB4*01:01:01G	29(2)	DQA1*01:01	75(6)	DQB1*02:01:01G	9 (1)	DPA1*01:03	71(5)	DPB1*04:01:01G	9 (1)
	DRB1*01	100(6)	DRB4*01:03	42(3)	DQA1*01	100(4)	DQB1*02:02	73(8)	DPA1*01	100(3)	DPB1*04:01P	9 (1)
			DRB4*01	67(2)			DQB1*02	100(6)			DPB1*04:01	64(7)
			DRB4*PRESENT	33(1)							DPB1*04(DP401)	25(1)
											DPB1*04	75(3)
DNA Typing - class II	<u>11 labs High; 6 labs low-DRB1</u>		<u>8 labs High; 4 labs Low-DQA1</u>		<u>11 labs High; 6 labs Low-DQB1</u>		<u>7 labs High; 3 labs Low-DPA1</u>		<u>11 labs High; 4 labs Low-DPB1</u>			
		%(n)		%(n)		%(n)		%(n)		%(n)		
	DRB1*04:05:01	18(2)	DQA1*03:03:01	25(2)	DQB1*05:01:01	9 (1)			DPB1*104:01:01	9 (1)		
	DRB1*04:05	82(9)	DQA1*03:03	63(5)	DQB1*05:01:01G	9 (1)			DPB1*104:01	64(7)		
	DRB1*04	100(6)	DQA1*03:02	12(1)	DQB1*05:01	82(9)			DPB1*03:01:01G	9 (1)		
			DQA1*03	100(4)	DQB1*05	100(6)			DPB1*03:01P	9 (1)		
									DPB1*03:01	9 (1)		
									DPB1*104	50(2)		
									DPB1*03	50(2)		

Table 9: Summary of the 424th Cell Exchange - DNA Typing

Cell 1695

DNA Typing - class I	<u>10 labs High; 8 labs low- A</u>		<u>10 labs High; 7 labs low- B</u>		<u>10 labs High; 7 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*33:03:01:01	10(1)	B*15:37	100(10)	C*03:04:02:01	10(1)
	A*33:03	80(8)	B*15(B62)	14(1)	C*03:04	90(9)
	A*33:01	10(1)	B*15(B71)	14(1)	C*03(Cw10)	43(3)
	A*33	100(8)	B*15(B75)	14(1)	C*03	57(4)
			B*15	57(4)		
<u>10 labs High; 8 labs low- A</u>		<u>10 labs High; 8 labs low- B</u>		<u>10 labs High; 6 labs low- C</u>		
	%(n)		%(n)		%(n)	
A*68:02:01:01	10(1)	B*35:01:01	10(1)	C*04:01:01:14	10(1)	
A*68:02	90(9)	B*35:01	80(8)	C*04:01	90(9)	
A*68	100(8)	B*35:24	10(1)	C*04	100(6)	
		B*35	100(8)			

DNA Typing - class II	<u>9 labs High; 4 labs low-DRB1</u>		<u>5 labs High; 1 lab low-DRB3/4/5</u>		<u>8 labs High; 3 labs Low-DQA1</u>		<u>9 labs High; 4 labs Low-DQB1</u>		<u>5 labs High; 3 labs Low-DPA1</u>		<u>9 labs High; 3 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*07:01:01	11(1)	DRB3*02:02:01	40(2)	DQA1*03:03:01	12(1)	DQB1*02:02:01	11(1)	DPA1*02:01:07	20(1)	DPB1*13:01:01	11(1)
	DRB1*07:01:01G	11(1)	DRB3*02:02:01G	20(1)	DQA1*03:01:01G	12(1)	DQB1*02:02	89(8)	DPA1*02:01	80(4)	DPB1*13:01:01G	22(2)
	DRB1*07:01	78(7)	DRB3*02:02	40(2)	DQA1*03:03	75(6)	DQB1*02	100(4)	DPA1*02	100(3)	DPB1*13:01P	11(1)
	DRB1*07	100(4)	DRB3*PRESENT	100(1)	DQA1*03	100(3)					DPB1*13:01	56(5)
											DPB1*13	100(3)
<u>9 labs High; 4 labs low-DRB1</u>		<u>5 labs High; 1 lab low-DRB3/4/5</u>		<u>8 labs High; 3 labs Low-DQA1</u>		<u>9 labs High; 4 labs Low-DQB1</u>		<u>5 labs High; 3 labs Low-DPA1</u>		<u>9 labs High; 3 labs Low-DPB1</u>		
	%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DRB1*11:02:01	11(1)	DRB4*01:01:01	20(1)	DQA1*05:05:01	12(1)	DQB1*03:19:01	22(2)	DPA1*03:01:01	20(1)	DPB1*105:01:01	11(1)	
DRB1*11:02	89(8)	DRB4*01:01:01G	20(1)	DQA1*05:01:01G	12(1)	DQB1*03:19	67(6)	DPA1*03:01	80(4)	DPB1*105:01	67(6)	
DRB1*11	100(4)	DRB4*01:01	60(3)	DQA1*05:05	75(6)	DQB1*03:01	11(1)	DPA1*03	100(3)	DPB1*04:02P	11(1)	
		DRB4*PRESENT	100(1)	DQA1*05	100(3)	DQB1*03	100(4)			DPB1*04:02	11(1)	
										DPB1*105	67(2)	
										DPB1*04	33(1)	

Table 10: Summary of the 424th Cell Exchange - DNA Typing

Cell 1696

DNA Typing - class I	<u>9 labs High; 8 labs low- A</u>		<u>9 labs High; 8 labs low- B</u>		<u>9 labs High; 6 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*02:01:01:01	11(1)	B*38:01:01:05	11(1)	C*04:01:01:75	11(1)
	A*02:01	89(8)	B*38:01	89(8)	C*04:01	89(8)
	A*02	100(8)	B*38	100(8)	C*04	100(6)
<u>10 labs High- A</u>		<u>10 labs High; 8 labs low- B</u>		<u>10 labs High; 6 labs low- C</u>		
	%(n)		%(n)		%(n)	
A*02:02:01:01	10(1)	B*53:01:01:01	10(1)	C*12:03:01:01	10(1)	
A*02:02	90(9)	B*53:01	90(9)	C*12:03	80(8)	
		B*53	100(8)	C*12:28	10(1)	
				C*12	100(6)	

DNA Typing - class II	<u>9 labs High; 4 labs low-DRB1</u>		<u>5 labs High; 1 lab low-DRB3/4/5</u>		<u>7 labs High; 3 labs Low-DQA1</u>		<u>9 labs High; 4 labs Low-DQB1</u>		<u>4 labs High; 3 labs Low-DPA1</u>		<u>9 labs High; 3 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*04:11:01	11(1)	DRB4*01:03:01	20(1)	DQA1*01:02:01	14(1)	DQB1*03:02:01	11(1)	DPA1*01:03:01	25(1)	DPB1*03:01:01	11(1)
	DRB1*04:11	89(8)	DRB4*01:01:01G	40(2)	DQA1*01:02	86(6)	DQB1*03:02:01G	11(1)	DPA1*01:03	75(3)	DPB1*03:01:01G	11(1)
	DRB1*04	100(4)	DRB4*01:03	40(2)	DQA1*01	100(3)	DQB1*03:02	78(7)	DPA1*01	100(3)	DPB1*03:01	78(7)
			DRB4*PRESENT	100(1)			DQB1*03(DQ8)	25(1)			DPB1*03	100(3)
							DQB1*03	75(3)				
<u>9 labs High; 4 labs low-DRB1</u>		<u>7 labs High; 3 labs Low-DQA1</u>		<u>8 labs High; 4 labs Low-DQB1</u>		<u>4 labs High; 3 labs Low-DPA1</u>		<u>9 labs High; 3 labs Low-DPB1</u>				
	%(n)		%(n)		%(n)		%(n)		%(n)			
DRB1*08:06	100(9)	DQA1*03:01:01	14(1)	DQB1*06:02:01	12(1)	DPA1*02:02:02	25(1)	DPB1*05:01:01	22(2)			
DRB1*08	100(4)	DQA1*03:01	86(6)	DQB1*06:02	88(7)	DPA1*02:02:02G	25(1)	DPB1*05:01	78(7)			
		DQA1*03	100(3)	DQB1*06	100(4)	DPA1*02:02	50(2)	DPB1*05	100(3)			
						DPA1*02	100(3)					

Table 11. Individual laboratory results for Cell #1693 - 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	*08	*52	*07	*12	*02:06	*24:02	*08:01	*52:01	*07:02	*12:02		
725	*02	*24	*08	*52	*07	*12							SSO	
747	*02	*24	*08	*52	*07	*12	*02:06:01	*24:02:01:02L	*08:01:01	*52:01:01	*07:02:01	*12:02:02	SSP SSO NGS	
762							*02:06	*24:02L	*08:01	*52:01	*07:02	*12:02	NGS	
771	*02	*24	*08	*52	*07	*12	*02:06	*24:02	*08:01	*52:01	*07:02	*12:02	SSO NGS	
774	*02	*24	*08	*52	*07	*12								
3808	*02	*24	*08	*52	*07	*12						*12:02	SSO	
4079	*02	*24	*08	*52	*07	*12	*02:06	*24:02	*08:01	*52:01	*07:02	*12:02	SSP NGS	
4251							*02:06	*24:02	*08:01	*52:01	*07:02	*12:02	NGS	
5133							*02:06:01:01	*24:02:01:02L	*08:01:01:02	*52:01:01:01	*07:02:01:01	*12:02:02:01	NGS	
5462							*02:06	*24:02L	*08:01	*52:01	*07:02	*12:02	SSP NGS	
6649	*02	*24	*08	*52									SSO	
8001							*02:06	*24:02	*08:01	*52:01	*07:02	*12:02		
8043							*02:06	*24:02	*08:01	*52:01	*07:02	*12:02	NGS	
8058	*02	*69	*08	*51									OTHER	
8103	*02	*24	*08	*52	*07	*12	*02:06	*24:02	*08:02	*52:01	*07:02	*12:02	SSO	

Table 12a: Individual laboratory results for Cell #1693 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*04	*15	4*01	5*01	*01	*03	*03	*06	*01	*01	*02	*04	SSP SSO NGS	
771	*04	*15			*01	*03	*03	*06			*02	*04	SSO NGS	
3808	*04	*15	NT	NT	*01	*03	*03	*06	*01	*01	*02(DP201)	*04(DP401)	SSO	
4079	*04	*15	4*01	5*01			*03(DQ8)	*06					SSP NGS	
8058	*13	*15	4*PRESENT	5*PRESENT			*02	*06					OTHER	
8103	*04	*15			*01	*03	*03	*06	*01	*01	*02	*04	SSO	

Table 12b: Individual laboratory results for Cell #1693 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*04:18	*15:02:02	4*01:03:01	5*01:02	*01:03:01	*03:01:01	*03:02:01	*06:01:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	SSP SSO NGS	DQB1*03:289 DQB1*03:416 DQB1*06:01:15
771	*04:18	*15:02					*03:02	*06:01			*02:01	*04:01	SSO NGS	
774	*04:18	*15:02	4*01:01:01G	5*01:02:01G	*01:03	*03:01	*03:02	*06:01			*02:01	*04:01		
3808	*04:18	*15:02			*01:03	*03:01	*03:02	*06:01	*01:03	*01:03	*02:01:02G	*04:01:01G	SSO	
4079	*04:18	*15:02	4*01:03	5*01:02	*01:03	*03:01	*03:02	*06:01	*01:03		*02:01	*04:01	SSP NGS	
4251	*04:18	*15:02	4*01:01:01G	5*01:02	*01:03	*03:01	*03:02:01G	*06:01:01G	*01:03	*01:03:01G	*02:01	*04:01	NGS	
5133	*04:18	*15:02:02	4*01:03:01	5*01:02	*01:03:01	*03:01:01	*03:02:01	*06:01:01	*01:03:01		*02:01:02	*04:01:01	NGS	
5462	*04:18	*15:02	4*01:03	5*01:02	*01:03	*03:01	*03:02	*06:01	*01:03		*02:01	*04:01	SSP NGS	
8001	*04:18	*15:02	4*01:03	5*01:02	*01:03	*03:01	*03:02	*06:01			*02:01	*04:01		
8043	*04:18	*15:02					*03:02	*06:01			*02:01	*04:01	NGS	
8103	*04:18	*15:02			*01:03	*03:01	*03:02	*06:01	*01:03	*01:03	*02:01	*04:01	SSO	

Table 13. Individual laboratory results for Cell #1694 - Class I

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*33	*14	*41	*08	*17	*02:02	*33:01	*14:02	*41:01	*08:02	*17:01		
725	*02	*33	*14	*41	*08	*17							SSO	
747	*02	*33	*14	*41	*08	*17	*02:02:01	*33:01:01	*14:02:01	*41:01:01	*08:02:01	*17:01:01	SSP SSO NGS	
762							*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	NGS	
771	*02	*33	*14	*41	*08	*17	*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	SSO NGS	
774	*02	*33	*14	*41	*08	*17								
3808	*02	*33	*14	*41	*08	*17	*02:02		*14:02		*08:02		SSO	
4079	*02	*33	*14	*41	*08	*17	*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	SSP NGS	
4251							*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	NGS	
5133							02:02:01:01	*33:01:01:01	*14:02:01:01	*41:01:01:01	*08:02:01:01	*17:01:01:05	NGS	
5462							*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	SSP NGS	
6649	*02	*33	*14	*41									SSO	
8001							*02:02	*33:01	*14:02	*41:01	*08:02	*17:01		
8043							*02:02	*33:01	*14:02	*41:01	*08:02	*17:01	NGS	
8058	*02	*33	*14		*08								OTHER	
8103	*02	*33	*14	*41	*08	*17	*02:02	*33:03	*14:02	*41:01	*08:02	*17:01	SSO	

Table 14a: Individual laboratory results for Cell #1694 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*01	*04	4*01		*01	*03	*02	*05	*01	*01	*04	*104	SSP SSO NGS	
771	*01	*04			*01	*03	*02	*05			*04	*104	SSO NGS	
3808	*01	*04	NT	NT	*01	*03	*02	*05	*01	*01	*04(DP401)	*03	SSO	
4079	*01	*04	4*01				*02	*05					SSP NGS	
8058	*01	*04	4*PRESENT	4*PRESENT			*02	*06					OTHER	
8103	*01	*04			*01	*03	*02	*05	*01	*01	*04	*03	SSO	

Table 14b: Individual laboratory results for Cell #1694 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*01:02:01	*04:05:01	4*01:03:01		*01:01:02	*03:03:01	*02:02:01	*05:01	*01:03:01	*01:03:01	*04:01:01	*104:01	SSP SSO NGS	DQB1*05:237 DQB1*05:263
771	*01:02	*04:05					*02:02	*05:01			*04:01	*104:01	SSO NGS	
774	*01:02	*04:05	4*01:01:01G		*01:01	*03:03	*02:02	*05:01			*04:01	*104:01		
3808	*01:02	*04:05					*02:02	*05:01	*01:03	*01:03	*04:01:01G	*03:01:01G	SSO	
4079	*01:02	*04:05	4*01:03		*01:01	*03:03	*02:02	*05:01	*01:03		*04:01	*104:01	SSP NGS	
4251	*01:02	*04:05	4*01:01:01G		*01:01	*03:03	*02:01:01G	*05:01:01G	*01:03	*01:03:01G	*04:01	*104:01	NGS	
5133	*01:02:01	*04:05:01	4*01:03:01		*01:01:02	*03:03:01	*02:02:01	*05:01:01	*01:03:01		*04:01:01	*104:01:01	NGS	DPB1*124:01:01 DPB1*702:01
5462	*01:02	*04:05	4*01:03	NP	*01:01	*03:03	*02:02	*05:01	*01:03		*04:01P	*03:01P	SSP NGS	DPB1*702:01 DPB1*104:01 DPB1*124:01
8001	*01:02	*04:05	4*01:03		*01:01	*03:03	*02:02	*05:01			*04:01	*104:01		
8043	*01:02	*04:05					*02:02	*05:01			*04:01	*104:01	NGS	
8103	*01:02	*04:05			*01:01	*03:02	*02:02	*05:01	*01:03	*01:03	*04:01	*03:01	SSO	DQA1*03:03

Table 15. Individual laboratory results for Cell #1695 - Class I

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*33	*68	*15	*35	*03	*04	*33:03	*68:02	*15:37	*35:01	*03:04	*04:01		
725	*33	*68	*15(B71)	*35	*03(Cw10)	*04							SSO	
747													SSP SSO NGS	
762							*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	NGS	
771	*33	*68	*15	*35	*03	*04	*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	SSO NGS	
774	*33	*68	*15(B75)	*35	*03(Cw10)	*04								
3808	*33	*68	*15(B62)	*35	*03(Cw10)	*04	*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	NGS	
5133							33:03:01:01	*68:02:01:01	*15:37	*35:01:01	*03:04:02:01	*04:01:01:14	NGS	
5462							*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	SSP NGS	
6649	*33	*68	*15	*35									SSO	
8001							*33:03	*68:02	*15:37	*35:01	*03:04	*04:01		
8043							*33:03	*68:02	*15:37	*35:01	*03:04	*04:01	NGS	
8058	*33	*68		*35	*03								OTHER	
8103	*33	*68	*15	*35	*03	*04	33:01	*68:02	*15:37	*35:24	*03:04	*04:01	SSO	

Table 16a: Individual laboratory results for Cell #1695 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*07	*11			*03	*05	*02	*03			*13	*04	SSO NGS	
774									*02	*03				
3808	*07	*11	NT	NT	*03	*05	*02	*03	*02	*03	*13	*105	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
8058	*07	*11	3*PRESENT	4*PRESENT			*02	*03					OTHER	
8103	*07	*11			*03	*05	*02	*03	*02	*03	*13	*105	SSO	

Table 16b: Individual laboratory results for Cell #1695 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*07:01	*11:02					*02:02	*03:19			*13:01	*04:02	SSO NGS	
774	*07:01	*11:02	3*02:02:01	4*01:01:01G	*03:03	*05:05	*02:02	*03:19:01			*13:01	*105:01		
3808	*07:01	*11:02			*03:03	*05:05	*02:02	*03:19	*02:01	*03:01	*13:01:01G	*105:01	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251	*07:01:01G	*11:02	3*02:02:01G	4*01:01	*03:03	*05:05	*02:02	*03:19	*02:01	*03:01	*13:01:01G	*105:01	NGS	
5133	*07:01:01	*11:02:01	3*02:02:01	4*01:01:01	*03:03:01	*05:05:01	*02:02:01	*03:19:01	*02:01:07	*03:01:01	*13:01:01	*105:01:01	NGS	
5462	*07:01	*11:02	3*02:02	4*01:01	*03:03	*05:05	*02:02	*03:19	*02:01	*03:01	*13:01P	*04:02P	SSP NGS	DPB1*105:01 DPB1*463:01 DPB1*133:01
8001	*07:01	*11:02	3*02:02	4*01:01	*03:03	*05:05	*02:02	*03:19			*13:01	*105:01		
8043	*07:01	*11:02			*03:01:01G	*05:01:01G	*02:02	*03:19			*13:01	*105:01	NGS	
8103	*07:01	*11:02			*03:03	*05:05	*02:02	*03:01	*02:01	*03:01	*13:01	*105:01	SSO	DQA1*03:02

Table 17. Individual laboratory results for Cell #1696 - Class I

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*02	*38	*53	*04	*12	*02:01	*02:02	*38:01	*53:01	*04:01	*12:03		
725	*02		*38	*53	*04	*12							SSO	
747	NT												SSP SSO NGS	
762							*02:01	*02:02	*38:01	*53:01	*04:01	*12:03	NGS	A*02:102 A*02:603
771	*02	*02	*38	*53	*04	*12	*02:01	*02:02	*38:01	*53:01	*04:01	*12:03	SSO NGS	
774	*02	*02	*38	*53	*04	*12								
3808	*02	*02	*38	*53	*04	*12		*02:02		*53:01		*12:03	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*02:01	*02:02	*38:01	*53:01	*04:01	*12:03	NGS	
5133							02:01:01:01	*02:02:01:01	*38:01:01:05	*53:01:01:01	*04:01:01:75	*12:03:01:01	NGS	
5462							*02:01	*02:02	*38:01	*53:01	*04:01	*12:03	SSP NGS	
6649	*02	*02	*38	*53									SSO	
8001							*02:01	*02:02	*38:01	*53:01	*04:01	*12:03		
8043							*02:01	*02:02	*38:01	*53:01	*04:01	*12:03	NGS	
8058	*02	*69	*38	*53									OTHER	
8103	*02	*02	*38	*53	*04	*12	*02:01	*02:02	*38:01	*53:01	*04:01	*12:28	SSO	

Table 18a: Individual laboratory results for Cell #1696 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*04	*08			*01	*03	*03	*06			*03	*05	SSO NGS	
774									*01	*02				
3808	*04	*08	NT	NT	*01	*03	*03(DQ8)	*06	*01	*02	*03	*05	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
8058	*04	*08	4*PRESENT	4*PRESENT			*03	*06					OTHER	
8103	*04	*08			*01	*03	*03	*06	*01	*02	*03	*05	SSO	

Table 18b: Individual laboratory results for Cell #1696 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*04:11	*08:06					*03:02	*06:02			*03:01	*05:01	SSO NGS	
774	*04:11	*08:06	4*01:01:01G		*01:02	*03:01	*03:02	*06:02			*03:01	*05:01		
3808	*04:11	*08:06			*01:02	*03:01	*03:02				*03:01:01G	*05:01:01	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251	*04:11	*08:06	4*01:01:01G		*01:02	*03:01	*03:02:01G	*06:02	*01:03	*02:02:02G	*03:01	*05:01	NGS	
5133	*04:11:01	*08:06	4*01:03:01		*01:02:01	*03:01:01	*03:02:01	*06:02:01	*01:03:01	*02:02:02	*03:01:01	*05:01:01	NGS	
5462	*04:11	*08:06	4*01:03	NP	*01:02	*03:01	*03:02	*06:02	*01:03	*02:02	*03:01	*05:01	SSP NGS	
8001	*04:11	*08:06	4*01:03		*01:02	*03:01	*03:02	*06:02			*03:01	*05:01		
8043	*04:11	*08:06					*03:02	*06:02			*03:01	*05:01	NGS	
8103	*04:11	*08:06			*01:02	*03:01	*03:02	*06:02	*01:03	*02:02	*03:01	*05:01	SSO	DQB1*06:11

SERUM EXCHANGE #582

The results for Serum Exchange #582 are summarized in Tables 19 - 26 and individual listing of results are shown in tables 27 - 40. Sera expressing

strong anti-B40 (B60, B61), -B35, -B53, -B12(B44,B45), and -A1 reactivity were examined in this study.

1321	method	#labs	B60	B61	B41	B48	B81	B8101	B27	B2708	B47	B50	B7	A32	A33	A74	Cw10	A2	A29	A31	B13	B45	B73	Cw7	Cw9
class I	NIH-Std	1	no consensus																						
	AHG	2	100%	100%	50%	50%	50%		50%		50%	50%	50%	50%	50%	50%									
	C1q	3	100%	100%	33%	100%	67%	33%									33%								33%
	PRA	3	67%	67%	33%	33%	67%		67%		67%	67%	67%	67%	67%	67%	33%	67%	67%	67%	67%	67%	67%	33%	
	SAB	24	100%	100%	100%	96%	92%		96%	33%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

1321	method	#labs	Cw17	Cw16	A30	B42	B46	B49	A66	A6602	Cw2	Cw8	Cw12	B8	B55	A36	A68	A69	B54	B56	B57	B67	B72	Cw14	Cw15
	PRA	3	33%	33%	33%	33%	33%	33%	33%		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
	SAB	24	96%	92%	92%	92%	88%	88%	63%	50%	58%	46%	33%	46%	42%										

1321	method	#labs	NEG	DQ2	DQA1*05
class II	C1q	2	100%		
	PRA	3		67%	
	SAB	19	37%	26%	32%

Serum 1321. Strong anti-B60 (20462) and -B61 (15792) reactivity was reported in this sample by all methods. Strong reactivity to B41 (12647), B48 (15072) and B81 (B*8101) (16410), was also reported by Antiglobulin, C1q, Luminex-PRA and single antigen (SAB). Each were reported by > 90% of SAB labs. A number (n = 5) of SAB labs also reported allele specific A*30:01 reactivity.

Results were mixed among labs, with respect to class II reactivity. Only

*(median MFI by SAB)

26% of SAB labs, along with 2 out of 3 (67%) PRA labs, reported anti-DQ2 (2705) reactivity. Another 32% of SAB labs reported additional anti-DQA1*05 (2803) reactivity, while the remainder (37%) of SAB labs reported this sample as negative for class II. Both labs reporting by C1q detected no C1-q binding of HLA-class II antibodies. This sample was not graded for class II due to lack of consensus (< 90%).

1322	method	#labs	B35	B53	B62	B18	B49	B50	B51	B52	B5	B46	B56	B57	B58	B17	B71	B72	B70	B75	B77	B63
class I	NIH-Std	1	no consensus																			
	AHG	2	100%	100%	100%	50%	50%	50%	50%		50%		50%	50%		50%			50%			
	C1q	3	100%	100%	100%	33%	100%	100%	100%	100%		100%	100%	100%	100%		100%	100%		100%	100%	100%
	PRA	3	67%	67%	67%	67%	67%	67%	67%	67%		67%	67%	67%	67%		67%	67%		67%	67%	67%
	SAB	24	100%	100%	100%	100%	100%	100%	100%	100%		100%	100%	100%	100%		100%	100%		100%	100%	96%
1322	method	#labs	B78	B7801	Cw2	Cw4	Cw5	Cw9	Cw6	Cw10	Cw15	Cw17	Cw18	B27	B2708	B2705	B37	B44	B45	A25	A31	A33
	AHG	2												50%								
	C1q	3	67%	33%	100%	67%	100%	33%	100%	67%	100%	33%	100%									
	PRA	3	67%		33%	33%	33%	33%	33%	33%	33%	33%	33%	67%			67%	67%	67%	67%	67%	67%
	SAB	24	96%	21%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%	25%	12%	100%	92%	75%	75%	67%	58%
1322	method	#labs	Cw12	Cw14	B54	B55	B22	B64	A66	A26	B73	A3	B76	Cw1	B82	B13	B5C	Bw4	Cw3	Cw403		
	AHG	2					50%															
	PRA	3	33%	33%	33%	33%		33%	33%	33%	33%	33%	33%				33%					
	SAB	24	79%	67%	92%	29%		75%	42%	29%	38%		25%	25%	17%	12%	12%	12%	12%	12%		
1322	method	#labs	DQ7	DQ8	DQ9	DR13	DR52	DQA1*03	DQA1*05	DQA1*06	DQ3	DR18										
class II	C1q	2	100%																			
	PRA	3	67%	67%	67%																	
	SAB	22	100%	100%	100%	27%	23%	18%	18%	18%	9%	9%										

Serum 1322. Strong anti-B35 (20667) and -B53 (19647) reactivity was detected in this sample by all methods. Strong reactivity to other 5C specificities, including anti-B62 (18187), -B18 (13049), -B49 (20584), -B50 (19133), -B51 (22794), -B56 (18752), and -B57 (16609) reactivity, was also reported by C1q, AHG, PRA and SAB. Each were reported by 100% of SAB labs. In addition,

anti-B27 (B*27:05) (1845), -B37 (8054), -B44 (2514), and C-locus reactivity was reported by various methods.

Anti-DQ7 (14237) reactivity was reported by C1q, PRA, and 100% of SAB labs. Additional reactivity to DQ8 (4372) and DQ9 (4052) was reported by PRA and all 22 SAB labs.

*(median MFI by SAB)

1323	method	#labs	B44	B45	B12	B47	B49	B50	B61	B60	B13	B41	B82	B8201	B38	B62	B76	B75	B77	B72	B71	B35	B53	B51
class I	NIH-Std	1	no consensus																					
	AHG	2	100%	100%	50%	50%	50%	50%	50%	50%		50%				50%								
	C1q	3	100%	100%		67%	67%	67%	67%		67%		67%	67%			100%							
	PRA	3	67%	67%		67%	67%	67%	67%	67%	67%	67%	33%		67%	67%	33%	67%	67%	67%	67%	67%	67%	33%
	SAB	24	100%	100%		100%	100%	100%	100%	100%	100%	100%	96%	12%	100%	100%	100%	100%	100%	100%	92%	96%	96%	92%

1323	method	#labs	B78	B7801	B37	B59	A1	B52	B57	B18	B46	B58	B63	B48	A23	B39	A24	B8	B64	B56	B12C	B5C	Bw4
	PRA	3	67%		33%	33%	67%	67%	67%	67%	33%	33%	33%	33%	33%	33%				67%			
	SAB	24	92%	21%	92%	92%	92%	88%	79%	79%	75%	71%	67%	62%	58%	54%	42%	42%	38%	29%	12%	12%	12%

1323	method	#labs	NEG	DR4	DQ7	DQ8	DQ9	DR51	DR53	DQA1*03	DQ6	DR52	DR53	DQA1*02	DQA1*04	DQA1*05	DQA1*06	DQ4	DQ3	DR15
class II	C1q	2	50%							50%	50%			50%	50%					
	PRA	3		67%	67%	67%	67%		33%		33%	33%	33%							
	SAB	22		100%	86%	86%	82%	77%	77%	27%						14%	14%	14%	9%	9%

Serum 1323. Strong anti-B44 (19798) and –B45 (20993) reactivity was reported in this sample by all methods. In addition, labs reporting by C1q, anti-globulin, PRA, and SAB reported reactivity to B47 (9495), B49 (14011), B50 (12842), and B61 (9783). Each were reported by 100% of SAB labs. Additional reactivity to B38 (6585), B59 (4256), and A1 (5194), as well as reactivity to a number of 5C and 7C specificities was reported by PRA and SAB labs.

Anti-A*24:02 reactivity was also reported by 4 SAB labs.

Weak class II reactivity was detected in this sample, with PRA and SAB labs detecting anti-DR4 (4940), -DR53 (1601), -DQ7 (2578), -DQ8 (2860), and -DQ9 (3050) reactivity. One lab reporting by C1q and 1 lab reporting by PRA also detected anti-DQ6 reactivity.

*(median MFI by SAB)

1324	method	#labs	A1	A36	A80	A24	A2403	A32	A43	A25	A26	A23	A29	B49	B51	B57	B58	B63	B38	B44	B52	B77	B76	B59	B13	B37
class I	NIH-Std	1																								
	AHG	2	100%	50%		50%		50%		50%				50%	50%	50%	50%	50%								
	C1q	3	100%	100%	100%				100%																	
	PRA	3	67%	67%	67%	67%		67%	33%	33%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	33%	33%	67%	67%
	SAB	24	100%	100%	100%	100%	21%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	96%

1324	method	#labs	B53	B47	B27	B2705	A11	A1101	A1102	A3	Bw4	A66	A6601	A34	B45	B82	A31	A68	A74	B73	B76	B15	A1C	A2C	B12C	B5C
class I	NIH-Std	1																								
	AHG	2									50%															
	C1q	3																								
	PRA	3	67%	67%	67%		67%			33%		33%		33%	33%	33%	33%	33%	33%	33%	33%					
	SAB	24	96%	88%	67%	33%	83%	12%	12%	62%	50%	25%	21%	21%	21%	8%						8%	8%	8%	8%	8%

1324	method	#labs	NEG	DR15	DR16	DR51	DR11	DR8	DR9	DR12	DQ6	DQ5	DQA1*01	DR2	DR52	DR53	DR10	DR13	DR14	DR4	DR7	
class II	C1q	2	100%																			
	PRA	3		67%	33%	33%	67%	33%	33%			33%				33%	33%		33%	33%	33%	
	SAB	22		100%	100%	100%	91%	41%	14%	73%	64%		9%	5%	5%			14%				

Serum 1324. Strong anti-A1 (15782) reactivity was reported by all methods for this sample. In addition, reactivity to a number of 1C, 10C, and 5C specificities, including anti-A36 (12309), -A80 (12234), -A24 (6108), -A32 (9177), -A43 (9671), -A24 (6108), -B49 (8612), -B51 (8263), -B57 (7726), and -B58 (7159) reactivity, was detected by various methods.

Labs reporting by Luminex-PRA and SAB also reported anti-DR15 (4222), -DR16 (5190), -DR51 (3576), and -DR11 (1904) reactivity. Each were reported by > 90% of SAB labs. Allele specific DRB1*12:02 and DQB1*06:01 reactivity was reported by a number (n = 5) of SAB labs. Labs reporting by C1q reported this sample as negative for class II.

*(median MFI by SAB)

NEXT MAILING DATE: November 3, 2021

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Table 19. Summary of the 582nd Serum Exchange (Serum #1321-1324) by NIH-Standard - class I

Method: NIH-Standard											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
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 20. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Antiglobulin - class I

Method: Antiglobulin											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B60	100%	100%	B35	100%	100%	B44	100%	100%	A1	100%	100%
B61	100%	100%	B53	100%	100%	B45	100%	100%	A25	50%	100%
A74	50%	100%	B62	100%	100%	B12	50%	100%	A32	50%	100%
B27	50%	100%	B17	50%	100%	B41	50%	100%	A36	50%	100%
B40	50%	100%	B18	50%	100%	B47	50%	100%	B49	50%	100%
B41	50%	100%	B22	50%	100%	B49	50%	100%	B51	50%	100%
B47	50%	100%	B27	50%	100%	B50	50%	100%	B57	50%	100%
B48	50%	100%	B49	50%	100%	B60	50%	100%	B58	50%	100%
B50	50%	100%	B5	50%	100%	B61	50%	100%	B63	50%	100%
B7	50%	100%	B50	50%	100%	B62	50%	50%	Bw4	50%	94%
B81	50%	100%	B51	50%	100%				A24	50%	71%
A32	50%	83%	B56	50%	100%						
A33	50%	75%	B57	50%	100%						
			B70	50%	100%						

Table 21. Summary of the 582nd Serum Exchange (Serum #1321-1324) by C1q - class I

Method: C1q											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B48	100%	100%	B35	100%	100%	B44	100%	100%	A1	100%	100%
B60	100%	100%	B46	100%	100%	B45	100%	100%	A36	100%	100%
B61	100%	100%	B49	100%	100%	B76	100%	100%	A80	100%	100%
B81	67%	100%	B50	100%	100%	B82	67%	100%	A43	33%	100%
B41	33%	100%	B51	100%	100%	B13	33%	100%			
B8101	33%	100%	B52	100%	100%	B47	33%	100%			
Cw10	33%	100%	B53	100%	100%	B49	33%	100%			
Cw9	33%	100%	B56	100%	100%	B50	33%	100%			
			B57	100%	100%	B61	33%	100%			
			B58	100%	100%	B8201	33%	100%			
			B62	100%	100%						
			B63	100%	100%						
			B71	100%	100%						
			B72	100%	100%						
			B75	100%	100%						
			B77	100%	100%						
			Cw15	100%	100%						
			Cw18	100%	100%						
			Cw2	100%	100%						
			Cw5	100%	100%						
			Cw6	100%	100%						
			B78	67%	100%						
			Cw10	67%	100%						
			Cw4	67%	100%						
			B18	33%	100%						
			B7801	33%	100%						
			Cw17	33%	100%						
			Cw9	33%	100%						

Table 22. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Luminex PRA - class I

Method: Luminex-PRA											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A2	67%	100%	A25	67%	100%	A1	67%	100%	A1	67%	100%
A29	67%	100%	A31	67%	100%	B13	67%	100%	A11	67%	100%
A31	67%	100%	A33	67%	100%	B18	67%	100%	A23	67%	100%
A32	67%	100%	B18	67%	100%	B35	67%	100%	A24	67%	100%
A33	67%	100%	B27	67%	100%	B38	67%	100%	A26	67%	100%
A74	67%	100%	B35	67%	100%	B41	67%	100%	A29	67%	100%
B13	67%	100%	B37	67%	100%	B44	67%	100%	A32	67%	100%
B27	67%	100%	B44	67%	100%	B45	67%	100%	A36	67%	100%
B45	67%	100%	B45	67%	100%	B47	67%	100%	A80	67%	100%
B47	67%	100%	B46	67%	100%	B49	67%	100%	B13	67%	100%
B50	67%	100%	B49	67%	100%	B50	67%	100%	B27	67%	100%
B60	67%	100%	B50	67%	100%	B52	67%	100%	B37	67%	100%
B61	67%	100%	B51	67%	100%	B53	67%	100%	B38	67%	100%
B7	67%	100%	B52	67%	100%	B57	67%	100%	B44	67%	100%
B73	67%	100%	B53	67%	100%	B60	67%	100%	B47	67%	100%
B81	67%	100%	B56	67%	100%	B61	67%	100%	B49	67%	100%
A30	33%	100%	B57	67%	100%	B62	67%	100%	B51	67%	100%
A36	33%	100%	B58	67%	100%	B71	67%	100%	B52	67%	100%
A66	33%	100%	B62	67%	100%	B72	67%	100%	B53	67%	100%
A68	33%	100%	B63	67%	100%	B75	67%	100%	B57	67%	100%
A69	33%	100%	B71	67%	100%	B77	67%	100%	B58	67%	100%
B41	33%	100%	B72	67%	100%	B78	67%	100%	B63	67%	100%
B42	33%	100%	B75	67%	100%	A23	33%	100%	B77	67%	100%
B46	33%	100%	B77	67%	100%	B37	33%	100%	A25	33%	100%
B48	33%	100%	B78	67%	100%	B39	33%	100%	A3	33%	100%
B49	33%	100%	A26	33%	100%	B46	33%	100%	A31	33%	100%
B54	33%	100%	A3	33%	100%	B48	33%	100%	A34	33%	100%
B55	33%	100%	A66	33%	100%	B51	33%	100%	A43	33%	100%
B56	33%	100%	B13	33%	100%	B58	33%	100%	A66	33%	100%
B57	33%	100%	B54	33%	100%	B59	33%	100%	A68	33%	100%
B67	33%	100%	B55	33%	100%	B63	33%	100%	A74	33%	100%
B72	33%	100%	B64	33%	100%	B76	33%	100%	B45	33%	100%
B8	33%	100%	B73	33%	100%	B82	33%	100%	B59	33%	100%
Cw10	33%	100%	B76	33%	100%				B73	33%	100%
Cw12	33%	100%	Cw10	33%	100%				B76	33%	100%

Table 23. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Single Antigen - class I

Method: Luminex - SAB											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
24 typing Labs			24 typing Labs			24 typing Labs			24 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A29	100%	100%	B18	100%	100%	B13	100%	100%	A1	100%	100%
A31	100%	100%	B35	100%	100%	B38	100%	100%	A23	100%	100%
A32	100%	100%	B37	100%	100%	B41	100%	100%	A24	100%	100%
A33	100%	100%	B46	100%	100%	B44	100%	100%	A25	100%	100%
A74	100%	100%	B49	100%	100%	B45	100%	100%	A26	100%	100%
B13	100%	100%	B50	100%	100%	B47	100%	100%	A29	100%	100%
B41	100%	100%	B51	100%	100%	B49	100%	100%	A32	100%	100%
B45	100%	100%	B52	100%	100%	B50	100%	100%	A36	100%	100%
B47	100%	100%	B53	100%	100%	B60	100%	100%	A43	100%	100%
B50	100%	100%	B56	100%	100%	B61	100%	100%	A80	100%	100%
B60	100%	100%	B57	100%	100%	B62	100%	100%	B38	100%	100%
B61	100%	100%	B58	100%	100%	B72	100%	100%	B44	100%	100%
B7	100%	100%	B62	100%	100%	B75	100%	100%	B49	100%	100%
B73	100%	100%	B71	100%	100%	B76	100%	100%	B52	100%	100%
A2	100%	89%	B72	100%	100%	B77	100%	100%	B57	100%	100%
Cw7	100%	86%	B75	100%	100%	B35	96%	100%	B58	100%	100%
Cw9	100%	75%	B77	100%	100%	B53	96%	100%	B59	100%	100%
Cw10	100%	73%	Cw15	100%	100%	B82	96%	100%	B63	100%	100%
B27	96%	100%	Cw17	100%	100%	B37	92%	100%	B76	100%	100%
B48	96%	100%	Cw18	100%	100%	B51	92%	100%	B77	100%	100%
Cw17	96%	100%	Cw2	100%	100%	B59	92%	100%	B13	96%	100%
B42	92%	100%	Cw4	100%	100%	B71	92%	100%	B37	96%	100%
B81	92%	100%	Cw9	100%	100%	B78	92%	100%	B51	96%	100%
Cw16	92%	100%	Cw6	100%	92%	A1	92%	89%	B53	96%	100%
A30	92%	75%	Cw10	100%	91%	B52	88%	100%	B47	88%	100%
B46	88%	100%	Cw5	100%	67%	B57	79%	33%	A11	83%	50%
B49	88%	100%	B63	96%	100%	B18	79%	25%	B27	67%	100%
A66	63%	50%	B78	96%	100%	B46	75%	0%	A3	62%	100%
Cw2	58%	100%	B44	92%	75%	B58	71%	100%	Bw4	50%	100%
A6602	50%	100%	B54	92%	0%	B63	67%	33%	B2705	33%	100%
B8	46%	100%	Cw12	79%	67%	B48	62%	100%	A66	25%	100%
Cw8	46%	100%	B45	75%	100%	A23	58%	100%	A2403	21%	100%
B55	42%	100%	A25	75%	75%	B39	54%	100%	A34	21%	100%
B2708	33%	100%	B64	75%	67%	A24	42%	100%	A6601	21%	100%
Cw12	33%	100%	B27	67%	100%	B8	42%	100%	B45	21%	100%

Table 23. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Single Antigen - class I

Method: Luminex - SAB, cont.											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
24 typing Labs			24 typing Labs			24 typing Labs			24 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B8101	25%	100%	Cw14	67%	100%	B64	38%	100%	A1101	12%	100%
A203	21%	100%	A31	67%	67%	B56	29%	100%	A1102	12%	100%
Cw14	21%	100%	A33	58%	83%	B7801	21%	100%	A1C	8%	100%
B2705	17%	100%	A66	42%	100%	B12C	12%	100%	A2C	8%	100%
B67	17%	100%	B73	38%	100%	B5C	12%	100%	B12C	8%	100%
B703	17%	100%	A26	29%	100%	B8201	12%	100%	B15	8%	100%
Cw1	17%	100%	B55	29%	100%	Bw4	12%	100%	B5C	8%	100%
B12C	8%	100%	B2708	25%	100%	B15	8%	100%	B82	8%	100%
B40	8%	100%	B76	25%	100%	B3901	8%	100%	A10	4%	100%
B54	8%	100%	Cw1	25%	100%	B40	8%	100%	A10C	4%	100%
B72	8%	100%	B7801	21%	100%	A1C	4%	100%	A19	4%	100%
B7C	8%	100%	B82	17%	100%	A2C	4%	100%	A9	4%	100%
Cw3	8%	100%	B13	12%	100%	B12	4%	100%	B12	4%	100%
A1	4%	100%	B2705	12%	100%	B21	4%	100%	B16	4%	100%
A10C	4%	100%	B5C	12%	100%	B4005	4%	100%	B17	4%	100%
A19	4%	100%	Bw4	12%	100%	B54	4%	100%	B21	4%	100%
A1C	4%	100%	Cw3	12%	100%	B65	4%	100%	B5	4%	100%
A24	4%	100%	Cw403	12%	100%	B70	4%	100%	B7C	4%	100%
A26	4%	100%	B15	8%	100%	B7C	4%	100%	B8C	4%	100%
A2C	4%	100%	A10C	4%	100%	B8C	4%	100%	Bw6	4%	100%
A43	4%	100%	A11	4%	100%	Bw6	4%	100%			
A68	4%	100%	A1102	4%	100%						
A69	4%	100%	A29	4%	100%						
B21	4%	100%	A2C	4%	100%						
B37	4%	100%	B12	4%	100%						
B4005	4%	100%	B12C	4%	100%						
B52	4%	100%	B17	4%	100%						
B59	4%	100%	B21	4%	100%						
B5C	4%	100%	B22	4%	100%						
B82	4%	100%	B4005	4%	100%						
Bw4	4%	100%	B5	4%	100%						
Bw6	4%	100%	B61	4%	100%						
Cw15	4%	100%	B70	4%	100%						
Cw18	4%	100%	B7C	4%	100%						
Cw4	4%	100%	B8C	4%	100%						

Table 24. Summary of the 582nd Serum Exchange (Serum #1321-1324) by C1q - class II

Method: C1q											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
NEG	100%	-	DQ7	100%	100%	DQ6	50%	100%	NEG	100%	-
						DQA1*02	50%	100%			
						DQA1*03	50%	100%			
						DQA1*04	50%	100%			
						NEG	50%	-			

Table 25. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Luminex PRA - class II

Method: Luminex-PRA											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ2	67%	100%	DQ7	67%	100%	DQ7	67%	100%	DR11	67%	100%
DR12	33%	100%	DQ8	67%	100%	DQ8	67%	100%	DR15	67%	100%
			DQ9	67%	100%	DQ9	67%	100%	DQ5	33%	100%
			DP11	33%	100%	DR4	67%	100%	DR10	33%	100%
			DQ6	33%	100%	DQ2	33%	100%	DR14	33%	100%
						DQ6	33%	100%	DR16	33%	100%
						DR52	33%	100%	DR4	33%	100%
						DR53	33%	100%	DR51	33%	100%
									DR53	33%	100%
									DR7	33%	100%
									DR8	33%	100%
									DR9	33%	100%

Table 26. Summary of the 582nd Serum Exchange (Serum #1321-1324) by Single Antigen - class II

Method: Luminex - SAB											
*** Serum 1321 ***			*** Serum 1322 ***			*** Serum 1323 ***			*** Serum 1324 ***		
19 typing Labs			22 typing Labs			22 typing Labs			22 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
NEG	37%	100%	DQ7	100%	100%	DR4	100%	100%	DR15	100%	100%
DQA1*05	32%	100%	DQ8	100%	83%	DQ8	86%	100%	DR16	100%	100%
DQ2	26%	20%	DQ9	100%	56%	DQ7	86%	65%	DR51	100%	100%
DPA1*03	5%	100%	DR13	27%	100%	DQ9	82%	33%	DR11	91%	71%
DR14	5%	100%	DR52	23%	100%	DR51	77%	100%	DR12	73%	25%
DR52	5%	100%	DQA1*03	18%	100%	DR53	77%	47%	DQ6	64%	46%
DR9	5%	100%	DQA1*05	18%	100%	DQA1*03	27%	100%	DR8	41%	100%
Undefined	5%	100%	DQA1*06	18%	100%	DQ4	14%	100%	DR13	14%	100%
			DQ3	9%	100%	DQA1*05	14%	100%	DR9	14%	100%
			DR18	9%	100%	DQA1*06	14%	100%	DQA1*01	9%	100%
			DP15	5%	100%	DQ3	9%	100%	DR2	5%	100%
						DR15	9%	100%	DR52	5%	100%
						DR16	5%	100%			

Table 27. Individual laboratory results for Serum #1321 - 1324 by NIH-Standard - class I

**** Serum 1321 ****						**** Serum 1322 ****					**** Serum 1323 ****					**** Serum 1324 ****					
Ctr	% POS	B40	B60	B61	Other	% POS	B35	B5	B53	Other	% POS	B12	B44	B45	Other	% POS	A1		Other	Method	
786		+	+	+			+	+	+			+	+	+			+				STD

STD = NIH-Std

Table 28. Individual laboratory results for Serum #1321 - 1324 by Antiglobulin - class I

Ctr	**** Serum 1321 ****						**** Serum 1322 ****						**** Serum 1323 ****						**** Serum 1324 ****						Method
	% POS	B60	B61	A74	B27	Other	% POS	B35	B53	B62	B17	Other	% POS	B44	B45	B12	B41	Other	% POS	A1	A25	A32	A36	Other	
774	67	+	+	+	+	B48,B50,B47,B7 >	85	+	+	+		B70,B49,B50,B27 >		+	+		+	B60,B61,B62,B49 >	73	+	+	+		A24,B49,B51,B63 >	Antiglobulin
786		+	+			B40		+	+	+	+	B5,B22		+	+	+				+			+		Antiglobulin

Table 29. Individual laboratory results for Serum #1321 - 1324 by C1q - class I

**** Serum 1321 ****						**** Serum 1322 ****																											
Ctr	% POS	B48	B60	B61	B81	Other	% POS	B35	B46	B49	B50	B51	B52	B53	B56	B57	B58	B62	B63	B71	B72	B75	B77	Cw15	Cw18	Cw2	Cw5	Cw6	B78	Cw10	Cw4	Other	Method
786		+	+	+		B8101		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				B7801	C1q
2400		+	+	+	+	B41,Cw10,Cw9		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B18,Cw9,Cw17	C1q
3753		+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			C1q

**** Serum 1323 ****						**** Serum 1324 ****																												
Ctr	% POS	B44	B45	B76	B82	Other	% POS	A1	A36	A80																						Other	Method	
786		+	+	+		B8201		+	+	+																								C1q
2400		+	+	+	+	B61,B49,B50,B13 >		+	+	+																						A43	C1q	
3753		+	+	+	+			+	+	+																							C1q	

Table 30. Individual laboratory results for Serum #1321 - 1324 by Luminex PRA- class I

		**** Serum 1321 ****																																	
Ctr	% POS	A2	A29	A31	A32	A33	A74	B13	B27	B45	B47	B50	B60	B61	B7	B73	B81														Other	Method			
2400	86																																	LMX-PRA	
3753	76	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																B41,B42	LMX-PRA	
8058	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																	B48,A66,B49,B54 >	LMX-PRA

		**** Serum 1322 ****																																				
Ctr	% POS	A25	A31	A33	B18	B27	B35	B37	B44	B45	B46	B49	B50	B51	B52	B53	B56	B57	B58	B62	B63	B71	B72	B75	B77	B78							Other	Method				
2400	89																																			LMX-PRA		
3753	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-PRA		
8058	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			Cw4,Cw6,A66,B13 >	LMX-PRA

		**** Serum 1323 ****																																					
Ctr	% POS	A1	B13	B18	B35	B38	B41	B44	B45	B47	B49	B50	B52	B53	B57	B60	B61	B62	B71	B72	B75	B77	B78										Other	Method					
2400	79																																				LMX-PRA		
3753	88	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-PRA		
8058	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			B48,B51,B82,A23 >	LMX-PRA

		**** Serum 1324 ****																																						
Ctr	% POS	A1	A11	A23	A24	A26	A29	A32	A36	A80	B13	B27	B37	B38	B44	B47	B49	B51	B52	B53	B57	B58	B63	B77										Other	Method					
2400	82																																					LMX-PRA		
3753	92	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-PRA	
8058	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			A66,B82,B45,A25 >	LMX-PRA

Table 31. Individual laboratory results for Serum #1321 by LMX SAB - class I

		**** Serum 1321 ****																																														
Ctr	% POS	A29	A31	A32	A33	A74	B13	B41	B45	B47	B50	B60	B61	B7	B73	A2	Cw7	Cw9	Cw10	B27	B48	Cw17	B42	B81	Cw16	A30	B46	B49	A66	Cw2	A6602	B8	Cw8	B55	B2708	Cw12	B8101	A203	Cw14	Other	Method							
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A*30:01, B54,B67,B72,Cw1	LMX-SAB				
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB			
774	79	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB		
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B54,B67,B72,Cw1	LMX-SAB		
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A*30:01	LMX-SAB			
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB		
3224	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B2705,A*30:01	LMX-SAB			
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A*30:01	LMX-SAB			
3766	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B2705	LMX-SAB			
3808	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703	LMX-SAB			
3966	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,Cw6,A24,B52 >	LMX-SAB		
5219	33	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B21,B703,A19 >	LMX-SAB		
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A*30:01,A*30:02	LMX-SAB		
6649	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB		
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B67,Cw1	LMX-SAB		
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB		
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,Bw4,Bw6,B12C >	LMX-SAB	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B67	LMX-SAB	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B703,Cw3,Cw15 >	LMX-SAB	
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB	
8125		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B4005	LMX-SAB	
8128		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX-SAB

Table 32. Individual laboratory results for Serum #1322 by LMX SAB - class I

		**** Serum 1322 ****																																																								
Ctr	% POS	B18	B35	B37	B46	B49	B50	B51	B52	B53	B56	B57	B58	B62	B71	B72	B75	B77	Cw15	Cw17	Cw18	Cw2	Cw4	Cw9	Cw6	Cw10	Cw5	B63	B78	B44	B54	Cw12	B45	A25	B64	B27	Cw14	A31	A33	A66	B73	A26	B55	B2708	B76	Cw1	B7801	Other	Method									
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A*11:02,A11,B61, B*40:02,B13>	LMX-SAB									
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B82	LMX-SAB								
774	82	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B13	LMX-SAB							
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
3224	51	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B2705	LMX-SAB						
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
3766	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B2705,A*33:01	LMX-SAB					
3808	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw403,B82,Cw3	LMX-SAB					
3966	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B13	LMX-SAB				
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Bw4	LMX-SAB				
5219	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ Cw403,B15,B70>	LMX-SAB				
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	LMX-SAB			
6649	47	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B82,Bw4,Bw6>	LMX-SAB			
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B5C	LMX-SAB		
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ Cw403,B15,B82>	LMX-SAB	
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	LMX-SAB		
8125		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B4005	LMX-SAB	
8128		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB

Table 33. Individual laboratory results for Serum #1323 by LMX SAB - class I

		**** Serum 1323 ****																																																
Ctr	% POS	B13	B38	B41	B44	B45	B47	B49	B50	B60	B61	B62	B72	B75	B76	B77	B35	B53	B82	B37	B51	B59	B71	B78	A1	B52	B57	B18	B46	B58	B63	B48	A23	B39	A24	B8	B64	B56	B7801	Other	Method									
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B54,B65,A*24:02	LMX-SAB						
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
774	70	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB					
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B8201	LMX-SAB				
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A*24:02,Bw4	LMX-SAB				
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB				
3224	43	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB				
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
3766	88	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ B8201,A*24:02	LMX-SAB			
3808	28	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB			
3966	43	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Bw4	LMX-SAB		
5219	22	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ B40,B15,B70,B21 >	LMX-SAB		
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ B8201,B3901	LMX-SAB	
6649	43	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB	
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A*24:02	LMX-SAB	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Bw4,Bw6,B12C,B5C >	LMX-SAB	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B12C,B5C	LMX-SAB	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+ B40,B15	LMX-SAB	
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB	
8125		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B4005	LMX-SAB	
8128		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX-SAB

Table 34. Individual laboratory results for Serum #1324 by LMX SAB - class I

		**** Serum 1324 ****																																																					
Ctrl	% POS	A1	A23	A24	A25	A26	A29	A32	A36	A43	A80	B38	B44	B49	B52	B57	B58	B59	B63	B76	B77	B13	B37	B51	B53	B47	A11	B27	A3	Bw4	B2705	A66	A2403	A34	A6601	B45	Other	Method																	
	615	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+										B82,B*27:05	LMX-SAB															
	725	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+										LMX-SAB												
	774	79	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																LMX-SAB										
	786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+								LMX-SAB								
	910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							+	+										LMX-SAB								
	2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						+													LMX-SAB							
	3224	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+				A*34:02	LMX-SAB												
	3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																				LMX-SAB						
	3766	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+					A1101,A1102	LMX-SAB											
	3808	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																				LMX-SAB						
	3966	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																				LMX-SAB					
	4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																					LMX-SAB					
	5219	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																A9,B15,A10,B21 >	LMX-SAB									
	5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																	A1101,A1102	LMX-SAB								
	6649	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																					LMX-SAB					
	8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																	+				LMX-SAB					
	8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																						LMX-SAB				
	8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																						LMX-SAB				
	8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																			Bw6,B12C,B5C,B8C>	LMX-SAB						
	8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																				+				LMX-SAB		
	8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																						B15,A1101,A1102	LMX-SAB			
	8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																						LMX-SAB				
	8125		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																					+	B82	LMX-SAB			
	8128		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+																										LMX-SAB

Table 35. Individual laboratory results for Serum #1321 - #1324 by C1q - class II

Ctr	**** Serum 1321 ****			**** Serum 1322 ****			**** Serum 1323 ****					**** Serum 1324 ****			Method	
	% POS		Other	% POS	DQ7	Other	% POS	DQ6	DQA1*02	DQA1*03	DQA1*04	Other	% POS			Other
2400	0				+			+	+	+	+		0			C1q
3753	0				+		0						0			C1q

Table 36. Individual laboratory results for Serum #1321 - #1324 by Luminex PRA - class II

Ctr	**** Serum 1321 ****				**** Serum 1322 ****						**** Serum 1323 ****							**** Serum 1324 ****										Method									
	% POS	DQ2	DR12	Other	% POS	DQ7	DQ8	DQ9	DP11	DQ6	Other	% POS	DQ7	DQ8	DQ9	DR4	DQ2	DQ6	DR52	DR53	Other	% POS	DR11	DR15	DQ5	DR10	DR14		DR16	DR4	DR51	DR53	DR7	DR8	DR9	Other	
2400	0				34							31										46															LMX-PRA
3753	27	+			47	+	+	+				67	+	+	+	+						40	+	+				+		+						LMX-PRA	
8058	100	+	+		100	+	+	+	+	+		100	+	+	+	+	+	+	+	+		100	+	+	+	+	+	+	+	+	+	+	+	+		LMX-PRA	

Table 37. Individual laboratory results for Serum #1321 - 1322 by Luminex Single Antigen - class II

**** Serum 1321 ****					**** Serum 1322 ****										
Ctr	% POS	DQA1*05	DQ2	Other	% POS	DQ7	DQ8	DQ9	DR13	DR52	DQA1*03	DQA1*05	DQA1*06	Other	Method
615	Undefined					+	+	+	+	+				DR18,DRB1*13:01, DRB3*01:01, DRB3*03:01	LMX-SAB
774	0				34	+	+	+							LMX-SAB
910	0					+	+	+							LMX-SAB
2400		+				+	+	+							LMX-SAB
3224	0				12	+	+	+							LMX-SAB
3753			+			+	+	+							LMX-SAB
3766	0	+		DQA1*05:01	54	+	+	+							LMX-SAB
3808	0				6	+	+	+							LMX-SAB
3966	0				13	+	+	+			+	+	+		LMX-SAB
4322				DR52,DPA1*03		+	+	+	+	+	+	+	+	DP15	LMX-SAB
5219	0				8	+	+	+						DQ3	LMX-SAB
5462	0					+	+	+							LMX-SAB
6649	1	+			12	+	+	+							LMX-SAB
8082		+		DR9,DR14		+	+	+	+	+	+	+	+	DR18	LMX-SAB
8086	200		+		200	+	+	+							LMX-SAB
8090		+		DQA1*05:01		+	+	+	+					DRB1*13:01	LMX-SAB
8098	NT					+	+	+	+	+					LMX-SAB
8100			+			+	+	+							LMX-SAB
8103	NT					+	+	+	+	+				DQ3	LMX-SAB
8112		+	+			+	+	+			+	+	+		LMX-SAB
8125			+			+	+	+							LMX-SAB
8128	NT					+	+	+							LMX-SAB

Table 38. Individual laboratory results for Serum #1323 - 1324 by Luminex Single Antigen - class II

Ctr	**** Serum 1323 ****										**** Serum 1324 ****								Method
	% POS	DR4	DQ8	DQ7	DQ9	DR51	DR53	DQA1*03	Other	% POS	DR15	DR16	DR51	DR11	DR12	DQ6	DR8	Other	
615		+	+	+	+	+	+	+	DR15,DR16,DQ4		+	+	+	+	+	+	+	DRB1*12:02, DQB1*06:01	LMX-SAB
774	26	+	+	+	+		+			40	+	+	+	+	+	+			LMX-SAB
910		+	+	+	+	+	+		DQA1*03:03		+	+	+	+				DRB1*12:02, DQB1*06:01	LMX-SAB
2400		+	+	+	+	+	+				+	+	+	+	+				LMX-SAB
3224	22	+	+	+	+	+	+			13	+	+	+	+		+		DRB1*12:02, DQB1*06:01	LMX-SAB
3753		+	+	+	+		+				+	+	+	+	+			DRB1*12:02, DQB1*06:01	LMX-SAB
3766	78	+	+	+	+	+	+			39	+	+	+	+				DRB1*12:02, DQB1*06:01	LMX-SAB
3808	7	+					+			7	+	+	+						LMX-SAB
3966	19	+	+	+	+	+	+	+	DQ4,DQA1*05,DQA1*06	13	+	+	+	+	+	+	+	DR9,DQA1*01	LMX-SAB
4322		+	+	+	+	+	+	+	DQA1*05,DQA1*06		+	+	+	+	+	+	+	DR52,DQA1*01	LMX-SAB
5219	7	+	+				+		DQ3	10	+	+	+	+				DR2,DR13	LMX-SAB
5462		+	+	+	+						+	+	+	+	+	+		DRB1*12:02, DQB1*06:01	LMX-SAB
6649	22	+	+	+	+	+	+			12	+	+	+	+	+	+			LMX-SAB
8082		+	+	+	+	+	+	+	DR15,DQA1*05,DQA1*06		+	+	+	+	+	+	+	DR9	LMX-SAB
8086	200	+		+			+			200	+	+	+	+	+	+			LMX-SAB
8090		+	+	+	+	+	+	+	DQA1*03:03		+	+	+	+	+	+		DRB1*12:02, DQB1*06:01	LMX-SAB
8098		+	+	+	+	+	+				+	+	+	+		+		DR13	LMX-SAB
8100		+	+	+	+	+	+		DQ4		+	+	+	+	+	+	+	DR9	LMX-SAB
8103		+	+	+			+	+	DQ3		+	+	+	+		+		DR13	LMX-SAB
8112		+			+			+			+	+	+		+	+			LMX-SAB
8125		+	+	+	+	+	+				+	+	+	+					LMX-SAB
8128		+	+	+	+		+				+	+	+	+	+	+	+		LMX-SAB