

B-cell Line Exchange #279

FEBRUARY 6, 2019

B-cell Lines 557-558

The results for B-cell Line Exchange #279 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8. We wish to express our appreciation to **Welsh Blood Service, Pontyclun Wales** for its generosity in providing us with the valuable reference cells studied in this Exchange.

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

Ter-557. The consensus type for this cell from a Caucasian donor is DRB1*03:01-DRB1*04:04-DRB3*01:01-DRB4*01:03-DQA1*03:01-DQA1*05:01-DQB1*02:01-DQB1*03:02-DPA1*01:03-DPB1*02:01/A*01:01-A*03:01-B*08:01-B*40:31-C*03:04-C*07:01. This cell is 33692, the reference cell for B*40:31 (1). From family and exchange study data, one haplotype present in this cell is shown to be A*03:01-B*40:31-C*03:04-DRB1*04:04-DRB4*01:03-DQA1*03:01-DQB1*03:02. The other haplotype present A*01:01-B*08:01-C*07:01-DRB1*03:01-DQB1*02:01, is the most common haplotype observed in Caucasians, with HF = 0.07408.

The cell was previously studied in the class I DNA Extract Exchange as extracts 553 (2012) and 374 (2006). We congratulate Chen on correctly identifying this cell as being previously examined.

In this present retyping, the rare B*40:31 allele was assigned in complete consensus by labs reporting at high resolution. This was an improvement from the 2012 study in which B*40:31 was assigned by only 58%. B*08:01 (100%) was assigned as the second B-locus allele, with 6 labs assigning B*08:01:01. DRB1*03:01 (100%) and DRB1*04:04 (100%) were the reported DRB1 types, with 8 labs assigning DRB1*03:01:01 and 9 labs assigning DRB1*04:04:01.

References:

1. Street J, Downing J, Hammond L, et al. Immunogenetics of two new HLA alleles: A*0108 and B*4031. Tissue Antigens 2003;61:322-324.

Ter-558. The consensus type for this sample from a Caucasian donor is DRB1*11:01-DRB1*13:02-DRB3*02:02-DRB3*03:01-DQA1*01:02-DQA1*05:05-DQB1*03:01-DQB1*06:04-DPA1*01:03-DPB1*02:01-DPB1*03:01/A*02:01-A*23:01-B*40:14-B*44:03-C*03:04-C*04:01. One likely haplotype present in this cell is A*23:01-B*44:03-C*04:01-DRB1*11:01-DQB1*03:01, with HF = 0.00045, in Caucasians. The other likely haplotype present may then be A*02:01-B*40:14-C*03:04-DRB1*13:02-DQB1*06:04. The association of DRB1*13:02-DQB1*06:04 in this cell is commonly observed in Caucasians, with HF = 0.03208.

This cell is 1169540, the reference cell for B*40:14:03. It was previously studied in the class I DNA Extract Exchange as extracts 554 and 374, as astutely noted by Chen.

In this present study, B*40:14 was assigned by 95% , with 8 labs (6 NGS and 2 SBT) assigning B*40:14:03. B*44:03 (100%) was reported as the second B-locus allele, with 6 labs reporting B*44:03:01. For class II, DRB1*11:01 and DR1*13:02 were each assigned by 100% of labs reporting at high resolution. DRB1*11:01:01 was reported by 8 labs, and DRB1*13:02:01 was assigned by 10 labs.

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Table 1: Summary of the 279th B-cell Line Exchange

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DNA Typing - class II		33 labs High; 31 labs low-DRB1		18 labs High; 22 labs Low-DRB3/4/5		22 labs High; 27 labs Low-DQA1		32 High Labs; 29 labs Low-DQB1		16 High Labs; 14 labs Low-DPA1		26 High Labs; 17 labs Low-DPB1	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DNA Typing - class II	DRB1*03:01:01:01	6 (2)	DRB3*01:01:02:01	11(2)	DQA1*03:01:01	23(5)	DQB1*02:01:01	25(8)	DPA1*01:03:01:01	19(3)	DPB1*02:01:02	23(6)	
	DRB1*03:01:01	18(6)	DRB3*01:01:02	11(2)	DQA1*03:01	77(17)	DQB1*02:01	75(24)	DPA1*01:03:01	6 (1)	DPB1*02:01:02G	8 (2)	
	DRB1*03:01:01G	3 (1)	DRB3*01:01P	6 (1)	DQA1*03	100(27)	DQB1*02	100(29)	DPA1*01:03P	6 (1)	DPB1*02:01	69(18)	
	DRB1*03:01	73(24)	DRB3*01:01	72(13)					DPA1*01:03	69(11)]	DPB1*02(DP201)	65(11)	
	DRB1*03(DR17)	3 (1)	DRB3*01	73(16)					DPA1*01	100(14)	DPB1*02	35(6)	
	DRB1*03	97(30)	DRB3*PRESENT	27(6)									
DNA Typing - class I		21 labs High; 24 labs low- A		21 labs High; 24 labs low- B		22 labs High; 24 labs low- C		21 labs High; 24 labs low- C					
		%(n)		%(n)		%(n)		%(n)					
DNA Typing - class I	A*01:01:01:01	14(3)	B*08:01:01:01	14(3)	C*03:04:01:01	14(3)	C*03:04:01	14(3)					
	A*01:01:01	14(3)	B*08:01:01	14(3)	C*03:04:01G	5 (1)	C*03:04:01G	5 (1)					
	A*01:01:01G	5 (1)	B*08:01:01G	5 (1)	C*03:04P	5 (1)	C*03:04P	5 (1)					
	A*01:01P	5 (1)	B*08:01P	5 (1)	C*03:04	64(14)	C*03:04	64(14)					
	A*01:01	62(13)	B*08:01	62(13)	C*03(Cw10)	4 (1)	C*03(Cw10)	4 (1)					
	A*01	100(24)	B*08	100(24)	C*03	96(23)	C*03	96(23)					
DNA Typing - class I		21 labs High; 24 labs low- A		23 labs High; 24 labs low- B		21 labs High; 24 labs low- C		21 labs High; 24 labs low- C					
		%(n)		%(n)		%(n)		%(n)					
DNA Typing - class I	A*03:01:01:01	14(3)	B*40:31	100(23)	C*07:01:01:01	9(2)	C*07:01:01:01	9(2)					
	A*03:01:01	14(3)	B*40 (B60)	4 (1)	C*07:01:01	19(4)	C*07:01:01	19(4)					
	A*03:01P	5 (1)	B*40	96(23)	C*07:01:01G	5 (1)	C*07:01:01G	5 (1)					
	A*03:01	67(14)			C*07:01P	5 (1)	C*07:01P	5 (1)					
	A*03	100(24)			C*07:01	62(13)	C*07:01	62(13)					
					C*07	100(24)	C*07	100(24)					

Table 2: Summary of the 279th B-cell Line Exchange

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DNA Typing - class II		DNA Typing - class I	
DNA Typing - class II	31 labs High; 31 labs low-DRB1	18 labs High; 22 labs Low-DRB3/4/5	22 labs High; 27 labs Low-DQA1
	DRB1*11:01:01	DRB3*02:02:01:02	DQA1*01:02:01:04
	DRB1*11:01:01G	DRB3*02:02:01	DQA1*01:02:01
	DRB1*11:01	DRB3*02:02P	DQA1*01:02
	DRB1*11	DRB3*02:02	DQA1*01
		DRB3*02	
		DRB3*PRESENT	
DNA Typing - class I	21 labs High; 24 labs low- A	21 labs High; 24 labs low- B	22 labs High; 24 labs low- C
	A*02:01:01:01	B*40:14:03	C*03:04:01:01
	A*02:01:01	B*40:14	C*03:04:01
	A*02:01:01G	B*40:01	C*03:04:01G
	A*02:01P	B*40 (B60)	C*03:04P
	A*02:01	B*40	C*03:04
	A*02		C*03(Cw10)
			C*03
DNA Typing - class II	31 labs High; 31 labs low-DRB1	18 labs High; 22 labs Low-DRB3/4/5	22 labs High; 27 labs Low-DQA1
	DRB1*13:02:01	DRB3*03:01:01	DQA1*05:05:01
	DRB1*13:02	DRB3*03:01P	DQA1*05:05
	DRB1*13	DRB3*03:01	DQA1*05
		DRB3*03	
		DRB3*PRESENT	
DNA Typing - class II	31 High Labs; 29 labs Low-DQB1	17 High Labs; 14 labs Low-DPA1	26 High Labs; 17 labs Low-DPB1
	DQB1*03:01:01:03	DPA1*01:03:01:03	DPB1*02:01:02
	DQB1*03:01:01	DPA1*01:03:01	DPB1*02:01:02G
	DQB1*03:01:01G	DPA1*01:03P	DPB1*02:01
	DQB1*03:01	DPA1*01:03	DPB1*02(DP201)
	DQB1*03(DQ7)	DPA1*01	DPB1*02
	DQB1*03		
DNA Typing - class II	31 High Labs; 29 labs Low-DQB1	26 High Labs; 17 labs Low-DPB1	
	DQB1*06:04:01	DPB1*03:01:01	
	DQB1*06:04:01G	DPB1*03:01:01G	
	DQB1*06:04	DPB1*03:01	
	DQB1*06	DPB1*03	

Table 3a: Individual laboratory results for B-cell #557 - Class II

Low resolution														
Center	DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
87	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*02(DP201)	*02(DP201)	RT-PCR	
206	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		*02		SSO	
278	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*02	*02		
725	*03	*04	3*PRESENT	4*PRESENT	*03	*05	*02	*03					SSP SSO	
731	*03	*04			*03	*05	*02	*03					SSP SSO SBT	
735	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		*02(DP201)		SSP SSO SBT	
747	*03	*04	3*PRESENT	4*PRESENT	*03	*05	*02	*03	*01	*01	*02	*02	SSP SSO NGS	
771	*03	*04			*03	*05	*02	*03					SSP SSO	
774	*03	*04	3*01	4*01	*03	*05	*02	*03			*02(DP201)		SSP SSO	
779	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		*02(DP201)		SSP SSO	
792	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		*02		SSO SBT	
793	*03	*04	3*01	4*01	*03	*05	*02	*03			*02(DP201)		SSP	
2400	*03	*04	3*01	4*01	*03	*05	*02	*03			*02		SSP SSO SBT	
2847	*03	*04											SSO	
3519	*03	*04			*03	*05	*02	*03	*01		*02(DP201)		SSP NGS	
3632	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		*02(DP201)		SSP SSO	
3966													SSP	
4079	*03	*04			*03	*05	*02	*03	*01		*02(DP201)		SSP SSO NGS	
4251	*03	*04	3*01	4*01	*03	*05	*02	*03	*01	*01	*02(DP201)	*02(DP201)	SSO NGS	
4492	*03	*04	3*PRESENT	4*PRESENT	*03	*05	*02	*03	*01		*02(DP201)		SSP SSO NGS	
5130	*03	*04	3*01	4*01	*03	*05	*02	*03			*02	*02	SSO NGS	
5214	*03 (DR17)	*04	3*01	4*01	*03 (DQ8)	*05	*02	*03	*01		*02(DP201)		RT-PCR	
5219	*03	*04			*03	*05	*02	*03					SSO	
5451	*03	*04	3*01	4*01	*03	*05	*02	*03					SSO SBT	
5462	*03	*04	3*01	4*01	*03	*05	*02	*03	*01		NT	NT	RT-PCR	
5488			3*01	4*01									SSP SSO SBT NGS	
5642	*03	*04	3*PRESENT	4*PRESENT			*02	*03					SSP	
6649	*03	*04	3*PRESENT	4*PRESENT									SSO	
8001	*03	*04			*03	*05	*02	*03					SSP SSO	
8029	*03	*04			*03	*05	*02	*03					SSO	
8043	*03	*04			*03	*05	*02	*03					SSP SSO	
8068	*03	*04			*03	*05	*02	*03					SSO	
9916	*03	*04	3*PRESENT	4*PRESENT			*02	*03					SSP	B*48

Table 3b: Individual laboratory results for B-cell #557 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*03:01	*04:04					*02:01	*03:02			*02:01		SSO SBT	
278	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*02:01	*02:01		
731	*03:01	*04:04:01					*02:01:01	*03:02					SSP SSO SBT	
735	*03:01	*04:04	3*01:01P	4*01:01P	*03:01	*05:01	*02:01	*03:02	*01:03P		*02:01		SSP SSO SBT	DPA1*01:13
747	*03:01:01:01	*04:04:01	3*01:01:02:01	4*01:03:01	*03:01:01	*05:01:01:02	*02:01:01	*03:02:01:02	*01:03:01:01	*01:03:01:01	*02:01:02	*02:01:02	SSP SSO NGS	
762	*03:01:01:01	*04:04:01	3*01:01:02:01	4*01:03:01	*03:01:01	*05:01:01:02	*02:01:01	*03:02:01:02	*01:03:01:01		*02:01:02		NGS	
771	*03:01	*04:04					*02:01	*03:02					SSP SSO	
														DRB1*03:100 DRB1*03:68N DRB1*03:83 DRB1*03:104 DRB1*03:112 DRB4*01:09 DRB4*01:10 DQB1*03:110 DQB1*03:161
774	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02			*02:01		SSP SSO	
779	*03:01				*03:01	*05:01	*02:01	*03:01	*01:03		*02:01		SSP SSO	
792	*03:01	*04:04					*02:01	*03:02			*02:01		SSO SBT	
793					*03:01	*05:01					*02:01		SSP	
2344	*03:01:01	*04:04:01					*02:01:01	*03:02:01			*02:01:02G	*02:01:02G	NGS	
2400	*03:01	*04:04			*03:01	*05:01	*02:01	*03:02			*02:01:02G		SSP SSO SBT	
3135	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*02:01	*02:01		
3224	*03:01:01G	*04:04	NT	NT	NT	NT	*02:01	*03:02	NT	NT	NT	NT	SSP SBT	
3511	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*02:01	*02:01	SSP SSO	
3519	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*02:01		SSP NGS	
3632	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*02:01		SSP SSO	
3753	*03:01:01	*04:04:01	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01	*01:03:01	*01:03:01	*02:01:02	*02:01:02	NGS	
3966	*03:01	*04:04	3*01:01	4*01:03			*02:01	*03:02					SSP	
4079	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*02:01		SSP SSO NGS	
4251	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*02:01	*02:01	SSO NGS	
4337	*03:01	*04:04					*02:01	*03:02			*02:01	*02:01	SBT NGS	
4492	*03:01:01	*04:04:01	3*01:01	4*01:03	*03:01:01	*05:01:01:02	*02:01:01	*03:02:01	*01:03	*01:03	*02:01:02		SSP SSO NGS	DPA1*01:13
5130	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02			*02:01	*02:01	SSO NGS	DRB1*04:22
5133	*03:01:01	*04:04:01	3*01:01:02	4*01:03:01	*03:01:01	*05:01:01	*02:01:01	*03:02:01:02	*01:03:01:01		*02:01:02		NGS	
5451	*03:01:01	*04:04:01											SSO SBT	
5488	*03:01:01	*04:04:01			*03:01	*05:01	*02:01:01	*03:02:01			*02:01:02		SSP SSO SBT NGS	DRB1*03:06 DRB1*04:42
5642	*03:01	*04:04					*02:01	*03:02					SSP	
8001	*03:01	*04:04	3*01:01	4*01:03			*02:01	*03:02			*02:01		SSP SSO	
8021	*03:01	*04:04	3*01:01	4*01:03	*03:01	*05:01	*02:01	*03:02	*01:03		*02:01		SSO NGS	
8043	*03:01	*04:04			*03:01	*05:01	*02:01	*03:02:01:01					SSP SSO	
8070	*03:01	*04:04					*02:01	*03:02					SBT	
8086	*03:01	*04:04			*03:01	*05:01	*02:01	*03:02	*01:03	*01:03	*02:01	*02:01	SSO SBT	

Table 4: Individual laboratory results for B-cell #557-Class II

Serology										
CTR	DRB1		DRB3/4/5		DQB1		Others			
910	DR18	DR4	DR52	DR53		DQ2	DQ3	DR17		

Table 5: Individual laboratory results for B-cell #557 - Class I

Low resolution										High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C						
87	*01	*03	*08	*40	*03	*07							RT-PCR				
206	*01	*03	*08	*40	*03	*07							SSO				
230							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSO SBT				
278	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01					
725	*01	*03	*08	*40	*03	*07							SSP SSO				
735	*01	*03	*08	*40	*03	*07	*01:01P	*03:01P	*08:01P	*40:31	*03:04P	*07:01P	SSP SSO SBT				
747	*01	*03	*08	*40	*03	*07	*01:01:01:01	*03:01:01:01	*08:01:01:01	*40:31	*03:04:01:01	*07:01:01:01	SSP SSO NGS				
774	*01	*03	*08	*40	*03	*07				*40:31			SSP SSO				
779	*01	*03	*08	*40	*03	*07				*40:31	*03:04		SSP SSO				
792	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSO SBT	A*03:01:01:02N			
793	*01	*03	*08	*40	*03	*07							SSP				
2344							*01:01:01	*03:01:01	*08:01:01	*40:31	*03:04:01	*07:01:01	NGS				
2400	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSP SSO SBT				
2847	*01	*03	*08	*40	*03	*07							SSO				
3135							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01					
3224							*01:01:01G	*03:01	*08:01:01G	*40:31	*03:04:01G	*07:01:01G	SSP SBT				
3511							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSP SSO				
3519	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSP NGS				
3753							*01:01:01	*03:01:01	*08:01:01	*40:31	*03:04:01	*07:01:01	NGS				
3966	*01	*03	*08	*40	*03	*07							SSP				
4079	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSP SSO NGS				
4251	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSO NGS				
4337							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SBT NGS				
4492	*01	*03	*08	*40	*03	*07	*01:01:01:01	*03:01:01:01	*08:01:01:01	*40:31	*03:04:01:01	*07:01:01	SSP SSO NGS				
5130	*01	*03	*08	*40	*03	*07	*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSO NGS				
5133							*01:01:01:01	*03:01:01:01	*08:01:01:01	*40:31	*03:04:01:01	*07:01:01:01	NGS				
5214	*01	*03	*08	*40 (B60)	*03 (Cw10)	*07							RT-PCR				
5219	*01	*03	*08	*40	*03	*07							SSO				
5462	*01	*03	*08	*40	*03	*07							RT-PCR				
5488							*01:01:01	*03:01:01	*08:01:01	*40:31	*03:04:01	*07:01:01	SSP SSO SBT				
8021							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	NGS				
8029	*01	*03	*08	*40	*03	*07							SSO				
8068	*01	*03	*08	*40	*03	*07							SSO				
8086							*01:01	*03:01	*08:01	*40:31	*03:04	*07:01	SSO SBT				
9916	*01	*03	*08	*40	*03	*07							SSP	B*48			

Table 6a: Individual laboratory results for B-cell #558 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
87	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*03	RT-PCR	DPB1*124
206	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02	*03	SSO	DPB1*104
278	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*03		
725	*11	*13	3*PRESENT		*01	*05	*03	*06					SSP SSO	
731	*11	*13			*01	*05	*03	*06					SSP SSO SBT	
735	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02(DP201)	*03	SSP SSO SBT	
747	*11	*13	3*PRESENT	3*PRESENT	*01	*05	*03	*06	*01	*01	*02	*03	SSP SSO NGS	
771	*11	*13			*01	*05	*03	*06					SSP SSO	
774	*11	*13	3*02	3*03	*01	*05	*03	*06			*02(DP201)	*03	SSP SSO	
779	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02(DP201)	*03	SSP SSO	
792	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*03	SSO SBT	
793	*11	*13	3*02	3*03	*01	*05	*03	*06			*02(DP201)	*03	SSP	
2400	*11	*13	3*02	3*03	*01	*05	*03	*06			*02	*03	SSP SSO SBT	
2847	*11	*13											SSO	
3519	*11	*13			*01	*05	*03	*06	*01		*02(DP201)	*03	SSP NGS	
3632	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02(DP201)	*03	SSP SSO	
3966													SSP	
4079	*11	*13			*01	*05	*03	*06	*01		*02(DP201)	*03	SSP SSO NGS	
4251	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*03	SSO NGS	
4492	*11	*13	3*PRESENT		*01	*05	*03	*06	*01		*02(DP201)	*03	SSP SSO NGS	
5130	*11	*13	3*02	3*03	*01	*05	*03	*06			*02	*03	SSO NGS	
5214	*11	*13	3*02	3*03	*01	*05	*03 (DQ7)	*06	*01		*02(DP201)	*03	RT-PCR	
5219	*11	*13			*01	*05	*03	*06					SSO	
5451	*11	*13	3*02	3*03	*01	*05	*03	*06					SSO SBT	
5462	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		NT	NT	RT-PCR	
5488			3*02	3*03									SSP SSO SBT NGS	
5642	*11	*13	3*PRESENT				*03	*06					SSP	
6649	*11	*13	3*PRESENT										SSO	
8001	*11	*13			*01	*05	*03	*06					SSP SSO	
8029	*11	*13			*01	*05	*03	*06					SSO	
8043	*11	*13			*01	*05	*03	*06					SSP SSO	
8068	*11	*13			*01	*05	*03	*06					SSO	
9916	*11	*13	3*PRESENT				*03	*06					SSP	DRB1*03 DQB1*03

Table 6b: Individual laboratory results for B-cell #558 - Class II

Center	High resolution												METHOD	Other Alleles
	DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPB1				
230	*11:01	*13:02					*03:01	*06:04			*02:01	*03:01	SSO SBT	
278	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*01:03	*02:01	*03:01		
731	*11:01	*13:02:01					*03:01	*06:04					SSP SSO SBT	DQB1*03:22 DQB1*06:39
735	*11:01	*13:02	3*02:02P	3*03:01P	*01:02	*05:05	*03:01	*06:04	*01:03P		*02:01	*03:01	SSP SSO SBT	DPA1*01:13
747	*11:01:01	*13:02:01	3*02:02:01:02	3*03:01:01	*01:02:01:04	*05:05:01	*03:01:01:03	*06:04:01	*01:03:01:03	*01:03:01:04	*02:01:02	*03:01:01	SSP SSO NGS	DPB1*124:01 DPB1*414:01 DPB1*461:01 DPB1*352:01
762	*11:01:01	*13:02:01	3*02:02:01:02	3*03:01:01	*01:02:01	*05:05:01	*03:01:01:03	*06:04:01	*01:03:01:03	*01:03:01:04	*02:01:02	*03:01:01	NGS	
771	*11:01	*13:02					*03:01	*06:04					SSP SSO	
774	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04			*02:01	*03:01	SSP SSO	DRB1*11:97 DRB1*11:100 DRB1*11:117 DRB1*11:157 DRB1*11:158 DQB1*03:73 DQB1*03:92 DQB1*03:93
779					*01:02	*05:05	*03:01	*06:04	*01:03		*02:01	*03:01	SSP SSO	
792	*11:01	*13:02					*03:01	*06:04			*02:01	*03:01	SSO SBT	
793					*01:02	*05:05					*02:01	*03:01	SSP	
2344	*11:01:01	*13:02:01					*03:01:01G	*06:04:01			*02:01:02G	*03:01:01G	NGS	
2400	*11:01	*13:02			*01:02	*05:05	*03:01	*06:04			*02:01:02G	*03:01:01G	SSP SSO SBT	
3135	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*01:03	*02:01	*03:01		DQA1*05:09
3224	*11:01:01G	*13:02:01G	NT	NT	NT	NT	*03:01:01G	*06:04:01G	NT	NT	NT	NT	SSP SBT	
3511	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*01:03	*02:01	*03:01	SSP SSO	
3519	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03		*02:01	*03:01	SSP NGS	
3632	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03		*02:01	*03:01	SSP SSO	
3753	*11:01:01	*13:02:01	3*02:02:01	3*03:01:01	*01:02:01	*05:05:01	*03:01:01	*06:04:01	*01:03:01	*01:03:01	*02:01:02	*03:01:01	NGS	
3966	*11:01	*13:02	3*02:02	3*03:01			*03:01	*06:04					SSP	
4079	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03		*02:01	*03:01	SSP SSO NGS	
4251	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*01:03	*02:01	*03:01	SSO NGS	
4337	*11:01	*13:02					*03:01	*06:04			*02:01	*03:01	SBT NGS	
4492	*11:01:01	*13:02:01	3*02:02	3*03:01	*01:02:01	*05:05:01	*03:01:01	*06:04:01	*01:03	*01:03	*02:01:02	*03:01:01	SSP SSO NGS	DRB3*03:02 DPA1*01:13
5130	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04			*02:01	*03:01	SSO NGS	
5133	*11:01:01	*13:02:01	3*02:02:01	3*03:01:01	*01:02:01	*05:05:01	*03:01:01	*06:04:01	*01:03:01		*02:01:02	*03:01:01	NGS	
5451	*11:01:01	*13:02:01											SSO SBT	
5488	*11:01:01	*13:02:01			*01:02:01	*05:05:01	*03:01:01	*06:04:01	*01:03:01		*02:01:02	*03:01:01	SSP SSO SBT	
5642	*11:01	*13:02					*03:01	*06:04					NGS	
8001	*11:01	*13:02	3*02:02	3*03:01			*03:01	*06:04			*02:01	*03:01:01G	SSP SSO	
8021	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03		*02:01	*03:01	SSO NGS	

Table 6b: Individual laboratory results for B-cell #558 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
8043	*11:01	*13:02			*01:02	*05:05	*03:01	*06:04					SSP SSO	
8070													SBT	
8086	*11:01	*13:02			*01:02	*05:05	*03:01	*06:04	*01:03	*01:03	*02:01	*03:01	SSO SBT	

Table 7: Individual laboratory results for B-cell #558-Class II

Serology										
CTR	DRB1		DRB3/4/5		DQB1				Others	
910	DR11	DR4	DR52	DR53			DQ7	DQ1		

Table 8: Individual laboratory results for B-cell #558 - Class I

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
87	*02	*23	*40	*44	*03	*04							RT-PCR	
206	*02	*23	*40	*44	*03	*04							SSO	
230							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSO SBT	
278	*02	*23	*40	*44	*03	*04	*02:01	*23:01	*40:14	*44:03	*03:04	*04:01		
725	*02	*23	*40	*44	*03	*04							SSP SSO	
735	*02	*23	*40	*44	*03	*04	*02:01P	*23:01:01G	*40:14	*44:03	*03:04P	*04:01P	SSP SSO SBT	
747	*02	*23	*40	*44	*03	*04	*02:01:01:01	*23:01:01	*40:14:03	*44:03:01:01	*03:04:01:01	*04:01:01:01	SSP SSO NGS	
774	*02	*23	*40	*44	*03	*04			*40:14				SSP SSO	B*40:121
779	*02	*23	*40	*44	*03	*04			*40:01	*44:03	*03:04		SSP SSO	B*40:01:13
792	*02	*23	*40	*44	*03	*04	*02:01	*23:01	*40:14:03	*44:03	*03:04	*04:09N	SSO SBT	A*02:01:01:02L
793	*02	*23	*40	*44	*03	*04							SSP	
2344							*02:01:01	*23:01:01	*40:14:03	*44:03:01	*03:04:01	*04:01:01	NGS	
2400	*02	*23	*40	*44	*03	*04	*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSP SSO SBT	
2847	*02	*23	*40	*44	*03	*04							SSO	
3135							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01		
3224							*02:01:01G	*23:01:01G	*40:14:03	*44:03	*03:04:01G	*04:01P	SSP SBT	
3511							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSP SSO	
3519	*02	*23	*40	*44	*03	*04	*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSP NGS	
3753							*02:01:01	*23:01:01	*40:14:03	*44:03:01	*03:04:01	*04:01:01	NGS	
3966	*02	*23	*40	*44	*03	*04							SSP	
4079	*02	*23	*40	*44	*03	*04	*02:01	*23:01		*44:03	*03:04	*04:01	SSP SSO NGS	
4251	*02	*23	*40	*44	*03	*04	*02:01	*23:01		*44:03	*03:04	*04:01	SSO NGS	
4337							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SBT NGS	
4492	*02	*23	*40	*44	*03	*04	*02:01:01	*23:01:01	*40:14:03	*44:03:01	*03:04:01:01	*04:01:01	SSP SSO NGS	
5130	*02	*23	*40	*44	*03	*04	*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSO NGS	
5133							*02:01:01	*23:01:01	*40:14:03	*44:03:01	*03:04:01:01	*04:01:01:14	NGS	
5214	*02	*23	*40 (B60)	*44	*03 (Cw10)	*04							RT-PCR	
5219	*02	*23	*40	*44	*03	*04							SSO	
5462	*02	*23	*40	*44	*03	*04							RT-PCR	
5488							*02:01:01	*23:01:01	*40:14:03	*44:03:01	*03:04:01	*04:01:01	SSP SSO SBT	
8021							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSO NGS	
8029	*02	*23	*40	*44	*03	*04							SSO	
8068	*02	*23	*40	*44	*03	*04							SSO	
8086							*02:01	*23:01	*40:14	*44:03	*03:04	*04:01	SSO SBT	
9916	*02	*23	*40	*44	*03	*04							SSP	