

Report of the 317th B-cell line Exchange

JULY 30, 2025

B-cell Lines 634 - 636

The results for B-cell Line Exchange #317 are summarized in Tables 1 - 3 and individual laboratory results reported for each sample are listed in Tables 4 - 9. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://network.nmdp.org/services-support/bioinformatics-immunobiology/haplotype-frequencies>.

We are most grateful to the generosity of **Welsh Blood Service, Pontyclun**, for providing the reference C*03:11:02 cell examined in this study. We also wish to acknowledge and thank the labs performing NGS for sharing their findings and encourage other NGS labs to do so as well.

Ter-634. The consensus type for this cell from donor of Chinese descent is as follows:

HLA-A	HLA-B	HLA-C
*02:07 *24:02	*07:02 *15:01	*03:03 *07:02

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*15:01 *15:01	5*01:01 5*01:01	*01:02 *05:05	*03:01 *06:02	*01:03 *02:02	*02:02 *04:01

One likely association present in this cell is B*15:01-C*03:03-DRB1*15:01-DQB1*06:02, observed in Asians with HF = 0.00362. The other likely association may then be B*07:02-C*07:02-DRB1*15:01-DQB1*03:01. DRB1*15:01-DQB1*03:01 is observed in Asian populations, with HF = 0.00178.

This cell was previously examined as Ter 403 (2008) and Ter 367 (2005). In this present retyping, ≥ 90% agreement was achieved for all allele assignments.

Ter-635. The consensus type for this cell from a Caucasian donor is as follows:

HLA-A	HLA-B	HLA-C
*24:02 *25:01	*15:14 *18:01	*03:03 *12:03

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*01:01 *15:01	NP 5*01:01	*01:02 *01:27	*05:01 *06:02	*01:03 *01:03	*04:01 *04:01

One likely association present in this cell is B*18:01-C*12:03-DRB1*15:01-DQB1*06:02, observed commonly in Caucasians, with HF = 0.00638. The other likely association present is B*15:14-C*03:03-DRB1*01:01-DQB1*05:01. The rare B*15:14-C*03:03 association in this cell is observed exclusively in Caucasian populations, with HF = 0.00006.

This cell is SS713, one of the reference cells for B*15:14. It was previously examined in the Exchange as DNA extract nos. 575 (2013), 335 (2005), and 127 (2000). In this present retyping, B*15:14 was assigned by 100% of labs reporting at high resolution. A rare subtype of DQA1*01, DQA1*01:27, was detected in this sample. Among the 25 labs reporting at high resolution, 16 labs (76%) assigned DQA1*01:27, and 3 labs (14%) assigned DQA1*01:01P. One lab indicated a new DQA1 allele was present.

Ter-636. The following is the reported consensus type for this cell from a Caucasian donor.

HLA-A		HLA-B		HLA-C	
*24:02	*24:02	*15:01	*57:01	*03:11	*06:02

DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01	*04:01

Combing data from family studies (1) and the Exchange, the haplotypes in this cell are A*24:02-B*15:01-C*03:11:02-DRB1*01:01-DQA1*01:01-DQB1*05:01-DPA1*01:03-DPB1*04:01 and A*24:02-B*57:01-C*06:02-DRB1*01:03-DQA1*01:01-DQB1*05:01-DPA1*01:03-DPB1*02:01.

This cell is the reference cell for C*03:11:02. Its primary name is 11845457 and was examined previously in the Exchange as Ter 497 (2012), Ter 387 (2007), and extract 381 (2007). In this present retyping, C*03:11 was assigned by 24 labs (96%), with 9 labs assigning C*03:11:02. Among the 18 labs reporting at low resolution, 6 labs (33%) assigned C*03 (Cw9) as the serologic split.

Reference:

1. Hammond L, Street J, Johnson J, Pepperall J, Darke C. A new HLA-Cw*03 variant - Cw*031102. Tissue Antigens. 2006 Nov;68(5):455-6. doi: 10.1111/j.1399-0039.2006.00691.x. PMID: 17092264.

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Table 1: Summary of the 317th B-cell Line Exchange

[illegible]

DNA Typing - class I	<u>25 labs High; 19 labs Low- A</u>		<u>25 labs High; 19 labs Low- B</u>		<u>25 labs High; 18 labs Low- C</u>	
		%(n)		%(n)		%(n)
	A*02:07:01:01	8 (2)	B*07:02:01	28(7)	C*03:03:01:01	4 (1)
	A*02:07P	4 (1)	B*07:02:01G	4 (1)	C*03:03:01	28(7)
	A*02:07	88(22)	B*07:02P	4 (1)	C*03:03P	4 (1)
	A*02	100(19)	B*07:02	64(16)	C*03:03	64(16)
			B*07	100(19)	C*03(Cw9)	50(9)
					C*03	50(9)
	<u>25 labs High; 18 labs Low- A</u>		<u>25 labs High; 19 labs Low- B</u>		<u>25 labs High; 18 labs Low- C</u>	
		%(n)		%(n)		%(n)
A*24:02:01:01		4 (1)	B*15:01:01:01	4 (1)	C*07:02:01:03	4 (1)
A*24:02:01		28(7)	B*15:01:01	24(6)	C*07:02:01	28(7)
A*24:02P		4 (1)	B*15:01:01G	4 (1)	C*07:02	64(16)
A*24:02		64(16)	B*15:01P	4 (1)	C*07:02P	4 (1)
A*24		100(19)	B*15:01	64(16)	C*07	94(17)
			B*15(B62)	53(10)	C*02	6 (1)
			B*15	47(9)		

Table 2: Summary of the 317th B-cell Line Exchange

Ter-635

DNA Typing - class II	26 labs High; 18 labs Low-DRB1	%(n)			21 labs High; 16 labs Low-DQA1	%(n)	26 labs High; 17 labs Low-DQB1	%(n)	21 labs High; 10 labs Low-DPA1	%(n)	26 labs High; 10 labs Low-DPB1	%(n)
	DRB1*01:01:01	19(5)			DQA1*01:02:01	29(6)	DQB1*05:01:01	23(6)	DPA1*01:03:01	24(5)	DPB1*04:01:01	19(5)
	DRB1*01:01:01G	8 (2)			DQA1*01:02	71(15)	DQB1*05:01:01G	8 (2)	DPA1*01:03:01G	10(2)	DPB1*04:01:01G	19(5)
	DRB1*01:01P	12(3)			DQA1*01	100(16)	DQB1*05:01P	4 (1)	DPA1*01:03P	4 (1)	DPB1*04:01P	19(5)
	DRB1*01:01	61(16)					DQB1*05:01	65(17)	DPA1*01:03	62(13)	DPB1*04:01	42(11)
	DRB1*01	100(18)					DQB1*05	100(17)	DPA1*01	100(10)	DPB1*04(DP401)	60(6)
											DPB1*04	40(4)
	DNA Typing - class I	25 labs High; 19 labs Low- A	%(n)	25 labs High; 19 labs Low- B	%(n)	25 labs High; 18 labs Low- C	%(n)					
A*24:02:01:01		4 (1)	B15:14	100(25)	C*03:03:01:01	4 (1)						
A*24:02:01		28(7)	B*15(B76)	53(10)	C*03:03:01	28(7)						
A*24:02P		4 (1)	B*15	47(9)	C*03:03P	4 (1)						
A*24:02		64(16)			C*03:03	64(16)						
A*24		100(19)			C*03(Cw9)	56(10)						
					C*03	44(8)						
25 labs High; 19 labs Low- A		%(n)	25 labs High; 19 labs Low- B	%(n)	25 labs High; 18 labs Low- C	%(n)						
A*25:01:01:01		8 (2)	B*18:01:01	28(7)	C*12:03:01:01	4 (1)						
A*25:01:01		24(6)	B*18:01:01G	4 (1)	C*12:03:01	28(7)						
A*25:01P		4 (1)	B*18:01P	4 (1)	C*12:03P	4 (1)						
A*25:01		64(16)	B*18:01	64(16)	C*12:03	64(16)						
A*25		100(19)	B*18	100(19)	C*12	100(18)						

Table 3: Summary of the 317th B-cell Line Exchange

Ter-636											
DNA Typing - class II	26 labs High; 18 labs Low-DRB1				21 labs High; 16 labs Low-DQA1				26 labs High; 17 labs Low-DQB1		
		%(n)				%(n)				%(n)	
	DRB1*01:01:01	19(5)			DQA1*01:01:01	28(6)			DQB1*05:01:01	23(6)	
	DRB1*01:01:01G	8 (2)			DQA1*01:01P	5 (1)			DQB1*05:01:01G	8 (2)	
	DRB1*01:01P	11(3)			DQA1*01:01	67(14)			DQB1*05:01P	4 (1)	
	DRB1*01:01	62(16)			DQA1*01	100(16)			DQB1*05:01	65(17)	
	DRB1*01	100(18)							DQB1*05	100(17)	
DNA Typing - class I	25 labs High; 19 labs Low- A				25 labs High; 19 labs Low- B				25 labs High; 18 labs Low- C		
		%(n)				%(n)				%(n)	
	A*24:02:01:01	4 (1)			B*15:01:01	32(8)			C*03:11:02	36(9)	
	A*24:02:01	28(7)			B*15:01P	4 (1)			C*03:11	60(15)	
	A*24:02P	4 (1)			B*15:01	64(16)			C*03:03	4 (1)	
	A*24:02	64(16)			B*15(B62)	53(10)			C*03(Cw9)	33(6)	
	A*24	100(19)			B*15	47(9)			C*03	67(12)	
DNA Typing - class I	25 labs High; 19 labs Low- B				25 labs High; 18 labs Low- C				25 labs High; 18 labs Low- C		
		%(n)				%(n)				%(n)	
	B*57:01:01	32(8)			C*06:02:01:01	4 (1)			C*06:02:01:01	4 (1)	
	B*57:01P	4 (1)			C*06:02:01	28(7)			C*06:02:01	28(7)	
	B*57:01	64(16)			C*06:02	68(17)			C*06:02	68(17)	
	B*57	100(19)			C*06	100(18)			C*06	100(18)	
DNA Typing - class I	25 labs High; 19 labs Low- B				25 labs High; 18 labs Low- C				25 labs High; 18 labs Low- C		
		%(n)				%(n)				%(n)	
	B*57:01:01	32(8)			C*06:02:01:01	4 (1)			C*06:02:01:01	4 (1)	
	B*57:01P	4 (1)			C*06:02:01	28(7)			C*06:02:01	28(7)	
	B*57:01	64(16)			C*06:02	68(17)			C*06:02	68(17)	
	B*57	100(19)			C*06	100(18)			C*06	100(18)	

Table 4a: Individual laboratory results for B-cell #634- Class II

Table 14: Individual Laboratory Results for D-Cell #554 - Class II														
	Low resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
725	*15		5*01		*01	*05	*03(DQ7)	*06					SSO	
747	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02	*04	SSP SSO NGS RT-PCR	
771	*15	*15			*01	*05	*03	*06					SSO NGS	
792	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02	*04	SSO NGS	
793	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02(DP202)	*04(DP401)	RT-PCR	
794	*15		5*01		*01	*05	*03	*06	*01	*02	*02	*04	SSO NGS RT-PCR	
2400	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02(DP202)	*04(DP401)	SSO NGS	
2847	*15												SSO	
3519	*15		5*01		*01	*05	*03(DQ7)	*06	*01	*02	*02(DP202)	*04(DP401)	SSP NGS	
3753	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02	*04(DP401)	SSO	
3966													SSP SSO RT-PCR	
5130	*15	*15	5*01		*01	*05	*03	*06	*01	*02	*02	*04	NGS RT-PCR	
5214	*15		5*01		*01	*05	*03(DQ7)	*06	*01	*02	*02(DP202)	*04(DP401)	SSO	
5488													SSO NGS	
6649	*15	*15					*03(DQ7)	*06					SSO SBT	
8029	*15	*15			*01	*05	*03	*06						
8043	*15				*01	*05	*03	*06					SSO NGS	
8058	*15	*15	NT	NT	*01	*05	*03	*03	NT	NT	NT	NT	SSO	
8068	*15	*15			*01	*05	*03	*06					SSO	
8123	*15	*15	5*01	5*01	*01	*05	*03(DQ7)	*06	*01	*02	*02(DP202)	*04(DP401)		

Table 4b: Individual laboratory results for B-cell #634 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
747	*15:01:01	*15:01:01	5*01:01:01	5*01:01:01	*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03:01	*02:02:01	*02:02:01	*04:01:01	SSP SSO NGS RT-PCR	
762	*15:01		5*01:01		*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
771	*15:01	*15:01					*03:01	*06:02			*02:02	*04:01	SSO NGS	
792	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	SSO NGS	
793											*02:02P	*04:01P	RT-PCR	
794	*15:01:01		5*01:01:01		*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03:01	*02:02:02	*02:02:01	*04:01:01	SSO NGS RT-PCR	
2344	*15:01:01G	*15:01:01G					*03:01:01G	*06:02:01G			*02:02:01G	*04:01:01G	NGS	
2400	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02:01G	*04:01:01G	SSO NGS	DQB1*03:276N
3135	*15:01P	*15:01P	5*01:01		*01:02	*05:01:01G	*03:01P	*06:02P	*01:03	*02:02	*02:02P	*04:01P		
3224	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02P	*04:01P	NGS	
3511	*15:01		5*01:01P		*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
3519	*15:01P		5*01:01		*01:02	*05:05	*03:01	*06:02			*02:02	*04:01P	SSP NGS	DRB1*15:01 DPB1*02:02 DPB1*04:01
3966	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03:01G	*02:02:02G	*02:02:01G	*04:01:01G	SSP SSO RT-PCR	
4337	*15:01	*15:01					*03:01	*06:02			*02:02	*04:01	SSP SBT NGS	
5130	*15:01	*15:01	5*01:01		*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02:01G	*04:01:01G	NGS RT-PCR	
5133	*15:01:01		5*01:01:01		*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03:01	*02:02:02	*02:02:01	*04:01:01	NGS	
5451	*15:01:01		5*01:01:01		*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03:01	*02:02:02	*02:02:01	*04:01:01	NGS	
5462	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
5488	*15:01:01		5*01:01:01		*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03:01	*02:02:02	*02:02:01	*04:01:01	SSO NGS	
6649	*15:01	*15:01					*03:01	*06:02					SSO SBT	
8001	*15:01		5*01:01		*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
8029	*15:01:01G	*15:01:01G					*03:01:01G	*06:02:01G			*02:02:01	*04:01:01G		
8038	*15:01:01	*15:01:01	5*01:01P	5*01:01P	*01:02:01	*05:05:01	*03:01:01	*06:02:01	*01:03P	*02:02P	*02:02:01	*04:01P	NGS	
8043	*15:01		5*01:01		*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	SSO NGS	
8122	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03	*02:02	*02:02	*04:01	NGS	
8137	*15:01	*15:01	5*01:01	5*01:01	*01:02	*05:05	*03:01	*06:02	*01:03:01G	*02:02:02G	*02:02	*04:01	SBT	

Table 5: Individual laboratory results for B-cell #634 - Class I

	Low resolution						High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
725	*02	*24	*07	*15(B62)	*03(Cw9)	*07							SSO	
747	*02	*24	*07	*15	*03	*07	*02:07	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01	SSP SSO NGS RT-PCR	
762							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
771	*02	*24	*07	*15	*03	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSO NGS	
792	*02	*24	*07	*15(B62)	*03(Cw9)	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSO NGS	
793	*02	*24	*07	*15(B62)	*03(Cw9)	*07							RT-PCR	
794	*02	*24	*07	*15	*03	*07	*02:07	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01	SSO NGS RT-PCR	
2344							*02:07	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01	NGS	
2400	*02	*24	*07	*15(B62)	*03(Cw9)	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSO NGS	
2847	*02	*24	*07	*15	*03	*07							SSO	
3135							*02:07P	*24:02P	*07:02P	*15:01P	*03:03P	*07:02P		
3224							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
3511							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
3519	*02	*24	*07	*15(B62)	*03(Cw9)	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSP NGS	
3753	*02	*24	*07	*15(B62)	*03(Cw9)	*07							SSO	
3966	*02	*24	*07	*15(B62)	*03(Cw9)	*07							SSP SSO RT-PCR	
4337							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSP SBT NGS	
5130	*02	*24	*07	*15	*03	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS RT-PCR	
5133							*02:07:01:01	*24:02:01:01	*07:02:01	*15:01:01:01	*03:03:01:01	*07:02:01:03	NGS	
5214	*02	*24	*07	*15(B62)	*03(Cw9)	*07							SSO	
5451							*02:07	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01	NGS	
5462							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
5488							*02:07	*24:02:01	*07:02:01G	*15:01:01G	*03:03:01	*07:02:01	SSO NGS	B*07:02:01 B*07:381 B*15:01:01 B*15:535
6649	*02	*24	*07	*15(B62)			*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSO SBT	B*07:07 B*07:09 B*15:07 B*15:63
8001							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
8029	*02	*24	*07	*15	*03	*07	*02:07	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01		
8038							*02:07:01:01	*24:02:01	*07:02:01	*15:01:01	*03:03:01	*07:02:01	NGS	
8043	*02	*24	*07	*15	*03	*07	*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SSO NGS	
8058	*02	*24	*07	*15	*03	*02							SSO	
8068	*02	*24	*07	*15	*03	*07							SSO	
8122							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	NGS	
8123	*02	*24	*07	*15(B62)	*03(Cw9)	*07								
8137							*02:07	*24:02	*07:02	*15:01	*03:03	*07:02	SBT	

Table 6a: Individual laboratory results for B-cell #635- Class II

	Low resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
725	*01	*15	5*01		*01		*05	*06					SSO	
													SSP SSO NGS	
747	*01	*15	5*01		*01	*01	*05	*06	*01	*01	*04	*04	RT-PCR	
771	*01	*15			*01	*01	*05	*06					SSO NGS	
792	*01	*15	5*01	NP	*01	*01	*05	*06	*01	*01	*04	*04	SSO NGS	
793	*01	*15	5*01		*01	*01	*05	*06	*01	*01	*04(DP401)	04(DP401)	RT-PCR	
													SSO NGS RT-PCR	
794	*01	*15	5*01		*01		*05	*06	*01		*04			
2400	*01	*15	5*01		*01	*01	*05	*06	*01	*01	*04(DP401)	04(DP401)	SSO NGS	
2847	*01	*15											SSO	
3519	*01	*15	5*01		*01	*01	*05	*06	*01		*04(DP401)		SSP NGS	
3753	*01	*15	5*01	NP	*01	*01	*05	*06	*01	*01	*04(DP401)	04(DP401)	SSO	
													SSP SSO RT-PCR	
3966														
5130	*01	*15	5*01		*01	*01	*05	*06	*01	*01	*04	*04	NGS RT-PCR	
5214	*01	*15	5*01		*01	*01	*05	*06	*01		*04(DP401)		SSO	
5488													SSO NGS	
6649	*01	*15					*05	*06					SSO SBT	
8029	*01	*15			*01	*01	*05	*06						
8043	*01	*15			*01	*01	*05	*06					SSO NGS	
8058	*01	*15	NT	NT	*01	*01	*05	*06	NT	NT	NT	NT	SSO	
8068	*01	*15			*01	*01	*05	*06					SSO	
8123	*01	*15	5*01		*01	*01	*05	*06	*01	*01	*04(DP401)	04(DP401)		

Table 6b: Individual laboratory results for B-cell #635 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03	*01:03	*04:01	*04:01	NGS	
747	*01:01:01	*15:01:01	5*01:01		*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03:01	*01:03:01	*04:01:01	*04:01:01	SSP SSO NGS RT-PCR	
762	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03		*04:01		NGS	
771	*01:01	*15:01					*05:01	*06:02			*04:01	*04:01	SSO NGS	
792	*01:01	*15:01	5*01:01	NP	*01:02	NEW	*05:01	*06:02	*01:03	*01:03	*04:01	*04:01	SSO NGS	DRB1*01:100
793											*04:01P	*04:01P	RT-PCR	
													SSO NGS RT-PCR	
794	*01:01:01	*15:01:01	5*01:01		*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03:01		*04:01:01			
2344	*01:01:01G	*15:01:01G					*05:01:01G	*06:02:01G			*04:01:01G	*04:01:01G	NGS	
2400	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03	*01:03	*04:01:01G	*04:01:01G	SSO NGS	DQB1*05:263
3135	*01:01P	*15:01P			*01:02	*01:01P	*05:01P	*06:02P	*01:03		*04:01P			
3224	*01:01	*15:01	5*01:01	NP	*01:02	*01:01P	*05:01	*06:02	*01:03	*01:03	*04:01P	*04:01P	NGS	
3511	*01:01	*15:01	5*01:01P	NP	*01:02	*01:01P	*05:01	*06:02	*01:03		*04:01		NGS	
														DRB1*01:01 DRB1*01:100 DRB1*15:01 DPB1*04:01
3519	*01:01P	*15:01P	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03		*04:01P		SSP NGS	
													SSP SSO RT-PCR	
3966	*01:01	*15:01	5*01:01		*01:02	*01:01	*05:01	*06:02	*01:03:01G	*01:03:01G	*04:01:01G	*04:01:01G		
4337	*01:01	*15:01					*05:01	*06:02			*04:01	*04:01	SSP SBT NGS	
5130	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03	*01:03	*04:01:01G	*04:01:01G	NGS RT-PCR	DRB1*01:100
5133	*01:01:01	*15:01:01	5*01:01		*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03:01		*04:01:01		NGS	
5451	*01:01:01	*15:01:01	5*01:01		*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03:01		*04:01:01		NGS	
5462	*01:01	*15:01	5*01:01	NP	*01:02	*01:27	*05:01	*06:02	*01:03	*01:03	*04:01	*04:01	NGS	
5488	*01:01:01	*15:01:01	5*01:01		*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03:01		*04:01:01		SSO NGS	
6649	*01:01	*15:01					*05:01	*06:02					SSO SBT	
8001	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03		*04:01		NGS	
8029	*01:01:01G	*15:01:01G					*05:01:01G	*06:02:01G			*04:01:01G	*04:01:01G		
8038	*01:01P	*15:01:01	5*01:01P	NP	*01:02:01	*01:27	*05:01:01	*06:02:01	*01:03P	*01:03P	*04:01P	*04:01P	NGS	
8043	*01:01	*15:01	5*01:01		*01:02	*01:27	*05:01	*06:02	*01:03		*04:01		SSO NGS	
8122	*01:01	*15:01	5*01:01	NP	*01:02	*01:27	*05:01	*06:02	*01:03	*01:03	*04:01	*04:01	NGS	
8137	*01:01	*15:01	5*01:01	NP	*01:02	*01:27	*05:01	*06:02	*01:03:01G	*01:03:01G	*04:01	*04:01	SBT	

Table 7: Individual laboratory results for B-cell #635 - Class I

	Low resolution						High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
725	*24	*25	*15(B76)	*18	*03(Cw9)	*12							SSO	
747	*24	*25	*15	*18	*03(Cw9)	*12	*24:02:01	*25:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	SSP SSO NGS	
762							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	RT-PCR	
771	*24	*25	*15	*18	*03	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
792	*24	*25	*15(B76)	*18	*03(Cw9)	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSO NGS	
793	*24	*25	*15(B76)	*18	*03(Cw9)	*12							SSO NGS	
													RT-PCR	
794	*24	*25	*15	*18	*03	*12	*24:02:01	*25:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	SSO NGS	
2344							*24:02:01	*25:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	RT-PCR	
2400	*24	*25	*15(B76)	*18	*03(Cw9)	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
2847	*24	*25	*15	*18	*03	*12							SSO NGS	
3135													SSO	
3224							*24:02P	*25:01P	*15:14	*18:01P	*03:03P	*12:03P		
3511							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
3519	*24	*25	*15(B76)	*18	*03(Cw9)	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
3753	*24	*25	*15(B76)	*18	*03(Cw9)	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSP NGS	
													SSO	
3966	*24	*25	*15(B76)	*18	*03(Cw9)	*12							SSP SSO	
4337													RT-PCR	
5130	*24	*25	*15	*18	*03	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSP SBT NGS	
5133							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS RT-PCR	
5214	*24	*25	*15(B76)	*18	*03(Cw9)	*12	*24:02:01:01	*25:01:01:01	*15:14	*18:01:01	*03:03:01:01	*12:03:01:01	NGS	
5451													SSO	
5462							*24:02:01	*25:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	NGS	
5488							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
6649	*24	*25	*15(B76)	*18			*24:02:01	*25:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	SSO NGS	
8001							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSO SBT	
8029	*24	*25	*15	*18	*03	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	NGS	
8038							*24:02:01	*25:01:01	*15:14	*18:01:01G	*03:03:01	*12:03:01		
8043	*24	*25	*15	*18	*03	*12	*24:02:01	*25:01:01:01	*15:14	*18:01:01	*03:03:01	*12:03:01	NGS	
8058	*24	*25	*15	*18	*03	*12	*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSO NGS	
8068	*24	*25	*15	*18	*03	*12							SSO	
8122							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSO	
8123	*24	*25	*15(B76)	*18	*03(Cw9)	*12							NGS	
8137							*24:02	*25:01	*15:14	*18:01	*03:03	*12:03	SSO	
													SBT	

Table 8a: Individual laboratory results for B-cell #636- Class II

	Low resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
725	*01	*103			*01		*05						SSO	
747	*01	*01			*01	*01	*05	*05	*01	*01	*02	*04(DP401)	SSP SSO NGS RT-PCR	
771	*01	*01			*01	*01	*05	*05					SSO NGS	
792	*01	*103	NP	NP	*01	*01	*05	*05	*01	*01	*02	*04	SSO NGS	
793	*01	*103			*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)	RT-PCR	
794	*01		NP	NP	*01		*05		*01		*02	*04	SSO NGS RT-PCR	
2400	*01	*103	NP	NP	*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)	SSO NGS	
2847	*01	*01											SSO	
3519	*01	*01			*01		*05		*01		*02(DP201)	*04(DP401)	SSP NGS	
3753	*01	*103	NP	NP	*01	*01	*05	*05	*01	*01	*02	*04(DP401)	SSO	
3966													SSP SSO RT-PCR	
5130	*01	*01			*01	*01	*05	*05	*01	*01	*02	*04	NGS RT-PCR	
5214	*01	*103			*01		*05		*01		*02(DP201)	*04(DP401)	SSO	
5488													SSO NGS	
6649	*01	*01					*05	*05					SSO SBT	
8029	*01	*01			*01	*01	*05	*05						
8043	*01	*01			*01		*05						SSO NGS	
8058	*01	*01	NT	NT	*01	*01	*05	*05	NT	NT	NT	NT	SSO	
8068	*01	*01			*01	*01	*05	*05					SSO	
8123	*01	*103			*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)		

Table 8b: Individual laboratory results for B-cell #636 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*01:03			*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01	*04:01	NGS	
747	*01:01:01	*01:03:01			*01:01:01	*01:01:01	*05:01:01	*05:01:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	SSP SSO NGS RT-PCR	
762	*01:01	*01:03			*01:01		*05:01		*01:03		*02:01	*04:01	NGS	
771	*01:01	*01:03					*05:01	*05:01			*02:01	*04:01	SSO NGS	
792	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01	*04:01	SSO NGS	DRB1*01:100
793											*02:01P	*04:01P	RT-PCR	
794	*01:01:01	*01:03			*01:01:01		*05:01:01		*01:03:01		*02:01:02	*04:01:01	SSO NGS RT-PCR	
2344	*01:01:01G	*01:03:01					*05:01:01G	*05:01:01G			*02:01:02G	*04:01:01G	NGS	
2400	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01:02G	*04:01:01G	SSO NGS	DQB1*05:263 DQB1*05:263
3135	*01:01P	*01:03			*01:01P		*05:01P		*01:03		*02:01P	*04:01P		
3224	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01P	*04:01P	NGS	
3511	*01:01	*01:03	NP	NP	*01:01		*05:01		*01:03		*02:01	*04:01	NGS	
3519	*01:01P	*01:03			*01:01		*05:01		*01:03		*02:01P	*04:01P	SSP NGS	DRB1*01:01 DRB1*01:03 DRB1*01:100 DPB1*02:01 DPB1*04:01
3966	*01:01	*01:03			*01:01	*01:01	*05:01	*05:01	*01:03:01G	*01:03:01G	*02:01:02G	*04:01:01G	SSP SSO RT-PCR	DPB1*02:01:04
4337	*01:01	*01:03					*05:01	*05:01			*02:01	*04:01	SSP SBT NGS	
5130	*01:01	*01:03			*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01:02G	*04:01:01G	NGS RT-PCR	
5133	*01:01:01	*01:03:01			*01:01:01		*05:01:01		*01:03:01		*02:01:02	*04:01:01	NGS	
5451	*01:01:01	*01:03:01	NP	NP	*01:01:01		*05:01:01		*01:03:01		*02:01:02	*04:01:01	NGS	
5462	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01	*04:01	NGS	
5488	*01:01:01	*01:03:01	NP		*01:01:01		*05:01:01		*01:03:01		*02:01:02	*04:01:01	SSO NGS	
6649	*01:01	*01:03					*05:01	*05:01					SSO SBT	
8001	*01:01	*01:03			*01:01		*05:01		*01:03		*02:01	*04:01	NGS	
8029	*01:01:01G	*01:03:01					*05:01:01G	*05:01:01G			*02:01:02G	*04:01:01G		
8038	*01:01P	*01:03	NP	NP	*01:01:01	*01:01:01	*05:01:01	*05:01:01	*01:03P	*01:03P	*02:01P	*04:01P	NGS	
8043	*01:01	*01:03			*01:01		*05:01		*01:03		*02:01	*04:01	SSO NGS	
8122	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03	*01:03	*02:01	*04:01	NGS	
8137	*01:01	*01:03	NP	NP	*01:01	*01:01	*05:01	*05:01	*01:03:01G	*01:03:01G	*02:01	*04:01	SBT	

Table 9: Individual laboratory results for B-cell #636 - Class I

	Low resolution						High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
725	*24		*15(B62)	*57	*03	*06							SSO	
747	*24	*24	*15	*57	*03	*06	*24:02:01	*24:02:01	*15:01:01	*57:01:01	*03:11:02	*06:02:01	SSP SSO NGS	
762							*24:02		*15:01	*57:01	*03:11	*06:02	RT-PCR	
771	*24	*24	*15	*57	*03	*06	*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
792	*24	*24	*15(B62)	*57	*03(Cw9)	*06	*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	SSO NGS	
793	*24	*24	*15(B62)	*57	*03(Cw9)	*06							RT-PCR	
794	*24		*15	*57	*03	*06	*24:02:01		*15:01:01	*57:01:01	*03:11:02	*06:02:01	SSO NGS	
2344							*24:02:01	*24:02:01	*15:01:01	*57:01:01	*03:11:02	*06:02:01	RT-PCR	
2400	*24	*24	*15(B62)	*57	*03	*06	*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
2847	*24		*15	*57	*03	*06							SSO NGS	
3135													SSO	
3224							*24:02P		*15:01P	*57:01P	*03:03	*06:02		
3511							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
3519	*24		*15(B62)	*57	*03(Cw9)	*06	*24:02		*15:01	*57:01	*03:11	*06:02	NGS	
3753	*24	*24	*15(B62)	*57	*03	*06			*15:01	*57:01	*03:11	*06:02	SSP NGS	
3966	*24	*24	*15(B62)	*57	*03(Cw9)	*06							SSO	
4337													SSP SSO	
5130	*24	*24	*15	*57	*03	*06	*24:02	*24:02	*15:01	*57:01	*03:11:02	*06:02	RT-PCR	
5133							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	SSP SBT NGS	
5133							*24:02:01:01		*15:01:01	*57:01:01	*03:11:02	*06:02:01:01	NGS RT-PCR	
5214	*24		*15(B62)	*57	*03(Cw9)	*06							NGS	
5451													SSO	
5451							*24:02:01		*15:01:01	*57:01:01	*03:11:02	*06:02:01	NGS	
5462							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
5488							*24:02:01		*15:01:01	*57:01:01	*03:11:02	*06:02:01	SSO NGS	
6649	*24	*24	*15(B62)	*57			*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	SSO SBT	
8001							*24:02		*15:01	*57:01	*03:11	*06:02	NGS	
8029	*24	*24	*15	*57	*03	*06	*24:02:01	*24:02:01	*15:01:01	*57:01:01	*03:11:02	*06:02:01	SSO NGS	
8038							*24:02:01	*24:02:01	*15:01:01	*57:01:01	*03:11:02	*06:02:01	SSO	
8043	*24		*15	*57	*03	*06	*24:02		*15:01	*57:01	*03:11	*06:02	SSO NGS	
8058	*24	*24	*15	*57	*03	*06							SSO	
8068	*24	*24	*15	*57	*03	*06							SSO	
8122							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	NGS	
8123	*24	*24	*15(B62)	*57	*03(Cw9)	*06								
8137							*24:02	*24:02	*15:01	*57:01	*03:11	*06:02	SBT	