

B-cell Line Exchange #275

B-cell Lines 549-550

MAY 9, 2018

The results for B-cell Line Exchange #275 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8.

We would like to acknowledge and thank the labs performing NGS typing

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

Ter-549. The consensus type for this sample from a donor of unknown ethnicity is DRB1*03:01-DRB1*11:01-DRB3*02:02-DQA1*01:02-DQA1*01:05-DQB1*05:01-DQB1*06:02-DPA1*02:01-DPA1*03:01-DPB1*17:01-DPB1*40:01/A*01:01-A*74:01-B*15:03-B*82:01-C*02:10-C*03:02. One likely association present in this cell is DRB1*11:01-DRB3*02:02-DQA1*01:02-DQB1*06:02, observed in previous exchange cells, Ter 458 (same as Ter 199) and Ter 241, both from Black donors. The other likely association present is DRB1*03:01-DRB3*02:02-DQA1*01:05-DQB1*05:01.

This cell was previously studied in the exchange as extract 540 (2012) and extract 400 (2007). In this present retyping, DRB1*03:01 and DRB1*11:01 were each assigned in complete consensus, with 9 labs assigning DRB1*03:01:01 and 10 labs assigning DRB1*11:01:02. The DQ types were reported as DQA1*01:02, DQA1*01:05, DQB1*05:01, and DQB1*06:02. Each were assigned by 100% of labs reporting at high resolution, with 6 labs assigning DQA1*01:02:01 and DQA1*01:05:01, 7 labs assigning DQB1*05:01:01, and 8 lab assigning DQB1*06:02:01. DPA1*02:01 (100%), DPA1*03:01 (89%). DPB1*17:01 (100%) and DPB1*40:01 (100%) were the reported DP types.

Hurley and Hartzman remarked on the presence of a possible new DRB3 allele, noting the sample is DRB3 heterozygous as "one of two alleles is novel (showing a 1nt MM at Ex4 nt 654 where T->W)." In addition, Askar noted a new DPA1 allele may be present, observing the "new DPA1 allele has a T->C substitution resulting in an M->T amino acid change in codon -31.2 (start codon) in exon 1, based on closest reference: DPA1*03:01:01."

The class I types in this sample were each assigned in complete consensus as A*01:01, A*74:01, B*15:03, B*82:01, C*02:10, and C*03:02. A*01:01:01, B*15:03:01, C*02:10:01, and C*03:02:02 were each assigned by

7 labs. The A*01:01-B*82:01-DRB1*11:01 association likely present in this cell is observed exclusively in Blacks, with HF=0.00042.

Ter-550. The consensus type for this sample from a Black donor is DRB1*04:05-DRB1*14:02-DRB3*01:01-DRB4*01:03-DQA1*03:03-DQA1*05:03-DQB1*03:01-DQB1*03:02-DPA1*01:03-DPA1*02:01-DPB1*01:01-DPB1*04:02/A*01:01-A*02:01-B*35:04-B*82:01-C*03:02-C*04:01. One likely association present in this cell is DRB1*14:02-DRB3*01:01-DQA1*05:03-DQB1*03:01, observed in Ter 280. The other association likely present is DRB1*04:05-DRB4*01:03-DQA1*03:03-DQB1*03:02, observed in numerous exchange cells, most recently, Ter 513 (same as Ter 414 and Ter 323) and Ter 522 (same as Ter 467, Ter 384, and Ter 334).

This cell is RB22, a reference cell for B*35:04:01, B*82:01:01:01, and MI-CA*043. It was previously studied in the exchange as Ter 511 (2015), Ter 499 (2014), Ter 266 (2000), and Ter 239 (1999), as well as extracts 432 (2008), 301 (2004), and 87 (1999). In this present typing, DRB1*04:05 and DRB1*14:02 were each assigned in complete consensus, with 10 labs assigning DRB1*04:05:01 and DRB1*14:02:01. The DQ types were reported as DQA1*03:03 (96%), DQA1*05:03 (96%), DQB1*03:01 (100%) and DQB1*03:02 (100%). The DP types were reported in complete consensus as DPA1*01:03, DPA1*02:01, DPB1*01:01, DPB1*04:02. DPA1*01:03:01 and DPA1*02:01:01 were each reported by 5 labs. DPB1*01:01:01 was reported by 9 labs, and DPB1*04:02:01 was reported by 8 labs.

This sample's class I types were reported as A*01:01 (100%), A*02:01 (100%), B*35:04 (96%), B*82:01 (100%), C*03:02 (100%), and C*04:01 (100%). A*01:01:01, A*02:01:01, and B*35:04:01 were each reported by 7 labs, while C*03:02:02 and C*04:01:01 were reported by 6 labs.

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Table 1: Summary of the 275th B-cell Line Exchange

Ter-549

DNA Typing - class II		21 labs High; 27 labs Low-DRB3/4/5		23 labs High; 31 labs Low-DQA1		33 High Labs; 32 labs Low-DQB1		18 High Labs; 16 labs Low-DPA1		28 High Labs; 20 labs Low-DPB1		
DNA Typing - class II	34 labs High; 34 labs low-DRB1	%(n)										
	DRB1*03:01:01:01	3 (1)	DRB3*02:02:01	28(6)	DQA1*01:02:01:03	9 (2)	DQB1*05:01:01:02	6 (2)	DPA1*02:01:01:01	6 (1)	DPB1*17:01:01:01	3 (1)
	DRB1*03:01:01:02	3 (1)	DRB3*02:02P	5 (1)	DQA1*01:02:01	17(4)	DQB1*05:01:01:01	3 (1)	DPA1*02:01:01:03	6 (1)	DPB1*17:01:01	7 (2)
	DRB1*03:01:01	21(7)	DRB3*02:02	67(14)	DQA1*01:02	74(17)	DQB1*05:01:01	12(4)	DPA1*02:01:01	16(3)	DPB1*17:01:01G	3 (1)
	DRB1*03:01:01G	3 (1)	DRB3*02	81(22)	DQA1*01	100(31)	DQB1*05:01:01G	3 (1)	DPA1*02:01	72(13)	DPB1*17:01	86(24)
	DRB1*03:01	70(24)	DRB3*PRESENT	19(5)			DQB1*05:01	76(25)	DPA1*02	100(16)	DPB1*17	100(20)
	DRB1*03	100(34)					DQB1*05	100(32)				
DNA Typing - class I	33 labs High; 34 labs low-DRB1	%(n)										
	DRB1*11:01:02	30(10)			23 labs High -DQA1	%(n)			18 High Labs; 16 labs Low-DPA1	%(n)		
	DRB1*11:01	70(23)			DQA1*01:05:01	26(6)			DPA1*02:01:01:01	5 (1)		
	DRB1*11	100(34)			DQA1*01:05	74(17)			DPA1*03:01	89(16)		
									DPA1*NEW	5 (1)		
									DPA1*03	100(16)		
DNA Typing - class I	21 labs High; 27 labs low- A	%(n)										
	A*01:01:01	33(7)	24 labs High; 27 labs low- B	%(n)								
	A*01:01	67(14)	B*15:03:01:02	8 (2)	21 labs High; 27 labs low- C	%(n)						
	A*01	100(27)	B*15:03:01	21(5)	C*02:10:01:01	19(4)						
			B*15:03P	4 (1)	C*02:10:01	14(3)						
			B*15:03	67(16)	C*02:10	62(13)						
			B*15	100(27)	C*02:02	5 (1)						
					C*02	100(27)						
DNA Typing - class I	20 labs High; 28 labs low- A	%(n)										
	A*74:01:01	20(4)	23 labs High; 27 labs low- B	%(n)								
	A*74:01P	5 (1)	B*82:01	100(23)	22 labs High; 27 labs low- C	%(n)						
	A*74:01	75(15)	B*82	100(27)	C*03:02:02:01	18(4)						
	A*74	100(28)			C*03:02:02	14(3)						
					C*03:02	68(15)						
					C*03	100(27)						

Table 3a: Individual laboratory results for B-cell #549-Class II

Center	Low resolution												METHOD	Other Alleles
	DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPB1				
87	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40	RT-PCR	
206	*03	*11	3*02		*01	*01	*05	*06	*02	*03	*17	*40		
278	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40		
725	*03	*11	3*PRESENT		*01		*05	*06					SSP SSO SBT	
731	*03	*11			*01		*05	*06					SSP SSO SBT	
735	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40	SSP SSO SBT	
747	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40	SSP SSO NGS	
771	*03	*11			*01	*01	*05	*06					SSP SSO	
774	*03	*11	3*02		*01	*01	*05	*06	*02	*03	*17	*40	SSP SSO	
779	*03	*11	3*02		*01	*01	*05	*06	*02	*03	*17	*40	SSP SSO	
792	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40	SSO SBT	
793	*03	*11	3*02		*01	*01	*05	*06			*17	*40	SSP	
794	*03	*11	3*02	NP	*01		*05	*06	*02	*03	*17	*40	SSP SSO NGS	
2400	*03	*11	3*02		*01	*01	*05	*06			*17	*40	RT-PCR	
2847	*03	*11											SSP SSO SBT	
3224	*03	*11	3*02	NP	*01	*01	*05	*06	*02	*03	*17	*40	SSO	
3519	*03	*11			*01		*05	*06	*02	*03	*17	*40	SSO	
3632	*03	*11	3*02		*01	*01	*05	*06	*02	*03	*17	*40	SSP SSO	
3966													SSP	
4079	*03	*11	3*02		*01		*05	*06			*17	*40	SSP SSO	
4251	*03	*11	3*02	3*02	*01	*01	*05	*06	*02	*03	*17	*40	SSO NGS	
4492	*03	*11	3*PRESENT		*01		*05	*06	*02	*03	*17	*40	SSP SSO NGS	
5130	*03	*11	3*02		*01	*01	*05	*06			*17	*40	SSP SSO NGS	
5214	*03 (DR17)	*11	3*02(DR52)		*01		*05	*06	*02	*03	*17	*40	RT-PCR	
5219	*03	*11			*01	*01	*05	*06					SSO	
5451	*03	*11	3*02	3*02	*01	*01	*05	*06					SSP SSO SBT	
5462	*03	*11	3*02		*01	*01	*05	*06	*02	*03	*17	*40	SSO RT-PCR	
5488			3*02		*01			*06					SSP SSO SBT	
5642	*03	*11	3*PRESENT				*05	*06						
6649	*03	*11	3*PRESENT	3*PRESENT									SSP	
8001	*03	*11	3*02		*01	*01	*05						SSP SSO	
8029	*03	*11			*01	*01	*05	*06					SSO	
8043	*03	*11			*01	*01	*05	*06					SSP SSO	
8068	*03	*11	3*02	3*02	*01	*01	*05	*06					SSO	
8087	*03	*11			*01	*01	*05	*06					SSO	
9916	*03	*11	3*PRESENT				*05	*06					SSP	B*82

Table 3b: Individual laboratory results for B-cell #549-Class II

Center	High resolution												METHOD	Other Alleles
	DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPA1				
230	*03:01	*11:01					*05:01	*06:02			*17:01	*40:01	SSO SBT	
278	*03:01	*11:01	3*02:02	3*02:02	*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01		
731	*03:01:01G	*11:01:02					*05:01:01G	*06:02:01G					SSP SSO SBT	
735	*03:01	*11:01	3*02:02P	3*02:02P	*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP SSO SBT	
747	*03:01:01:02	*11:01:02	3*02:02:01	3*02:02:01	*01:02:01:03	*01:05:01	*05:01:01:02	*06:02:01	*02:01:01	*03:01	*17:01	*40:01	SSP SSO NGS	
762	*03:01:01	*11:01:02	3*02:02:01		*01:02:01:03	*01:05:01	*05:01:01:02	*06:02:01	*02:01:01	*03:01	*17:01	*40:01	NGS	
771	*03:01	*11:01					*05:01	*06:02					SSP SSO	
														DRB3*02:33 DRB1*11:155 DRB3*02:28 DQB1*05:48 DQB1*05:55 DQB1*05:61 DQB1*06:159 DRB1*03:83 DRB1*03:100 DRB1*03:104 DRB1*03:107 DRB1*03:112 DRB3*02:29N DQB1*05:68 DQB1*05:74 DQB1*05:76
774	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP SSO	
779	*03:01				*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP SSO	
792	*03:01	*11:01					*05:01	*06:02			*17:01	*40:01	SSO SBT	DQB1*05:51 DQB1*06:20 B*15:103 B*15:220
793					*01:02	*01:05					*17:01	*40:01	SSP	
794	*03:01:01	*11:01:02	3*02:02:01		*01:02	*01:05	*05:01:01	*06:02:01	*02:01	*03:01	*17:01:01	*40:01	SSP SSO NGS RT-PCR	
2344	*03:01:01:01	*11:01:02	3*02:02:01	3*02:02:01	*01:02:01	*01:05:01	*05:01:01:01	*06:02:01	*02:01:01:01	*02:01:01:01	*17:01	*40:01	NGS	DPA1*02:01:01:02 DPA1*02:01:01:02 DRB1*03:01:01:02 DQB1*05:01:01:02 DQB1*05:01:01:03
2400	*03:01	*11:01			*01:02	*01:05	*05:01	*06:02			*17:01:01G	*40:01	SSP SSO SBT	
3135	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01		DQA1*01:04 DQA1*01:01
3511	*03:01	*11:01	3*02:02	3*02:02	*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP SSO	
3519	*03:01	*11:01	3*02:02	3*02:02	*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP NGS	
3632	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSP SSO	
3753	*03:01:01	*11:01:02	3*02:02:01	3*02:02:01	*01:02:01	*01:05:01	*05:01	*06:02:01	*02:01:01	*03:01	*17:01:01	*40:01	NGS	
3966	*03:01	*11:01	3*02:02	3*02:02			*05:01	*06:02					SSP	
4079	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02			*17:01	*40:01	SSP SSO	
4251	*03:01	*11:01	3*02:02	3*02:02	*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSO NGS	

Table 3b: Individual laboratory results for B-cell #549-Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPA1		METHOD	Other Alleles
4337	*03:01	*11:01					*05:01	*06:02			*17:01	*40:01	SBT	
4492	*03:01:01	*11:01:02	3*02:02		*01:02:01	*01:05:01	*05:01:01	*06:02:01	*02:01	*03:01	*17:01	*40:01	SSP SSO NGS	
5130	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02			*17:01	*40:01	SSP SSO NGS	
5133	*03:01:01	*11:01:02	3*02:02:01		*01:02:01	*01:05:01	*05:01:01	*06:02:01	*02:01:01:03	NEW	*17:01:01:01	*40:01	NGS	
5451	*03:01:01	*11:01:02											SSP SSO SBT	
5462	NT	NT	NT		NT	NT	NT	NT	NT	NT	*17:01	*40:01	SSO RT-PCR	DPB1*447:01
5488	*03:01:01	*11:01:02					*05:01:01				*17:01	*40:01	SSP SSO SBT	DRB1*03:01:11 DRB1*11:01:01 DQB1*05:01:14 DQB1*05:11:02 DQB1*05:73 DQB1*05:18
5642	*03:01	*11:01					*05:01	*06:02						
8001	*03:01	*11:01	3*02:02				*05:01	*06:02			*17:01	*40:01	SSP SSO	
8021	*03:01	*11:01	3*02:02		*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSO NGS	
8042	*03:01	*11:01	3*02:02				*05:01	*06:02						
8043	*03:01	*11:01			*01:02	*01:05	*05:01	*06:02					SSP SSO	
8070	*03:01	*11:01					*05:01	*06:02					SBT	
8086	*03:01	*11:01			*01:02	*01:05	*05:01	*06:02	*02:01	*03:01	*17:01	*40:01	SSO SBT	

Table 4: Individual laboratory results for B-cell #549-Class II

Serology									
CTR	DRB1		DRB3/4/5		DQB1		Others		
910	DR17	DR11	DR52				DQ1		

Table 5: Individual laboratory results for B-cell #549-Class I

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
87	*01	*74	*15	*82	*02	*03							RT-PCR	
206	*01	*74	*15	*82	*02	*03								
230							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSO SBT	
278	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:02	*03:02		
725	*01	*74	*15	*82	*02	*03							SSP SSO SBT	
731	*01	*74	*15	*82	*02	*03							SSP SSO SBT	
735	*01	*74	*15	*82	*02	*03	*01:01	*74:01P	*15:03P	*82:01	*02:10	*03:02	SSP SSO SBT	
747	*01	*74	*15	*82	*02	*03	*01:01:01	*74:01:01	*15:03:01:02	*82:01	*02:10:01:01	*03:02:02:01	SSP SSO NGS	
774	*01	*74	*15	*82	*02	*03			*15:03	*82:01			SSP SSO	B*15:173 B*15:103 B*15:210 B*15:220 B*15:266 B*15:274 B*15:282
779	*01	*74	*15	*82	*02	*03			*15:03	*82:01		*03:02	SSP SSO	
792	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSO SBT	B*15:103 B*15:220
793	*01	*74	*15	*82	*02	*03							SSP	
794	*01	*74	*15	*82	*02	*03	*01:01:01	*74:01:01	*15:03:01	*82:01	*02:10:01	*03:02:02	SSP SSO NGS RT-PCR	
2344							*01:01:01	*74:01	*15:03:01	*82:01	*02:10:01:01	*03:02:02:01	NGS	
2400	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSP SSO SBT	A*01:01:01:02N
2847	*01	*74	*15	*82	*02	*03							SSO	
3135							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02		
3224	*01	*74	*15	*82	*02	*03							SSO	
3511							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSP SSO	
3519	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSP NGS	
3753							*01:01:01	*74:01:01	*15:03:01	*82:01	*02:10:01	*03:02:02	NGS	
3966	*01	*74	*15	*82	*02	*03			*15:03				SSP	
4251	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSO NGS	
4337							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SBT	
4492	*01	*74	*15	*82	*02	*03	*01:01:01	*74:01	*15:03:01	*82:01	*02:10:01:01	*03:02:02:01	SSP SSO NGS	
5130	*01	*74	*15	*82	*02	*03	*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSP SSO NGS	
5133							*01:01:01	*74:01:01	*15:03:01:02	*82:01	*02:10:01:01	*03:02:02:01	NGS	
5214	*01	*74	*15 (B72)	*82	*02	*03 (Cw10)							RT-PCR	
5219	*01	*74	*15	*82	*02	*03							SSO	
5462	*01	*74	*15	*82	*02	*03	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5488		*74					*01:01:01		*15:03:01	*82:01	*02:10:01	*03:02:02	SSP SSO SBT	A*01:03
8021							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSO NGS	
8042							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02		
8029	*01	*74	*15	*82	*02	*03							SSO	
8068	*01	*74	*15	*82	*02	*03							SSO	
8086							*01:01	*74:01	*15:03	*82:01	*02:10	*03:02	SSO SBT	
8087	*01	*74	*15	*82	*02	*03							SSO	
9916	*01	*74	*15	*82	*02	*03							SSP	B*56

Table 6a: Individual laboratory results for B-cell #550-Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
87	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	RT-PCR	
206	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04		
278	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04		
725	*04	*14	3*PRESENT	4*PRESENT	*03	*05	*03						SSP SSO SBT	
731	*04	*14			*03	*05	*03	*03					SSP SSO SBT	
735	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSP SSO SBT	
747	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04	SSP SSO NGS	
771	*04	*14			*03	*05	*03	*03					SSP SSO	
774	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSP SSO	
779	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSP SSO	
792	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04	SSO SBT	
793	*04	*14	3*01	4*PRESENT	*03	*05	*03	*03			*01	*04(DP402)	SSP	
794	*04	*14	3*01	4*01	*03	*05	*03		*01	*02	*01	*04	SSP SSO NGS	
2400	*04	*14	3*01	4*01	*03	*05	*03	*03			*01	*04	RT-PCR	
2847	*04	*14											SSP SSO SBT	
3224	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSO	
3519	*04	*14			*03	*05	*03		*01	*02	*01	*04(DP402)	SSP NGS	
3632	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04	SSP SSO	
3966													SSP	
4079	*04	*14	3*01	4*01	*03	*05	*03				*01	*04	SSP SSO	
4251	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSO NGS	
4492	*04	*14	3*PRESENT	4*PRESENT	*03	*05	*03		*01	*02	*01	*04(DP402)	SSP SSO NGS	
5130	*04	*14	3*01	4*01	*03	*05	*03	*03			*01	*04	SSP SSO NGS	
5214	*04	*14	3*01(DR52)	4*01(DR53)	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	RT-PCR	
5219	*04	*14			*03	*05	*03	*03					SSO	
5451	*04	*14	3*01	4*01	*03	*05	*03	*03					SSP SSO SBT	
5462	*04	*14	3*01	4*01	*03	*05	*03	*03	*01	*02	*01	*04(DP402)	SSO RT-PCR	
5488			3*01	4*01	*03		*03	*03					SSP SSO SBT	
5642	*04	*14	3*PRESENT	4*PRESENT			*03	*03						
6649	*04	*14	3*PRESENT	4*PRESENT										
8001	*04	*14	3*01	4*01	*03	*05	*03	*03					SSP	
8029	*04	*14			*03	*05	*03	*03					SSP SSO	
8043	*04	*14			*03	*05	*03	*03					SSO	
8043	*04	*14			*03	*05	*03	*03					SSP SSO	
8068	*04	*14	3*01	4*01	*03	*05	*03	*03					SSO	
8068	*04	*14	3*01	4*01	*03	*05	*03	*03					SSO	
8087	*04	*14			*03	*05	*03	*03					SSO	
9916	*04	*14	3*PRESENT	4*PRESENT			*03	*03					SSP	

Table 6b: Individual laboratory results for B-cell #550-Class II

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPA1			
230	*04:05	*14:02					*03:01	*03:02			*01:01	*04:02	SSO SBT	
278	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02		
731	*04:05:01	*14:02:01					*03:01:01G	*03:02:01G					SSP SSO SBT	
735	*04:05	*14:02	3*01:01P	4*01:01P	*03:01P	*05:01P	*03:01	*03:02	*01:03P	*02:01	*01:01	*04:02	SSP SSO SBT	DPA1*01:13
747	*04:05:01	*14:02:01	3*01:01:02:01	4*01:03:01	*03:03:01:01	*05:03	*03:01:01:01	*03:02:01:01	*01:03:01:05	*02:01:01	*01:01:01	*04:02:01:02	SSP SSO NGS	
762	*04:05:01	*14:02:01	3*01:01:02:01	4*01:03:01	*03:03:01:01	*05:03	*03:01:01:01	*03:02:01	*01:03:01	*02:01:01	*01:01:01	*04:02:01	NGS	
771	*04:05	*14:02					*03:01	*03:02					SSP SSO	
														DPA1*01:13 DRB4*01:09 DRB4*01:10 DRB1*04:178N DRB3*01:16 DRB3*01:17 DRB3*01:19 DQB1*03:92 DQB1*03:93
774	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSP SSO	
779					*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSP SSO	
792	*04:05	*14:02					*03:01	*03:02			*01:01	*04:02	SSO SBT	
793					*03:03	*05:03					*01:01	*04:02	SSP	
794	*04:05:01	*14:02:01	3*01:01:02	4*01:03:01	*03:03	*05:03	*03:01:01	*03:02:01	*01:03	*02:01	*01:01:01	*04:02:01	SSP SSO NGS RT-PCR	
														DPA1*02:01:01:02 DPB1*04:02:01:02 DPA1*01:03:01:02 DPA1*01:03:01:03 DPA1*01:03:01:04 DPA1*01:03:01:05
2344	*04:05:01	*14:02:01	3*01:01:02:02	4*01:03:01	*03:03:01	*05:03	*03:01:01:01	*03:02:01:01	*01:03:01:01	*02:01:01:01	*01:01:01	*04:02:01:01	NGS	
2400	*04:05	*14:02			*03:03	*05:03	*03:01	*03:02			*01:01:01G	*04:02P	SSP SSO SBT	
3135	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02		DQA1*03:02
3511	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSP SSO	
3519	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSP NGS	
3632	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSP SSO	
3753	*04:05:01	*14:02:01	3*01:01:02	4*01:03:01	*03:03:01	*05:03:01	*03:01:01	*03:02:01	*01:03:01	*02:01:01	*01:01:01	*04:02:01	NGS	
3966	*04:05	*14:02	3*01:01	4*01:03			*03:01	*03:02					SSP	
4079	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02			*01:01	*04:02	SSP SSO	
4251	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSO NGS	
4337	*04:05	*14:02					*03:01	*03:02			*01:01	*04:02	SBT	
4492	*04:05:01	*14:02:01	3*01:01:02G	4*01:03	*03:03:01	*05:03	*03:01:01	*03:02:01	*01:03	*02:01	*01:01:01	*04:02:01	SSP SSO NGS	DPA1*01:13
5130	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03	*03:01	*03:02			*01:01	*04:02	SSP SSO NGS	
5133	*04:05:01	*14:02:01	3*01:01:02:02	4*01:03:01	*03:03:01:01	*05:03:01:01	*03:01:01	*03:02:01:01	*01:03:01	*02:01:01	*01:01:01:04	*04:02:01	NGS	
5451	*04:05:01	*14:02:01											SSP SSO SBT	
														DPB1*417:01 DPB1*440:01 DPB1*616:01 DPB1*462:01 DPB1*463:01 DPB1*647:01
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*01:01	*04:02P	SSO RT-PCR	

Table 6b: Individual laboratory results for B-cell #550-Class II

High resolution															
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPA1		METHOD	Other Alleles	
5488	*04:05:01	*14:02:01				*05:03						*01:01:01	*04:02:01	SSP SSO SBT	DRB1*04:08:01 DRB1*14:13
5642	*04:05	*14:02						*03:01	*03:02						
8001	*04:05	*14:02	3*01:01	4*01:03				*03:01	*03:02			*01:01	*04:02	SSP SSO	
8021	*04:05	*14:02	3*01:01	4*01:03	*03:03	*05:03		*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSO NGS	
8042	*04:05	*14:02	3*01:01	4*01:03				*03:01	*03:02						
8043	*04:05	*14:02			*03:03	*05:03		*03:01	*03:02					SSP SSO	
8070	*04:05	*14:02						*03:01	*03:02					SBT	
8086	*04:05	*14:02			*03:03	*05:03		*03:01	*03:02	*01:03	*02:01	*01:01	*04:02	SSO SBT	

Table 7: Individual laboratory results for B-cell #550-Class II

Serology									
CTR	DRB1		DRB3/4/5		DQB1		Others		
910	DR4	DR14	DR52	DR53			DQ7	DQ8	

Table 8: Individual laboratory results for B-cell #550-Class I

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
87	*01	*02	*35	*82	*03	*04							RT-PCR	
206	*01	*02	*35	*82	*03	*04								
230							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSO SBT	
278	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01		
725	*01	*02	*35	*82	*03	*04							SSP SSO SBT	
731	*01	*02	*35	*82	*03	*04							SSP SSO SBT	
735	*01	*02	*35	*82	*03	*04	*01:01P	*02:01P	*35:04	*82:01	*03:02	*04:01P	SSP SSO SBT	
747	*01	*02	*35	*82	*03	*04	*01:01:01	*02:01:01:01	*35:04:01	*82:01	*03:02:02:01	*04:01:01:01	SSP SSO NGS	
774	*01	*02	*35	*82	*03	*04			*35:02				SSP SSO	
779	*01	*02	*35	*82	*03	*04					*03:02		SSP SSO	
792	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSO SBT	A*02:642 A*02:665 A*02:686 A*02:689 C*04:30 C*04:226 C*04:275 A*01:234 A*02:629 A*02:01:01:02L
793	*01	*02	*35	*82	*03	*04							SSP	
794	*01	*02	*35	*82	*03	*04	*01:01:01	*02:01:01	*35:04:01	*82:01	*03:02:02	*04:01:01	SSP SSO NGS RT-PCR	
2344							*01:01:01	*02:01:01:01	*35:04:01	*82:01	*03:02:02:01	*04:01:01:01	NGS	
2400	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSP SSO SBT	A*01:01:01:02N
2847	*01	*02	*35	*82	*03	*04							SSO	
3135							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01		A*02:01L C*04:09N
3224	*01	*02	*35	*82	*03	*04							SSO	
3511							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSP SSO	
3519	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSP NGS	
3753							*01:01:01	*02:01:01	*35:04:01	*82:01	*03:02:02	*04:01:01	NGS	
3966	*01	*02	*35	*82	*03	*04							SSP	
4251	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSO NGS	
4337							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SBT	
4492	*01	*02	*35	*82	*03	*04	*01:01:01	*02:01:01	*35:04:01	*82:01	*03:02:02:01	*04:01:01	SSP SSO NGS	
5130	*01	*02	*35	*82	*03	*04	*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSP SSO NGS	
5133							*01:01:01	*02:01:01	*35:04:01	*82:01	*03:02:02:01	*04:01:01	NGS	
5214	*01	*02	*35	*82	*03 (Cw10)	*04							RT-PCR	
5219	*01	*02	*35	*82	*03	*04							SSO	
5462	*01	*02	*35	*82	*03	*04	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5488					*03	*04	*01:01:01	*02:01:01	*35:04:01	*82:01			SSP SSO SBT	A*01:01:21 A*01:01:68 A*01:98 A*01:100 A*02:01:09 A*02:01:52 A*02:262 A*02:346
8021							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSO NGS	
8029	*01	*02	*35	*82	*03	*04							SSO	

Table 8: Individual laboratory results for B-cell #550-Class I

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
8068	*01	*02	*35	*82	*03	*04							SSO	
8042							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01		
8086							*01:01	*02:01	*35:04	*82:01	*03:02	*04:01	SSO SBT	
8087	*01	*02	*35	*82	*03	*04							SSO	
9916	*01	*02	*35	*82	*03	*04							SSP	