

B-CELL LINE EXCHANGE #280

APRIL 8, 2019

B-cell Lines 559-560

The results for B-cell Line Exchange #280 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. We are most grateful to **Leiden University Medical Centre, Leiden** for kindly providing the valuable reference cells examined in our studies. We would also like to acknowledge and thank the labs performing NGS for shar-

ing 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-559. The consensus type for this cell from a Caucasian donor is DRB1*01:01-DRB1*07:01-DRB4*01:01-DRB5*01:01-DQA1*01:01-DQA1*02:01-DQB1*02:02-DQB1*05:01-DPA1*01:03-DPB1*02:01-DPB1*04:01/A*01:01-A*26:01-B*08:01-B*38:09-C*07:01-C*12:03. One likely association present is A*01:01-B*08:01-DRB1*01:01-DQB1*05:01, observed in Caucasian, with HF = 0.00308. The other likely association present is A*26:01-B*38:09-DRB1*07:01-DQB1*02:02, as observed in the B*38:09 reference cell, CS00065. The A*23:01-B*38:09 association in this cell, is observed exclusively in Caucasian, with HF = 0.00006.

This cell is TER299, one of the reference cells for B*38:09. It was previously examined in the Exchange as Ter-299 (2002) and extracts 585 (2013) and 434 (2008). In this present study, B*38:09 was reported in complete consensus, confirming previous findings. B*08:01 (100%) was reported as the second B-locus type, with 7 labs assigning B*08:01:01.

DRB1*01:01 and DRB1*07:01 were also reported in complete consensus, with 9 labs reporting DRB1*01:01:01 and DRB1*07:01:01. Interestingly, DRB5*01:01 (100%) was reported along with DRB1*01:01. The presence of this uncommon DRB5-DRB*01 linkage was noted by Rubocki. In addition, Wieten detected the presence of a possible new DRB1 allele in this cell, noting the new allele is "identical to DRB1*01:01:01 with a change of C to A at position 7636 in the genomic DNA."

Ter-560. The consensus type for this sample from a donor of unknown ethnicity is DRB1*01:01-DRB1*14:54-DRB3*02:02-DQA1*01:01-DQA1*01:04-DQB1*05:01-DQB1*05:03-DPA1*01:03-DPB1*02:01-DPB1*04:02/A*03:01-B*35:01-B*35:03-C*04:01. One likely association present in this cell is A*03:01-B*35:01-DRB1*01:01-DQB1*05:01, observed across all populations, with the highest frequency (HF = 0.01270) observed in Caucasians. The other likely association present may then be A*03:01-B*35:03-DRB1*14:54-DQB1*05:03. The association of B*35:03-DRB1*14:54-DRB3*02:02-DQB1*05:03-DPA1*01:03-DPB1*02:01 present in this cell was also observed in KOSE, a reference cell for DRB1*14:54:01:01.

This cell was previously examined for class II back in 1993 as Ter-131. In this present retyping DRB1*01:01 and DRB1*14:54 were each reported in complete consensus, with 9 labs reporting DRB1*01:01:01 and DRB1*14:54:01. Two subtypes of DQA1*01 and DQB1*05 were present in this cell, DQA1*01:01 (96%), DQA1*01:04 (96%), DQB1*05:01 (100%), and DQB1*05:03 (100%). A*03:01 (100%), B*35:01 (100%), B*35:03 (100%), and C*04:01 (100%), were the assigned class I types, with 7 labs assigning A*03:01:01, B*35:01:01, B*35:03:01, and C*04:01:01.

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Table 1: Summary of the 280th B-cell Line Exchange

Ter-559

DNA Typing - class II		<u>33 labs High; 29 labs low-DRB1</u>		<u>23 labs High; 21 labs Low-DRB3/4/5</u>		<u>23 labs High; 26 labs Low-DQA1</u>		<u>32 High Labs; 27 labs Low-DQB1</u>		<u>19 High Labs; 14 labs Low-DPA1</u>		<u>30 High Labs; 17 labs Low-DPB1</u>		
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DNA Typing - class II	DRB1*01:01:01	27(9)		DRB4*01:01:01:01	17(4)	DQA1*01:01:01:01	9 (2)	DQB1*02:02:01	25(8)	DPA1*01:03:01:01	16(3)	DPB1*02:01:02	27(8)	
	DRB1*01:01	73(24)		DRB4*01:01:01	9 (2)	DQA1*01:01:01:03	4 (1)	DQB1*02:01P	3 (1)	DPA1*01:03:01	16(3)	DPB1*02:01G	3 (1)	
	DRB1*01	100(29)		DRB4*01:01P	4 (1)	DQA1*01:01:01	9 (2)	DQB1*02:02	72(23)	DPA1*01:03P	5 (1)	DPB1*02:01	70(21)	
				DRB4*01:01	70(16)	DQA1*01:01	78(18)	DQB1*02	100(27)	DPA1*01:03	63(12)	DPB1*02(DP201)	53(9)	
				DRB4*PRESENT	19(4)	DQA1*01	100(26)			DPA1*01	100(14)	DPB1*02	47(8)	
				DRB4*01	81(17)									
DNA Typing - class II	<u>33 labs High; 29 labs low-DRB1</u>	%(n)		<u>22 labs High; 19 labs Low-DRB3/4/5</u>	%(n)	<u>23 labs High; 26 labs Low-DQA1</u>	%(n)	<u>32 High Labs; 27 labs Low-DQB1</u>	%(n)			<u>30 High Labs; 17 labs Low-DPB1</u>	%(n)	
	DRB1*07:01:01:01	6 (2)		DRB5*01:01:01	32(7)	DQA1*02:01:01:01	9 (2)	DQB1*05:01:01:03	9 (3)			DPB1*04:01:01:02	3 (1)	
	DRB1*07:01:01	21(7)		DRB5*01:01P	4 (1)	DQA1*02:01:01	13(3)	DQB1*05:01:01	13(4)			DPB1*04:01:01	23(7)	
	DRB1*07:01:01G	3 (1)		DRB5*01:01	64(14)	DQA1*02:01	78(18)	DQB1*05:01	78(25)			DPB1*04:01G	3 (1)	
	DRB1*07:01P	3 (1)		DRB5*PRESENT	21(4)	DQA1*02	100(26)	DQB1*05	100(27)			DPB1*04:01	70(21)	
	DRB1*07:01	67(22)		DRB5*01	79(15)							DPB1*04(DP401)	47(8)	
	DRB1*07	100(29)										DPB1*04	53(9)	
DNA Typing - class I	<u>23 labs High; 22 labs low- A</u>	%(n)		<u>23 labs High; 22 labs low- B</u>	%(n)	<u>23 labs High; 22 labs low- C</u>	%(n)							
	A*01:01:01:01	17(4)		B*08:01:01:01	13(3)	C*07:01:01:01	9 (2)							
	A*01:01:01	13(3)		B*08:01:01	17(4)	C*07:01:01	22(5)							
	A*01:01P	4 (1)		B*08:01P	4 (1)	C*07:01P	4 (1)							
	A*01:01	65(15)		B*08:01	65(15)	C*07:01	65(15)							
	A*01	100(22)		B*08	100(22)	C*07	100(22)							
DNA Typing - class I	<u>23 labs High; 22 labs low- A</u>	%(n)		<u>23 labs High; 22 labs low- B</u>	%(n)	<u>23 labs High; 22 labs low- C</u>	%(n)							
	A*26:01:01:01	17(4)		B*38:09	100(23)	C*12:03:01:01	17(4)							
	A*26:01:01	13(3)		B*38	95(21)	C*12:03:01	13(3)							
	A*26:01P	4 (1)		B*39	5 (1)	C*12:03P	4 (1)							
	A*26:01	65(15)				C*12:03	65(15)							
	A*26	100(22)				C*12	100(22)							

Table 3a: Individual laboratory results for B-cell #559 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
206	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02	*04		
278	*01	*07	4*01	5*01	*01	*02	*02	*05	*01	*01	*02	*04		
725	*01	*07	4*PRESENT	5*PRESENT	*01	*02	*02	*05					SSP SSO	
731	*01	*07			*01	*02	*02	*05					SSP SSO SBT	
735	*01	*07	4*01	5*01	*01	*02	*02	*05	*01	*01	*02(DP201)	*04(DP401)	SSP SSO SBT	
747	*01	*07	4*PRESENT	5*PRESENT	*01	*02	*02	*05	*01	*01	*02	*04	SSP SSO NGS	
771	*01	*07			*01	*02	*02	*05					SSP SSO	
774	*01	*07	4*01	5*01	*01	*02	*02	*05			*02(DP201)	*04(DP401)	SSP SSO	
792	*01	*07	4*01	5*01	*01	*02	*02	*05	*01	*01	*02	*04	SSP SSO SBT	
793	*01	*07	4*01	5*01	*01	*02	*02	*05			*02(DP201)	*04(DP401)	SSP	
794	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02	*04	SSP SSO NGS	
2400	*01	*07	4*01	5*01	*01	*02	*02	*05	*01	*01	*02	*04	RT-PCR	
2847	*01	*07											SSO NGS	
3519	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02(DP201)	*04(DP401)	SSO	
3632	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02	*04	SSP NGS RT-PCR	
3966													SSP SSO	
4079	*01	*07											SSP	
4079	*01	*07			*01	*02	*02	*05	*01		*02(DP201)	*04(DP401)	SSP	
4251	*01	*07	4*01	5*01	*01	*02	*02	*05	*01	*01	*02(DP201)	*04(DP401)	SSP SSO NGS	
4492	*01	*07	4*PRESENT	5*PRESENT	*01	*02	*02	*05	*01		*02(DP201)	*04(DP401)	SSP SSO NGS	
5130	*01	*07	4*01		*01	*02	*02	*05			*02	*04	SSP SSO	
5214	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02(DP201)	*04(DP401)	SSO NGS	
5219	*01	*07			*01	*02	*02	*05					RT-PCR	
5451	*01	*07	4*01	5*01	*01	*02	*02	*05					SSO	
5451	*01	*07	4*01	5*01	*01	*02	*02	*05					SSO SBT	
5462	*01	*07	4*01	5*01	*01	*02	*02	*05	*01		*02(DP201)	*04	SSP SSO	
5488			4*01										SSP SSO NGS	
5642	*01	*07	4*PRESENT	5*PRESENT			*02	*05					SSP	
6649	*01	*07											SSO	
8001	*01	*07	4*01	5*01	*01	*02	*02	*05					SSP SSO	
8029	*01	*07			*01	*02	*02	*05					SSO	
8043	*01	*07			*01	*02	*02	*05					SSP SSO	
8068	*01	*07			*01	*02	*02	*05					SSO	

Table 3b: Individual laboratory results for B-cell #559 - Class II

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
230	*01:01	*07:01					*02:02	*05:01			*02:01	*04:01	SSO SBT	
278	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03	*01:03	*02:01	*04:01		
731	*01:01:01	*07:01					*02:02:01	*05:01					SSP SSO SBT	
735	*01:01	*07:01P	4*01:01P	5*01:01P	*01:01	*02:01	*02:01P	*05:01	*01:03P	*01:03P	*02:01	*04:01	SSP SSO SBT	
747	*01:01:01	*07:01:01:01	4*01:01:01:01	5*01:01:01	*01:01:01:01	*02:01:01:01	*02:02:01	*05:01:01:03	*01:03:01:01	*01:03:01	*02:01:02	*04:01:01:02	SSP SSO NGS	
762	*01:01:01	*07:01:01:01	4*01:01:01:01	5*01:01:01	*01:01:01:03	*02:01:01	*02:02:01	*05:01:01:03	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01	SSO NGS	
771	*01:01	*07:01					*02:02	*05:01					SSP SSO	
														DRB1*01:64 DRB1*01:50 DRB1*01:62N DRB1*01:67 DRB1*07:31 DRB1*07:33 DRB1*07:35 DRB1*07:35 DRB5*01:16
774	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01			*02:01	*04:01	SSP SSO	
792	*01:01	*07:01					*02:02	*05:01			*02:01	*04:01	SSP SSO SBT	
793					*01:01	*02:01					*02:01	*04:01	SSP	
794	*01:01:01	*07:01:01	4*01:01:01	5*01:01:01	*01:01	*02:01	*02:02:01	*05:01:01	NT		*02:01:02	*04:01:01	SSP SSO NGS RT-PCR	
2344	*01:01:01	*07:01:01	4*01:01:01:01	5*01:01:01			*02:02:01	*05:01:01	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01	NGS	DPB1*02:01:19
2400	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03	*01:03	*02:01	*04:01	SSO NGS	
														DQA1*01:04 DQA1*01:05
3135	*01:01	*07:01	4*01:01		*01:01	*02:01	*02:02	*05:01	*01:03		*02:01	*04:01		
3224	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03		*02:01	*04:01	NGS	
3511	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03	*01:03	*02:01	*04:01	SSP SSO	
3519	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03	*01:03	*02:01	*04:01	SSP NGS RT-PCR	
3632	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03		*02:01	*04:01	SSP SSO	
3753	*01:01:01	*07:01:01	4*01:01:01	5*01:01:01	*01:01:01	*02:01:01	*02:02:01	*05:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	NGS	
3966	*01:01	*07:01	4*01:01	5*01:01			*02:02	*05:01					SSP	
4079	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03		*02:01	*04:01	SSP SSO NGS	
4251	*01:01	*07:01:01G	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03	*01:03	*02:01	*04:01	SSP NGS	
4337	*01:01	*07:01					*02:02	*05:01			*02:01	*04:01	SBT NGS	
4492	*01:01	*07:01:01	4*01:01	5*01:01	*01:01:01	*02:01:01	*02:02	*05:01:01	*01:03	*01:03	*02:01:02	*04:01:01	SSP SSO NGS	DPA1*01:13
5130	*01:01	*07:01	4*01:01		*01:01	*02:01	*02:02	*05:01			*02:01	*04:01	SSO NGS	
5133	*01:01:01	*07:01:01	4*01:01:01:01	5*01:01:01	*01:01:01:01	*02:01:01:01	*02:02:01	*05:01:01:03	*01:03:01		*02:01:02	*04:01:01	NGS	DPB1*02:01:19
5214											*02:01G	*04:01G	RT-PCR	
5451	*01:01:01	*07:01:01											SSO SBT	

Table 3b: Individual laboratory results for B-cell #559 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DPB1*643:01 DPB1*658:01 DPB1*670:01 DPB1*677:01 DPB1*682:01 DPB1*683:01 DPB1*696:01N DPB1*640:01 DPB1*678:01 DPB1*681:01 DPB1*685:01 DPB1*692:01 DPB1*700:01N
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			SSP SSO	
5488	*01:01:01	*07:01:01		5*01:01:01	*01:01	*02:01	*02:02:01	*05:01:01	*01:03:01				SSP SSO NGS	
5642	*01:01	*07:01					*02:02	*05:01					SSP	
8001	*01:01	*07:01	4*01:01	5*01:01			*02:02	*05:01					SSP SSO	
8021	*01:01	*07:01	4*01:01	5*01:01	*01:01	*02:01	*02:02	*05:01	*01:03				SSP SSO	
8043	*01:01	*07:01			*01:01	*02:01	*02:02	*05:01					SSP SSO	
8086	*01:01	*07:01			*01:01	*02:01	*02:02	*05:01	*01:03	*01:03			SSO SBT	
9916	*01:01	*07:01	4*01:01	5*01:01			*02:02	*05:01					SSO SBT	

Table 4: Individual laboratory results for B-cell #559 - Class I

Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
206	*01	*26	*08	*38	*07	*12								
230							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSO SBT	
278	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03		
725	*01	*26	*08	*38	*07	*12							SSP SSO	
735	*01	*26	*08	*38	*07	*12	*01:01P	*26:01P	*08:01P	*38:09	*07:01P	*12:03P	SSP SSO SBT	
747	*01	*26	*08	*38	*07	*12	*01:01:01:01	*26:01:01:01	*08:01:01:01	*38:09	*07:01:01:01	*12:03:01:01	SSP SSO NGS	
774	*01	*26	*08	*38	*07	*12							SSP SSO	
792	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSP SSO SBT	
793	*01	*26	*08	*38	*07	*12							SSP	
794	*01	*26	*08	*38	*07	*12	*01:01:01	*26:01:01	*08:01:01	*38:09	*07:01:01	*12:03:01	SSP SSO NGS RT-PCR	
2344							*01:01:01:01	*26:01:01:01	*08:01:01	*38:09	*07:01:01	*12:03:01:01	NGS	
2400	*01	*26	*08	*39	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSO NGS	
2847	*01	*26	*08	*38	*07	*12							SSO	
3135							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03		
3224							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	NGS	
3511							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSP SSO	
3519	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSP NGS RT-PCR	
3753							*01:01:01	*26:01:01	*08:01:01	*38:09	*07:01:01	*12:03:01	NGS	
3966	*01	*26	*08	*38	*07	*12							SSP	
4079	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSP SSO NGS	
4251	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSP NGS	
4337							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SBT NGS	
4492	*01	*26	*08	*38	*07	*12	*01:01:01:01	*26:01:01:01	*08:01:01:01	*38:09	*07:01:01	*12:03:01:01	SSP SSO NGS	
5130	*01	*26	*08	*38	*07	*12	*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSO NGS	
5133							*01:01:01:01	*26:01:01:01	*08:01:01:01	*38:09	*07:01:01:01	*12:03:01:01	NGS	
5214	*01	*26	*08	*38	*07	*12							RT-PCR	
5219	*01	*26	*08	*38	*07	*12							SSO	
5462	*01	*26	*08	*38	*07	*12	NT	NT	NT	NT	NT	NT	SSP SSO	
5488							*01:01:01	*26:01:01	*08:01:01	*38:09	*07:01:01	*12:03:01	SSP SSO NGS	
8021							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSO NGS	
8029	*01	*26	*08	*38	*07	*12							SSO	
8068	*01	*26	*08	*38	*07	*12							SSO	
8086							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SSO SBT	
9916							*01:01	*26:01	*08:01	*38:09	*07:01	*12:03	SBT	B*08:173 B*08:183 C*07:73 C*07:92 C*12:147

Table 5a: Individual laboratory results for B-cell #560 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
206	*01	*14	3*02		*01		*05	*05	*01		*02	*04		
278	*01	*14	3*02 NT		*01	*01	*05	*05	*01	*01	*02	*04		
725	*01	*14	3*PRESENT		*01		*05						SSP SSO	
731	*01	*14			*01	*01	*05	*05					SSP SSO SBT	
735	*01	*14	3*02		*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP402)	SSP SSO SBT	
747	*01	*14	3*PRESENT 3*PRESENT		*01	*01	*05	*05	*01	*01	*02	*04	SSP SSO NGS	
771	*01	*14			*01		*05	*05					SSP SSO	
774	*01	*14	3*02		*01	*01	*05	*05			*02(DP201)	*04(DP402)	SSP SSO	
792	*01	*14	3*02		*01	*01	*05	*05	*01	*01	*02	*04	SSP SSO SBT	
793	*01	*14	3*02		*01	*01	*05				*02	*04	SSP	
794	*01	*14	3*02		*01		*05		*01		*02	*04	SSP SSO NGS	
2400	*01	*14	3*02		*01	*01	*05	*05	*01	*01	*02	*04	RT-PCR	
2847	*01	*14											SSO NGS	
3519	*01	*14	3*02		*01		*05		*01		*02(DP201)	*04(DP402)	SSO	
3632	*01	*14	3*02		*01	*01	*05	*05	*01		*02	*04	SSP NGS RT-PCR	
3966		*14											SSP	
4079	*01	*14			*01		*05		*01		*02(DP201)	*04(DP402)	SSP SSO	
4251	*01	*14	3*02		*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP402)	SSP SSO NGS	
4492	*01	*14	3*PRESENT		*01		*05		*01		*02(DP201)	*04(DP402)	SSP NGS	
5130	*01	*14	3*02		*01	*01	*05	*05			*02	*04	SSP SSO NGS	
5214	*01	*14	3*02		*01		*05	*05	*01		*02(DP201)	*04(DP402)	SSO NGS	
5219	*01	*14			*01	*01	*05	*05					RT-PCR	
5451	*01	*14	3*02		*01		*05	*05					SSO	
5462	*01	*14	3*02		*01		*05	*05	*01		*02(DP201)	*04(DP402)	SSO SBT	
5488													SSP SSO	
5642	*01	*14	3*PRESENT				*05	*05					SSP SSO NGS	
6649	*01	*14											SSP	
8001	*01	*14	3*02		*01		*05	*05					SSO	
8029	*01	*14			*01	*01	*05	*05					SSP SSO	
8043	*01	*14			*01	*01	*05	*05					SSO	
8068	*01	*14			*01	*01	*05	*05					SSP SSO	
													SSO	

Table 5b: Individual laboratory results for B-cell #560 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*14:54					*05:01	*05:03			*02:01	*04:02	SSO SBT	
278	*01:01	*14:54	3*02:02	NT	*01:05	*01:05	*05:01	*05:03	*01:03	*01:03	*02:01	*04:02		
731	*01:01:01	*14:54					*05:01	*05:03					SSP SSO SBT	
735	*01:01	*14:54	3*02:02P		*01:01P	*01:01P	*05:01	*05:03P	*01:03P	*01:03P	*02:01P	*04:02P	SSP SSO SBT	
747	*01:01:01	*14:54:01	3*02:02:01:01	3*02:02:01:01	*01:01:01:01	*01:04:01:01	*05:01:01:03	*05:03:01	*01:03:01:01	*01:03:01:05	*02:01:02	*04:02:01	SSP SSO NGS	DPB1*105:01 DPB1*416:01 DPB1*665:01
762	*01:01:01	*14:54:01	3*02:02:01:01		*01:01:01:03	*01:04:01:01	*05:01:01:03	*05:03:01:01	*01:03:01:01	*01:03:01:05	*02:01:02	*04:02:01	SSO NGS	DPB1*105:01 DPB1*416:01
771	*01:01	*14:54					*05:01	*05:03					SSP SSO	
774	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03			*02:01	*04:02	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:67 DQB1*05:48 DQB1*05:61 DQB1*05:51 DQB1*05:55 DQB1*05:68 DQB1*05:74 DQB1*05:76 DQB1*05:67
792	*01:01	*14:54					*05:01	*05:03			*02:01	*04:02	SSP SSO SBT	DPB1*416:01 DPB1*105:01
793					*01:01	*01:04					*02:01:02G	*04:02:01G	SSP	
794	*01:01:01	*14:54:01	3*02:02:01		*01:01	*01:04	*05:01:01	*05:03:01	NT		*02:01:02	*04:02:01	SSP SSO NGS RT-PCR	DPB1*416:01 DPB1*105:01
2344	*01:01:01	*14:54:01	3*02:02:01				*05:01	*05:03:01	*01:03:01:01	*01:03:01:05	*02:01:02	*04:02:01	NGS	
2400	*01:01	*14:54	3*02:02:01G		*01:01	*01:04	*05:01	*05:03	*01:03	*01:03	*02:01	*04:02	SSO NGS	DPB1*416:01 DPB1*105:01
3135	*01:01	*14:54	3*02:02:01		*01:01		*05:01	*05:03	*01:03		*02:01	*04:02		DQA1*01:04 DQA1*01:05
3224	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03		*02:01:02G	*04:02:01G	NGS	
3511	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03	*01:03	*02:01	*04:02	SSP SSO	
3519	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03	*01:03	*02:01P	*04:02P	SSP NGS RT-PCR	DPB1*105:01 DPB1*416:01
3632	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03		*02:01P	*04:02P	SSP SSO	
3753	*01:01:01	*14:54:01	3*02:02:01	NP	*01:01:01	*01:04:01	*05:01	*05:03:01	*01:03:01	*01:03:01	*02:01:02G	*04:02:01G	NGS	
3966	*01:01		3*02:02				*05:01	*05:03					SSP	
4079	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03		*02:01	*04:02	SSP SSO NGS	
4251	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03	*01:03:01G	*02:01	*04:02	SSP NGS	
4337	*01:01	*14:54					*05:01	*05:03			*02:01	*04:02	SBT NGS	

Table 5b: Individual laboratory results for B-cell #560 - Class II

Center	High resolution												METHOD	Other Alleles
	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
4492	*01:01	*14:54:01	3*02:02		*01:01:01	*01:04:01	*05:01:01	*05:03	*01:03	*01:03	*02:01:02	*04:02:01	SSP SSO NGS	DPB1*416:01 DPB1*105:01 DPA1*01:13
5130	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03			*02:01	*04:02	SSO NGS	DPB1*105:01 DPB1*416:01 DPB1*416:01 DPB1*665:01
5133	*01:01:01	*14:54:01	3*02:02:01		*01:01:01	*01:04:01	*05:01:01:03	*05:03:01	*01:03:01		*02:01:02	*04:02:01	NGS	DPB1*665:01 DPB1*02:01:19 DPB1*105:01 DPB1*416:01
5214											*02:01G	*04:02G	RT-PCR	
5451	*01:01:01	*14:54:01											SSO SBT	
5462	NT	NT	NT		NT		NT	NT	NT		*02:01	*04:02P	SSP SSO	DPB1*678:01 DPB1*416:01 DPB1*640:01 DPB1*681:01 DPB1*700:01N DPB1*105:01 DPB1*647:01 DPB1*665:01 DPB1*674:01 DPB1*701:01
5488	*01:01:01	*14:54:01	3*02:02:01		*01:01:01	*01:04:01	*05:01:01	*05:03:01	*01:03:01		*02:01:02	*04:02:01	SSP SSO NGS	DPB1*105:01 DPB1*665:01 DPB1*416:01
5642	*01:01	*14:54					*05:01	*05:03					SSP	
8001	*01:01	*14:54	3*02:02				*05:01	*05:03			*02:01	*04:02	SSP SSO	
8021	*01:01	*14:54	3*02:02		*01:01	*01:04	*05:01	*05:03	*01:03		*02:01	*04:02	SSO NGS	
8043	*01:01	*14:54			*01:01	*01:04	*05:01	*05:03					SSP SSO	
8086	*01:01	*14:54			*01:01	*01:04	*05:01	*05:03	*01:03	*01:03	*02:01	*04:02	SSO SBT	
9916	*01:01	*14:54	3*02:02				*05:01	*05:03			*02:01	*04:02	SBT	DPB1*105:01 DPB1*416:01

Table 6: Individual laboratory results for B-cell #560 - Class I

Table 6: Individual laboratory results for B-cell #560 - Class I															
Low resolution							High resolution							METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles	
206	*03		*35	*35	*04										
230							*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSO SBT		
278	*03	*03	*35	*35	*04	*04	*03:01	*03:01	*35:01	*35:03	*04:01	*04:01			
725	*03		*35		*04								SSP SSO		
735	*03	*03	*35	*35	*04	*04	*03:01P	*03:01P	*35:01P	*35:03P	*04:01P	*04:01P	SSP SSO SBT		
747	*03	*03	*35	*35	*04	*04	*03:01:01	*03:01:01	*35:01:01:05	*35:03:01	*04:01:01:01	*04:01:01:01	SSP SSO NGS		
774	*03		*35		*04								SSP SSO		
792	*03	*03	*35	*35	*04	*04	*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSP SSO SBT		
793	*03		*35		*04								SSP		
794	*03		*35		*04		*03:01:01		*35:01:01	*35:03:01	*04:01:01		SSP SSO NGS		
2344							*03:01:01:01	*03:01:01:01	*35:01:01	*35:03:01	*04:01:01	*04:01:01	RT-PCR		
2400	*03	*03	*35	*35	*04	*04	*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	NGS		
2847	*03		*35	*35	*04								SSO NGS		
3135							*03:01		*35:01	*35:03		*04:01	SSO	C*04:09N	
3224							*03:01		*35:01	*35:03	*04:01		NGS		
3511							*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSP SSO		
3519	*03		*35		*04		*03:01		*35:01	*35:03	*04:01		SSP NGS RT-PCR		
3753							*03:01:01	*03:01:01	*35:01:01	*35:03:01	*04:01:01	*04:01:01	NGS		
3966	*03	*03	*35	*35	*04	*04							SSP		
4079	*03		*35		*04		*03:01		*35:01	*35:03	*04:01		SSP SSO NGS		
4251	*03	*03	*35	*35	*04	*04	*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSP NGS		
4337							*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SBT NGS		
4492	*03		*35		*04		*03:01:01:01	*03:01:01:01	*35:01:01	*35:03:01	*04:01:01	*04:01:01	SSP SSO NGS		
5130	*03	*03	*35	*35	*04	*04	*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSO NGS		
5133							*03:01:01:01		*35:01:01:05	*35:03:01	*04:01:01		NGS		
5214	*03		*35		*04								RT-PCR		
5219	*03	*03	*35	*35	*04	*04							SSO		
5462	*03		*35	*35	*04		NT		NT	NT	NT		SSP SSO		
5488							*03:01:01		*35:01:01	*35:03:01	*04:01:01		SSP SSO NGS		
8021							*03:01		*35:01	*35:03	*04:01		SSO NGS		
8029	*03	*03	*35	*35	*04	*04							SSO		
8068	*03	*03	*35	*35	*04	*04							SSO		
8086							*03:01	*03:01	*35:01	*35:03	*04:01	*04:01	SSO SBT		
9916							*03:01		*35:01	*35:03	*04:01		SBT	A*03:291 A*03:292 A*03:293 A*03:301 B*35:03 B*35:370 B*35:365	