

## CELL EXCHANGE #421 MARCH 24, 2021

Cells 1681 - 1684

The results for Cell Exchange #421 are summarized in Table 7 - 10. Molecular typing results for individual laboratories are listed in Tables 11 – 18 for each sample. Twelve labs submitted low and/or high resolution class II results for this study. We would like to thank each of them for sharing their results

and encourage other labs to do so as well so that the class II assignments can be graded. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

**Cell 1681.** The reported HLA type for this cell from a Black donor is A\*02:05-A\*68:01-B\*27:03-B\*53:01-C\*02:02-C\*04:01-DRB1\*03:01-DRB1\*08:04-DRB3\*02:02-DQA1\*04:01-DQA1\*05:01-DQB1\*02:01-DQB1\*03:19-DPA1\*01:03-DPA1\*02:01-DPB1\*17:01. Good agreement ( $\geq 90\%$ ) was achieved across each loci for all allele assignments.

Likely associations present in this cell are A\*02:05-B\*27:03-C\*02:02 and A\*68:01-B\*53:01-C\*04:01, observed in African American populations, with respective HF = 0.00042 and 0.00049.

**Cell 1682.** The reported HLA type for this cell from a donor of mixed Caucasian and Asian descent is A\*29:02-A\*33:03-B\*44:03-C\*07:06-C\*16:01-DRB1\*07:01-DRB1\*15:01-DRB4\*01:01-DRB5\*01:01-DQA1\*01:02, DQA1\*02:01, DQB1\*02:02-DQB1\*06:02-DPA1\*01:03-DPA1\*02:01-DPB1\*02:01-DPB1\*03:01.

Good agreement ( $\geq 90\%$ ) was achieved for all allele assignments, except C\*07. The subtype for C\*07 remained unresolved with 10 labs assigning C\*07:06, 2 labs assigning C\*07:01, and 1 lab assigning C\*07:01:01G. C\*07:06 differs from C\*07:01 in exon 6 by a single amino acid substitution at codon 324 (GCT → GTT), resulting in an amino acid change from alanine to valine in C\*07:06.

One likely association present in this cell is A\*29:02-B\*44:03-DRB1\*15:01, observed in Caucasians, with HF = 0.00147. The other likely association present is A\*33:03-B\*44:03-DRB1\*07:01, commonly observed in Asians, with HF = 0.01499.

**Cell 1683.** The reported HLA type for this cell from a donor of mixed descent (Caucasian/Asian/Hispanic) is A\*29:02-A\*34:01-B\*40:02-B\*44:03-C\*15:02-C\*16:01-DRB1\*07:01-DRB1\*15:02-DRB4\*01:01-DRB5\*01:01-DQA1\*01:02-DQA1\*02:01-DQB1\*02:02-DQB1\*05:02-DPA1\*02:01-DPA1\*02:02-DPB1\*01:01-DPB1\*11:01. For class I loci,  $\geq 90\%$  consensus was achieved among labs for each allele assignment. For class II, consensus for allele assignment was  $\geq 88\%$  for each allele assignment.

One likely association present in this cell is A\*29:02-B\*44:03-C\*16:01. It is the most common association found in Hispanics, with HF = 0.02457. The other likely association present is A\*34:01-B\*40:02-C\*15:02, observed exclusively in Asian populations, with HF = 0.00300.

**Cell 1684.** The reported HLA type for this cell from a Black donor is A\*02:01-A\*30:01-B\*15:03-B\*18:01-C\*02:10-C\*16:01-DRB1\*07:01-DRB1\*15:03-DRB4\*01:01-DRB5\*01:01-DQA1\*01:02-DQA1\*02:01-DQB1\*02:02-DQB1\*06:02-DPA1\*01:03-DPA1\*01-DPB1\*04:01-DPB1\*18:01. For all allele assignments, except DPA1,  $\geq 88\%$  consensus was achieved by labs reporting at high resolution. Four labs submitted DPA1 high resolution results. For the first DPA1 type, all 4 labs reported DPA1\*01:03. The second DPA1 type remained unresolved, with 2 labs reporting DPA1\*01:33, 1 lab reporting DPA1\*01:03, and 1 lab reporting DPA1\*01:03:01G.

The likely associations present in this cell are A\*02:01-B\*18:01-DRB1\*07:01 and A\*30:01-B\*15:03-DRB1\*15:03, observed in African American populations, with respective HF = 0.00057 and 0.00024.

**NEXT MAILING DATE: MAY 5, 2021**

*Arlene Locke, David Gjertson, Qiheng Zhang, and Elaine F. Reed*

**Table 7: Summary of the 421<sup>st</sup> Cell Exchange - DNA Typing**

**Cell 1681**

<b>DNA Typing - class I</b>		<b>12 labs High; 15 labs low- A</b>		<b>12 labs High; 14 labs low- B</b>		<b>13 labs High; 14 labs low- C</b>							
	<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>						
A*02:05:01	17(2)	B*27:03	100(12)	C*02:02:02	15(2)								
A*02:05	83(10)	B*27	100(14)	C*02:02	85(11)								
A*02	100(15)			C*02	100(14)								
<b>DNA Typing - class II</b>		<b>11 labs High; 10 labs low-DRB1</b>		<b>7 labs High; 6 labs low-DRB3/4/5</b>		<b>8 labs High; 9 labs Low-DQA1</b>		<b>10 labs High; 9 labs Low-DQB1</b>		<b>6 labs High; 6 labs Low-DPA1</b>		<b>9 labs High; 7 labs Low-DPB1</b>	
	<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>
DRB1*03:01:01	18(2)	DRB3*02:02:01	29(2)	DQA1*04:01:02:02	12(1)	DQB1*02:01:01	10(1)	DPA1*01:03:01	33(2)	DPB1*17:01:01	22(2)		
DRB1*03:01:01G	9 (1)	DRB3*02:02:01G	14(1)	DQA1*04:01:02	12(1)	DQB1*02:01:01G	10(1)	DPA1*01:03:01G	17(1)	DPB1*17:01	78(7)		
DRB1*03:01P	9 (1)	DRB3*02:02	57(4)	DQA1*04:01	75(6)	DQB1*02:01	80(8)	DPA1*01:03	50(3)	DPB1*17	100(7)		
DRB1*03:01	64(7)	DRB3*02	83(5)	DQA1*04	100(9)	DQB1*02	100(9)	DPA1*01	100(6)				
DRB1*03	100(10)	DRB3*PRESENT	17(1)										
<b>DNA Typing - class II</b>		<b>11 labs High; 10 labs low-DRB1</b>		<b>8 labs High; 9 labs Low-DQA1</b>		<b>10 labs High; 9 labs Low-DQB1</b>		<b>6 labs High; 6 labs Low-DPA1</b>		<b>9 labs High; 7 labs Low-DPB1</b>			
	<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		<b>%(n)</b>		
DRB1*08:04:01	18(2)	DQA1*05:01:01	25(2)	DQB1*03:19:01:01	10(1)	DPA1*02:01:01:08	16(1)	DPB1*17:01:01	22(2)				
DRB1*08:04:01G	9 (1)	DQA1*05:01	75(6)	DQB1*03:01:01G	10(1)	DPA1*02:01:01	16(1)	DPB1*17:01	78(7)				
DRB1*08:04	73(8)	DQA1*05	100(9)	DQB1*03:19	80(8)	DPA1*02:01:01G	16(1)	DPB1*17	100(7)				
DRB1*08	100(10)			DQB1*03	100(9)	DPA1*02:01	50(3)						
						DPA1*02	100(6)						

**Table 8: Summary of the 421<sup>st</sup> Cell Exchange - DNA Typing**

**Cell 1682**

DNA Typing - class I		<b>12 labs High; 15 labs low- A</b>		<b>13 labs High; 15 labs low- B</b>		<b>13 labs High; 14 labs low- C</b>												
			%(n)		%(n)		%(n)											
	A*29:02:01:01	8	(1)	B*44:03:01:04	8	(1)	C*07:06:01:01	8	(1)									
	A*29:02:01	8	(1)	B*44:03:01	8	(1)	C*07:01:01:01G	8	(1)									
	A*29:02	83	(10)	B*44:03	84	(11)	C*07:01	15	(2)									
	A*29	100	(15)	B*44	100	(15)	C*07:06	69	(9)									
							C*07	100	(14)									
DNA Typing - class II		<b>10 labs High; 10 labs low-DRB1</b>		<b>7 labs High; 5 labs low-DRB3/4/5</b>		<b>8 labs High; 9 labs Low-DQA1</b>		<b>10 labs High; 9 labs Low-DQB1</b>		<b>6 labs High; 5 labs Low-DPA1</b>		<b>9 labs High; 7 labs Low-DPB1</b>						
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)					
	DRB1*07:01:01	20	(2)	DRB4*01:01:01	29	(2)	DQA1*01:02:01	25	(2)	DQB1*02:02:01	10	(1)	DPA1*01:03:01	33	(2)	DPB1*02:01:02	22	(2)
	DRB1*07:01:01G	10	(1)	DRB4*01:01	71	(5)	DQA1*01:02	75	(6)	DQB1*02:01:01G	10	(1)	DPA1*01:03:01G	17	(1)	DPB1*02:01	78	(7)
	DRB1*07:01	70	(7)	DRB4*01	80	(4)	DQA1*01	100	(9)	DQB1*02:02	80	(8)	DPA1*01:03	50	(3)	DPB1*02	100	(7)
	DRB1*07	100	(10)	DRB4*PRESENT	20	(1)				DQB1*02	100	(9)	DPA1*01	100	(5)			
DNA Typing - class II		<b>10 labs High; 10 labs low-DRB1</b>		<b>7 labs High; 5 labs low-DRB3/4/5</b>		<b>8 labs High; 8 labs Low-DQA1</b>		<b>9 labs High; 9 labs Low-DQB1</b>		<b>6 labs High; 5 labs Low-DPA1</b>		<b>9 labs High; 7 labs Low-DPB1</b>						
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)					
	DRB1*15:01:01	20	(2)	DRB5*01:01:01	29	(2)	DQA1*02:01:01	25	(2)	DQB1*06:02:01	22	(2)	DPA1*02:01:01	33	(2)	DPB1*03:01:01	22	(2)
	DRB1*15:01:01G	10	(1)	DRB5*01:01:01G	14	(1)	DQA1*02:01	75	(6)	DQB1*06:02:01G	11	(1)	DPA1*02:01	67	(4)	DPB1*03:01:01G	11	(1)
	DRB1*15:01	70	(7)	DRB5*01:01	57	(4)	DQA1*02	88	(7)	DQB1*06:02	67	(6)	DPA1*02	100	(5)	DPB1*03:01	67	(6)
	DRB1*15	100	(10)	DRB5*PRESENT	80	(4)	DQA1*01	12	(1)	DQB1*06	100	(9)				DPB1*03	100	(7)
				DRB5*01	20	(1)												

**Table 9: Summary of the 421<sup>st</sup> Cell Exchange - DNA Typing**

**Cell 1683**

<b>DNA Typing - class I</b>	<b>10 labs High; 13 labs low- A</b>	%(n)	<b>11 labs High; 13 labs low- B</b>	%(n)	<b>10 labs High; 11 labs low- C</b>	%(n)
	A*29:02:01:01	10(1)	B*40:02:01:01	9 (1)	C*15:02:01:01	10(1)
	A*29:02	90(9)	B*40:02:01G	9 (1)	C*15:02	90(9)
	A*29	100(13)	B*40:02	82(9)	C*15	100(11)
			B*40	100(13)		

<b>DNA Typing - class II</b>	<b>8 labs High; 8 labs low-DRB1</b>	%(n)	<b>5 labs High; 4 labs low-DRB3/4/5</b>	%(n)	<b>6 labs High; 7 labs Low-DQA1</b>	%(n)	<b>8 labs High; 7 labs Low-DQB1</b>	%(n)	<b>4 labs High; 4 labs Low-DPA1</b>	%(n)	<b>7 labs High; 6 labs Low-DPB1</b>	%(n)
	DRB1*07:01:01	12(1)	DRB4*01:01:01:01	20(1)	DQA1*01:02:01	17(1)	DQB1*02:02:01	12(1)	DPA1*02:01:01	25(1)	DPB1*01:01:01	14(1)
	DRB1*07:01:01G	12(1)	DRB4*01:01:01	20(1)	DQA1*01:02	83(5)	DQB1*02:01:01G	12(1)	DPA1*02:01:01G	25(1)	DPB1*01:01:01G	14(1)
	DRB1*07:01	75(6)	DRB4*01:01	60(3)	DQA1*01	100(7)	DQB1*02:02	75(6)	DPA1*02:01	50(2)	DPB1*01:01P	14(1)
	DRB1*07	100(8)	DRB4*01	100(4)			DQB1*02	100(7)	DPA1*02	100(4)	DPB1*01:01	57(4)
											DPB1*01	100(6)

**Table 10: Summary of the 421<sup>st</sup> Cell Exchange - DNA Typing**

**Cell 1684**

DNA Typing - class I	<u>10 labs High; 13 labs low- A</u>		<u>11 labs High; 13 labs low- B</u>		<u>11 labs High; 11 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*02:01:01:01	10(1)	B*15:03:01:02	9 (1)	C*02:10:01:01	9 (1)
	A*02:01	90(9)	B*15:03:01G	9 (1)	C*02:10	91(10)
	A*02	100(13)	B*15:03	82(9)	C*02	100(11)
			B*15	92(12)		
			B*78	8 (1)		
DNA Typing - class I	<u>11 labs High; 13 labs low- A</u>		<u>10 labs High; 13 labs low- B</u>		<u>11 labs High; 11 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*30:01:01:01	9 (1)	B*18:01:01:51	10(1)	C*16:01:01:01	9 (1)
	A*30:01	91(10)	B*18:01P	10(1)	C*16:01	91(10)
	A*30	100(13)	B*18:01	80(8)	C*16	100(11)
			B*18	100(13)		

DNA Typing - class II	<u>6 labs High; 8 labs low-DRB1</u>		<u>5 labs High; 3 labs low-DRB3/4/5</u>		<u>6 labs High; 7 labs Low-DQA1</u>		<u>8 labs High; 7 labs Low-DQB1</u>		<u>4 labs High; 3 labs Low-DPA1</u>		<u>7 labs High; 5 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*07:01:01	17(1)	DRB4*01:01:01	20(1)	DQA1*01:02:01	17(1)	DQB1*02:02:01	12(1)	DPA1*01:03:01	25(1)	DPB1*04:01:01	14(1)
	DRB1*07:01:01G	17(1)	DRB4*01:01	80(4)	DQA1*01:02	83(5)	DQB1*02:01:01G	12(1)	DPA1*01:03:01G	25(1)	DPB1*04:01	86(6)
	DRB1*07:01	67(4)	DRB4*01	100(3)	DQA1*01	100(7)	DQB1*02:02	75(6)	DPA1*01:03	50(2)	DPB1*04(DP401)	60(3)
	DRB1*07	100(8)					DQB1*02	100(7)	DPA1*01	100(3)	DPB1*04	40(2)
DNA Typing - class II	<u>6 labs High; 8 labs low-DRB1</u>		<u>5 labs High; 3 labs low-DRB3/4/5</u>		<u>6 labs High; 7 labs Low-DQA1</u>		<u>7 labs High; 7 labs Low-DQB1</u>		<u>4 labs High-DPA1</u>		<u>7 labs High; 5 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*15:03:01	16(1)	DRB5*01:01:01	20(1)	DQA1*02:01:01	17(1)	DQB1*06:02:01	14(1)	DPA1*01:03:01G	25(1)	DPB1*18:01:01	14(1)
	DRB1*15:03:01G	16(1)	DRB5*01:01:01G	20(1)	DQA1*02:01	83(5)	DQB1*06:02:01G	14(1)	DPA1*01:33	50(2)	DPB1*18:01	86(6)
	DRB1*15:03P	16(1)	DRB5*01:01	60(3)	DQA1*02	86(6)	DQB1*06:02	71(5)	DPA1*01:03	25(1)	DPB1*18	100(5)
	DRB1*15:03	50(3)	DRB5*01	100(3)	DQA1*01	14(1)	DQB1*06	100(7)				
	DRB1*15	100(8)										

**Table 11. Individual laboratory results for Cell #1681 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	SSP SSO	
725	*02	*68	*27	*53	*02	*04							SSO	
731	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	SSP SSO SBT RT-PCR	
747	*02	*68	*27	*53	*02	*04	*02:05:01	*68:01:01	*27:03	*53:01:01	*02:02:02	*04:01:01	SSP SSO NGS	
762							*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	NGS	
771	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	SSP SSO NGS	
774	*02	*68	*27	*53	*02	*04							SSP SSO	
3545	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	SSO SBT	
3808	*02	*68	*27	*53	*02	*04		*68:01		*53:01	*02:02	*04:01:01G		
4079	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	SSP NGS	
4251							*02:05	*68:01	*27:03	*53:01	*02:02	*04:01	NGS	
5133							*02:05:01:01	*68:01:01:02	*27:03	*53:01:01:01	*02:02:02	*04:01:01	NGS	
5462	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01P	*02:02	*04:01	SSO	B*53:54
6649	*02	*68	*27	*53									SSO	
8001							*02:05	*68:01	*27:03	*53:01	*02:02	*04:01		
8043	*02	*68	*27	*53	*02	*04	*02:05	*68:01	*27:03	*53:01	*02:02	*04:01:01G	SSP SSO	
8058	*02	*68		*53	*02								OTHER	
8103	*02	*68	*27	*53	*02	*04							SSO	
8119	*02	*68	*27	*53	*02	*04							SSP RT-PCR	

**Table 12a: Individual laboratory results for Cell #1681 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*03	*08	3*02		*04	*05	*02	*03	*01	*02	*17	*17	SSP SSO SBT RT-PCR	
747	*03	*08	3*PRESENT		*04	*05	*02	*03	*01	*02	*17	*17	SSP SSO NGS	
771	*03	*08			*04	*05	*02	*03			*17		SSP SSO NGS	
774	*03	*08	3*02		*04	*05	*02	*03			*17		SSP SSO	
3545	*03	*08											SSO SBT	
3808	*03	*08	NT	NT	*04	*05	*02	*03	*01	*02	*17	*17		
4079	*03	*08	3*02	3*02	*04	*05	*02	*03	*01	*02	*17		SSP NGS	
5462	*03	*08	3*02	NP	*04	*05	*02	*03	*01	*02	NT		SSO	
8103	*03	*08			*04	*05	*02	*03	*01	*02			SSO	
8119	*03	*08	3*02		*04	*05	*02	*03			*17		SSP RT-PCR	

**Table 12b: Individual laboratory results for Cell #1681 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*03:01	*08:04					*02:01	*03:19					SSP SSO SBT RT-PCR	
747	*03:01:01	*08:04:01	3*02:02:01		*04:01:02:02	*05:01:01	*02:01:01	*03:19	*01:03:01	*02:01:01	*17:01:01	*17:01:01	SSP SSO NGS	DQB1*02:163N
771	*03:01	*08:04					*02:01	*03:19			*17:01		SSP SSO NGS	
774	*03:01	*08:04	3*02:02		*04:01	*05:01	*02:01	*03:19			*17:01		SSP SSO	DRB1*03:58 DRB1*03:61 DRB1*03:62 DRB1*03:66 DRB1*03:68N DRB1*03:72 DRB1*03:73 DRB1*03:83+ DRB1*08:28 DRB1*03:06
3545	*03:01	*08:04											SSO SBT	
3808	*03:01	*08:04			*04:01	*05:01	*02:01	*03:01:01G	*01:03	*02:01	*17:01	*17:01		
4079	*03:01	*08:04	3*02:02	3*02:02	*04:01	*05:01	*02:01	*03:19	*01:03	*02:01	*17:01		SSP NGS	
4251	*03:01:01G	*08:04:01G	3*02:02:01G		*04:01	*05:01	*02:01:01G	*03:19	*01:03:01G	*02:01:01G	*17:01	*17:01	NGS	
5133	*03:01:01	*08:04:01	3*02:02:01		*04:01:02	*05:01:01	*02:01:01	*03:19:01:01	*01:03:01	*02:01:01:08	*17:01:01		NGS	
5462	*03:01P	*08:04	3*02:02	NP	*04:01	*05:01	*02:01	*03:19	*01:03	*02:01	*17:01		SSO	DRB1*03:147 B*53:54
8001	*03:01	*08:04	3*02:02		*04:01	*05:01	*02:01	*03:19			*17:01			
8119	NT												SSP RT-PCR	DQB1*03:01 DQB1*03:19 DRB1*03:01

**Table 13. Individual laboratory results for Cell #1682 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:06	*16:01	SSP SSO	
725	*29	*33	*44		*07	*16							SSO	
731	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:01	*16:01	SSP SSO SBT RT-PCR	
747	*29	*33	*44	*44	*07	*16	*29:02:01	*33:03:01	*44:03:01	*44:03:02	*07:06	*16:01:01	SSP SSO NGS	
762							*29:02	*33:03	*44:03		*07:06	*16:01	NGS	
771	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:06	*16:01	SSP SSO NGS	
774	*29	*33	*44		*07	*16							SSP SSO	
3545	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:01	*16:01	SSO SBT	
3808	*29	*33	*44	*44	*07	*16			*44:03		*07:01:01G	*16:01		
4079	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:06	*16:01	SSP NGS	
4251							*29:02	*33:03	*44:03	*44:03	*07:06	*16:01	NGS	
5133							*29:02:01:01	*33:03:01:01	*44:03:01:04	*44:03:02:01	*07:06:01:01	*16:01:01:01	NGS	
5462	*29	*33	*44	*44	*07	*16	*29:02	*33:03	*44:03	*44:03	*07:06	*16:01	SSO	
6649	*29	*33	*44										SSO	
8001							*29:02	*33:03	*44:03		*07:06	*16:01		
8043	*29	*33	*44		*07	*16	*29:02	*33:03	*44:03		*07:06	*16:01	SSP SSO	
8058	*29		*44	45	*07								OTHER	
8103	*29	*33	*44	*44	*07	*16							SSO	
8119	*29	*33	*44		*07	*16							SSP RT-PCR	



**Table 14a: Individual laboratory results for Cell #1682 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07	*15			*01	*02	*02	*06					SSP SSO SBT RT-PCR	
747	*07	*15	4*PRESENT	5*PRESENT	*01	*02	*02	*06	*01	*02	*02	*03	SSP SSO NGS	
771	*07	*15			*01		*02	*06			*02	*03	SSP SSO NGS	
774	*07	*15	4*01	5*01	*01	*02	*02	*06			*02(DP201)	*03	SSP SSO	
3545	*07	*15											SSO SBT	
3808	*07	*15	NT	NT	*01	*02	*02	*06	*01	*02	*02(DP201)	*03		
4079	*07	*15	4*01	5*01	*01	*02	*02	*06	*01	*02	*02(DP201)	*03	SSP NGS	
5462	*07	*15	4*01	5*01	*01	*02	*02	*06	*01	*02	NT	NT	SSO	
8103	*07	*15			*01	*01	*02	*06	*01	*02	*02	*03	SSO	
8119	*07	*15	4*01	5*01	*01	*02	*02	*06			*02(DP201)	*03	SSP RT-PCR	

**Table 14b: Individual laboratory results for Cell #1682 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07:01	*15:01					*02:02	*06:02					SSP SSO SBT RT-PCR	
747	*07:01:01	*15:01:01	4*01:01:01	5*01:01:01	*01:02:01	*02:01:01	*02:02	*06:02:01	*01:03:01	*02:01:01	*02:01:02	*03:01:01	SSP SSO NGS	DQB1*02:156 DQB1*02:163N
771	*07:01	*15:01					*02:02	*06:02			*02:01	*03:01	SSP SSO NGS	
774	*07:01	*15:01	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02			*02:01	*03:01	SSP SSO	DRB5*01:16 DRB1*07:31 DRB1*07:33 DRB1*15:87
3545	*07:01	*15:01											SSO SBT	
3808					*01:02	*02:01	*02:02		*01:03	*02:01	*02:01	*03:01:01G		
4079	*07:01	*15:01	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02	*01:03	*02:01	*02:01	*03:01	SSP NGS	
4251	*07:01:01G	*15:01:01G	4*01:01	5*01:01:01G	*01:02	*02:01	*02:01:01G	*06:02:01G	*01:03:01G	*02:01	*02:01	*03:01	NGS	
5133	*07:01:01	*15:01:01	4*01:01:01	5*01:01:01	*01:02:01	*02:01:01	*02:02:01	*06:02:01	*01:03:01	*02:01:01	*02:01:02	*03:01:01	NGS	DPB1*352:01 DPB1*124:01
5462	*07:01	*15:01	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02	*01:03	*02:01	*02:01	*03:01	SSO	
8001	*07:01	*15:01	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02			*02:01	*03:01		
8119	NT												SSP RT-PCR	

**Table 15. Individual laboratory results for Cell #1683 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSP SSO	
725	*29	*34	*40	*44	*15	*16							SSO	
731	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
762							*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	NGS	
771	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSP SSO NGS	
774	*29	*34	*40	*44	*15	*16							SSP SSO	
3545	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSO SBT	
3808	*29	*34	*40	*44	*15	*16			*40:02:01G	*44:03				
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	NGS	
5133							*29:02:01:01	*34:01:01:01	*40:02:01:01	*44:03:01	*15:02:01:01	*16:01:01:01	NGS	
5462	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSO	
6649	*29	*34	*40	*44									SSO	
8001							*29:02	*34:01	*40:02	*44:03	*15:02	*16:01		
8043	*29	*34	*40	*44	*15	*16	*29:02	*34:01	*40:02	*44:03	*15:02	*16:01	SSP SSO	
8058	*29		*40	*44									OTHER	
8103	*29	*34	*40	*44	*15	*16							SSO	
8119	*29	*34	*40	*44	*15	*16							SSP RT-PCR	B*40:02

**Table 16a: Individual laboratory results for Cell #1683 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07	*15	4*01	5*01	*01	*02	*02	*05	*02	*02	*01	*11	SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
771	*07	*15			*01	*02	*02	*05			*01	*11	SSP SSO NGS	
774	*07	*15	4*01	5*01	*01	*02	*02	*05			*01	*11	SSP SSO	
3545	*07	*15											SSO SBT	
3808	*07	*15	NT	NT	*01	*02	*02	*05	*02	*02	*01	*11		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5462	*07	*15	4*01	5*01	*01	*02	*02	*05	*02	*02	NT	NT	SSO	
8103	*07	*15			*01	*01	*02	*05	*02	*02	*01	*11	SSO	
8119	*07	*15	4*01	5*01	*01	*02	*02	*05			*01	*11	SSP RT-PCR	

**Table 16b: Individual laboratory results for Cell #1683 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07:01	*15:02					*02:02	*05:02					SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
771	*07:01	*15:02					*02:02	*05:02			*01:01	*11:01	SSP SSO NGS	
774	*07:01	*15:02	4*01:01:01:01	5*01:01	*01:02	*02:01	*02:02	*05:02			*01:01	*11:01	SSP SSO	DRB1*07:31 DRB1*07:33 DRB1*07:35 DRB1*15:60 DRB1*15:101
3545	*07:01	*15:02											SSO SBT	
3808		*15:02:01G			*01:02	*02:01	*02:02	*05:02	*02:01:01G	*02:02:02G	*01:01	*11:01		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251	*07:01:01G	*15:02:01G	4*01:01	5*01:01:01G	*01:02	*02:01	*02:01:01G	*05:02:01G	*02:01	*02:02	*01:01:01G	*11:01:01G	NGS	
5133	*07:01:01	*15:02:01	4*01:01:01	5*01:01:01	*01:02:01	*02:01:01	*02:02:01	*05:02:01	*02:01:01	*02:02:02	*01:01:01	*11:01:01	NGS	DPB1*654:01 DPB1*417:01
5462	*07:01	*15:02P	4*01:01	5*01:01	*01:02	*02:01	*02:02	*05:02	*02:01	*02:02	*01:01P	*11:01P	SSO	DRB1*15:140 DPB1*417:01 DPB1*654:01 DRB1*15:149
8001	*07:01	*15:02	4*01:01	5*01:01	*01:02	*02:01	*02:02	*05:02			*01:01	*11:01		
8119	NT												SSP RT-PCR	

**Table 17. Individual laboratory results for Cell #1684 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	SSP SSO	C*02:02
725	*02	*30	*15	*18	*02	*16							SSO	
731	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
771	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	SSP SSO NGS	
762							*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	NGS	
774	*02	*30	*15	*18	*02	*16							SSP SSO	
3545	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	SSO SBT	
3808	*02	*30	*15	*18	*02	*16		*30:01	*15:03:01G		*02:10	*16:01		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	NGS	
5133							*02:01:01:01	*30:01:01:01	*15:03:01:02	*18:01:01:51	*02:10:01:01	*16:01:01:01	NGS	
5462	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01P	*02:10	*16:01	SSO	
6649	*02	*30	*15	*18									SSO	
8001							*02:01	*30:01	*15:03	*18:01	*02:10	*16:01		
8043	*02	*30	*15	*18	*02	*16	*02:01	*30:01	*15:03	*18:01	*02:10	*16:01	SSP SSO	
8058	*02	*30	*78	*18									OTHER	
8103	*02	*30	*15	*18	*02	*16							SSO	
8119	*02	*30	*15	*18	*02	*16							SSP RT-PCR	B*15:03

**Table 18a: Individual laboratory results for Cell #1684 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07	*15			*01	*02	*02	*06					SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
771	*07	*15			*01	*02	*02	*06			*04	*18	SSP SSO NGS	
774	*07	*15	4*01	5*01	*01	*02	*02	*06			*04(DP401)	*18	SSP SSO	
3545	*07	*15											SSO SBT	
3808	*07	*15	NT	NT	*01	*02	*02	*06	*01	*01	*04(DP401)	*18		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5462	*07	*15	4*01	5*01	*01	*02	*02	*06	*01	*01	NT	NT	SSO	
8103	*07	*15			*01	*01	*02	*06	*01	*01	*04	*18	SSO	
8119	*07	*15	4*01	5*01	*01	*02	*02	*06			*04(DP401)	*18	SSP RT-PCR	

**Table 18b: Individual laboratory results for Cell #1684 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
731	*07:01	*15:03					*02:02	*06:02					SSP SSO SBT RT-PCR	
747	NT												SSP SSO NGS	
771	*07:01	*15:03					*02:02	*06:02			*04:01	*18:01	SSP SSO NGS	
774	*07:01	*15:03	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02			*04:01	*18:01	SSP SSO	DRB1*07:31 DRB5*01:16
3545	*07:01	*15:03											SSO SBT	
3808		*15:03			*01:02	*02:01	*02:02		*01:03	*01:03	*04:01	*18:01		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251	*07:01:01G	*15:03:01G	4*01:01	5*01:01:01G	*01:02	*02:01	*02:01:01G	*06:02:01G	*01:03:01G	*01:03:01G	*04:01	*18:01	NGS	
5133	*07:01:01	*15:03:01	4*01:01:01	5*01:01:01	*01:02:01	*02:01:01	*02:02:01	*06:02:01	*01:03:01	*01:33	*04:01:01	*18:01:01	NGS	
5462	*07:01	*15:03P	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02	*01:03	*01:33	*04:01	*18:01	SSO	DRB1*15:185
8001	*07:01	*15:03	4*01:01	5*01:01	*01:02	*02:01	*02:02	*06:02			*04:01	*18:01		
8119	NT												SSP RT-PCR	