

B-CELL LINE EXCHANGE #303

FEBRUARY 1, 2023

B-cell Line 605 - 606

The results for B-cell Line Exchange #303 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. We would like to express our appreciation to **Oxford Transplant Center, Churchill Hospital and to Leiden University Medical Center, Leiden**, for generously donating the reference cells examined in this study.

We would like to also thank the labs performing NGS for sharing their findings and encourage other NGS labs to do so as well. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

Ter-605. The reported HLA type for this cell from a Caucasian donor is:

HLA-A	HLA-B	HLA-C
*68:01	*35:03 *44:02	*04:01 *07:04

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*08:01 *01:01		*04:01 *01:01	*04:02 *05:01	*01:03	*02:01

Likely associations present in this cell are A*68:01-B*35:03-C*04:01-DRB1*08:01-DQB1*04:02 and A*68:01-B*44:02-C*07:04-DRB1*01:01-DQB1*05:01, with respective HF = 0.00021 and 0.00038 in Caucasians.

This cell is NDS-HM, a reference cell for C*07:04:02. It was previously examined for class I as Ext 223 (2002) and Ext 153 (2001). In this present study, C*07:04 was assigned in complete consensus, with 9 labs (35%) assigning C*07:04:02. A*68:01 was also assigned in complete consensus, with 35% of labs reporting the presence of 2 different A*68:01 subtypes, A*68:01:01 and A*68:01:02.

Ter-606. The reported HLA type for this cell from a Caucasian donor is:

HLA-A	HLA-B	HLA-C
*01:01 *02:01	*08:01 *53:06	*07:01 *02:02

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*03:01 *11:01	3*01:01 3*02:02	*05:01 *05:05	*02:01 *03:01	*01:03 *02:01	*01:01 *04:01

From family studies and exchange data, the haplotypes present in this cell are A*01:01-B*08:01-C*07:01-DRB1*03:01-DRB3*01:01-DQB1*02:01 and A*02:01-B*53:06-C*02:02-DRB1*11:01-DRB3*02:02-DQB1*03:01.

This cell is SIA, the reference cell for B*53:06 (1). It was previously examined for class I in the Exchange as Ext 502 (2010), Ext 260 (2003), and Ext 197 (2002). In this present retyping, B*53:06 was well assigned by 100% of labs reporting at high resolution. Good agreement ($\geq 90\%$) was also achieved for all other allele assignments.

References:

1. Anholts JD, Kemps-Mols B, Verduijn W, et al. Three newly identified HLAB alleles: B*5124, B*5306, B*5307 and confirmation of B*0809 and B*5606. *Tissue Antigens* (2001) 58:38-41.

NEXT MAILING DATE: March 1, 2023

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

Table 1: Summary of the 303rd B-cell Line Exchange

[illegible]

DNA Typing - class I	<u>26 labs High; 22 labs low- A</u>		<u>26 labs High; 22 labs low- B</u>		<u>26 labs High; 21 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*68:01:01:02	8 (2)	B*35:03:01:03	4 (1)	C*04:01:01:14	4 (1)
	A*68:01:01	27(7)	B*35:03:01	23(6)	C*04:01:01	23(6)
	A*68:01:01G	4 (1)	B*35:03:01G	4 (1)	C*04:01:01G	8 (2)
	A*68:01P	4 (1)	B*35:03P	4 (1)	C*04:01P	4 (1)
	A*68:01	57(15)	B*35:03	65(17)	C*04:01	61(16)
	A*68	100(22)	B*35	100(22)	C*04	100(21)
	<u>26 labs High- A</u>		<u>26 labs High; 22 labs low- B</u>		<u>26 labs High; 21 labs low- C</u>	
				%(n)		%(n)
	A*68:01:02:02	8 (2)	B*44:02:01:03	4 (1)	C*07:04:02:02	4 (1)
	A*68:01:02	27(7)	B*44:02:01	23(6)	C*07:04:02	31(8)
	A*68:01:02G	4 (1)	B*44:02:01G	8 (2)	C*07:04	65(17)
	A*68:01P	4 (1)	B*44:02P	4 (1)	C*07	100(21)
	A*68:01	57(15)	B*44:02	61(16)		
			B*44	100(22)		

Table 2: Summary of the 303rd B-cell Line Exchange

Ter-606

DNA Typing - class II	<u>28 labs High; 22 labs low-DRB1</u>		%(n)	<u>19 labs High; 15 labs Low-DRB3/4/5</u>		%(n)	<u>21 labs High; 18 labs Low-DQA1</u>		%(n)	<u>27 labs High; 21 labs Low-DQB1</u>		%(n)	<u>15 labs High; 10 labs Low-DPA1</u>		%(n)	<u>26 labs High; 13 labs Low-DPB1</u>		%(n)
	DRB1*03:01:01		11(3)	DRB3*01:01:02		5 (1)	DQA1*05:01:01		19(4)	DQB1*02:01:01		15(4)	DPA1*01:03:01		27(4)	DPB1*01:01:01		35(9)
	DRB1*03:01:01G		14(4)	DRB3*01:01:02G		5 (1)	DQA1*05:01		81(17)	DQB1*02:01:01G		15(4)	DPA1*01:03:01G		7 (1)	DPB1*01:01:01G		4 (1)
	DRB1*03:01P		11(3)	DRB3*01:01P		26(5)	DQA1*05		100(18)	DQB1*02:01P		4 (1)	DPA1*01:03		66(10)	DPB1*01:01		61(16)
	DRB1*03:01		64(18)	DRB3*01:01		63(12)				DQB1*02:01		66(18)	DPA1*01		100(10)	DPB1*01		100(13)
	DRB1*03(DR17)		45(10)	DRB3*01		93(14)				DQB1*02		95(20)						
	DRB1*03		55(12)	DRB3*PRESENT		7 (1)				<i>DQB1*04</i>		5 (1)						
	<u>28 labs High; 22 labs low-DRB1</u>		%(n)	<u>19 labs High; 15 labs Low-DRB3/4/5</u>		%(n)	<u>21 labs High-DQA1</u>		%(n)	<u>28 labs High; 21 labs Low-DQB1</u>		%(n)	<u>15 labs High; 10 labs Low-DPA1</u>		%(n)	<u>26 labs High; 13 labs Low-DPB1</u>		%(n)
	DRB1*11:01:01		14(4)	DRB3*02:02:01		5 (1)	DQA1*05:05:01		19(4)	DQB1*03:01:01		14(4)	DPA1*02:01:02		27(4)	DPB1*04:01:01		23(6)
	DRB1*11:01:01G		7 (2)	DRB3*02:02:01G		11(2)	DQA1*05:01:01G		5 (1)	DQB1*03:01:01G		14(4)	DPA1*02:01:02G		7 (1)	DPB1*04:01:01G		12(3)
	DRB1*11:01P		4 (1)	DRB3*02:02P		21(4)	DQA1*05:05		71(15)	DQB1*03:01P		4 (1)	DPA1*02:01		66(10)	DPB1*04:01P		4 (1)
DRB1*11:01		75(21)	DRB3*02:02		63(12)	<i>DQA1*03:03</i>		5 (1)	DQB1*03:01		68(19)	DPA1*02		100(10)	DPB1*04:01		61(16)	
DRB1*11		100(22)	DRB3*02		93(14)				DQB1*03(DQ7)		52(11)				DPB1*04(DP401)		69(9)	
			DRB3*PRESENT		7 (1)				DQB1*03		48(10)				DPB1*04		31(4)	

DNA Typing - class I	<u>26 labs High; 22 labs low- A</u>		%(n)	<u>26 labs High; 22 labs low- B</u>		%(n)	<u>26 labs High; 21 labs low- C</u>		%(n)										
	A*01:01:01		27(7)	B*08:01:01		27(7)	C*02:02:02:01		4 (1)										
	A*01:01:01G		4 (1)	B*08:01:01G		4 (1)	C*02:02:02		23(6)										
	A*01:01P		4 (1)	B*08:01P		11(3)	C*02:02P		8 (2)										
	A*01:01		65(17)	B*08:01		58(15)	C*02:02		65(17)										
	A*01		100(22)	B*08		100(22)	C*02		100(21)										
	<u>26 labs High; 22 labs low- A</u>		%(n)	<u>27 labs High; 22 labs low- B</u>		%(n)	<u>26 labs High; 22 labs low- C</u>		%(n)										
	A*02:01:01		27(7)	B*53:06		100(27)	C*07:01:01:01		4 (1)										
	A*02:01:01G		4 (1)	B*53		100(22)	C*07:01:01		19(5)										
	A*02:01P		4 (1)				C*07:01:01G		4 (1)										
	A*02:01		65(17)				C*07:01P		4 (1)										
	A*02		100(22)				C*07:01		69(18)										
							C*07		100(21)										

Table 3a: Individual laboratory results for B-cell #605 - Class II														
	Low resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*01	*08	NT	NT	*01	*04	*04	*05	*01	*01	*02(DP201)	*02(DP201)		
725	*01	*08			*01	*04	*04	*05					SSO	
731	*01	*08			*01	*04	*04	*05	*01	*01	*02	*02	NGS RT-PCR	
747	*01	*08			*01	*04	*04	*05	*01	*01	*02	*02	SSP SSO NGS	
													SSP SSO SBT	
771	*01	*08			*01	*04	*04	*05					NGS	
792	*01	*08			*01	*04	*04	*05	*01	*01	*02(DP201)	*02(DP201)	SSO	
793	*01	*08			*01	*04	*04	*05	*01		*02(DP201)		SSP	
2400	*01	*08	NP	NP	*01	*04	*04	*05	NT	NT	*02		SSO NGS	
2847	*01	*08											SSO	
													SSP NGS	
3519	*01	*08			*01	*04	*04	*05	*01		*02(DP201)		RT-PCR	
3753	*01	*08	NP	NP	*01	*04	*04	*05	*01	*01	*02	*02	SSO	
3966	NT												SSP	
4079	*01	*08			*01	*04	*04	*05	*01		*02(DP201)		SSO	
5130	*01	*08			*01	*04	*04	*05			*02	*02		
5214	*01	*08			*01	*04	*04	*05	*01	*01	*02(DP201)	*02(DP201)	SSO	
5219	*01	*08			*01	*04	*04	*05					SSO NGS	
5488													SSO SBT NGS	
5642	*01	*08					*04	*05					SSP SBT	
6649	*01	*08					*04	*05					SSO	
8038	*01	*08	NP	NP	*01	*04	*04	*05	*01	*01	*02(DP201)	*02(DP201)	SSO SBT	
8043	*01	*08					*04	*05					SSP SSO NGS	
8058	*01	*08					*04	*05					SSP	
8068	*01	*08			*01	*04	*04	*05					SSO	
8123	*01	*08			*01	*04	*04	*05	*01	*01	*02(DP201)	*02(DP201)	RT-PCR	

Table 3b: Individual laboratory results for B-cell #605 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01	*01:03	*01:03	*02:01	*02:01	NGS	
278	*01:01	*08:01	NT	NT	*01:01	*04:01	*04:02	*05:01	*01:03	*01:03	*02:01	*02:01		
731	*01:01	*08:01:01			*01:01	*04:01	*04:02	*05:01			*02:01	*02:01	NGS RT-PCR	
747	*01:01:01	*08:01			*01:01:01	*04:01:01	*04:02:01	*05:01	*01:03:01	*01:03:01	*02:01:02	*02:01:02	SSP SSO NGS	DRB1*08:105 DQB1*05:263
762	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	
													SSP SSO SBT	
771	*01:01	*08:01					*04:02	*05:01			*02:01		NGS	
793					*01:01	*04:01					*02:01		SSP	
2344	*01:01:01G	*08:01:01G	NT	NT	NT	NT	*04:02:01G	*05:01:01G	NT	NT	*02:01:02	*02:01:02		
2400	*01:01	*08:01	NP	NP	*01:01	*04:01	*04:02	*05:01	NT	NT	*02:01:02G		SSO NGS	DQB1*05:263
3135	*01:01:01G	*08:01:01G			*01:01:01G	*04:01	*04:02	*05:01	*01:03		*02:01:02G			
3224	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	
3511	*01:01	*08:01	NP	NP	*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	
													SSP NGS	
3519	*01:01P	*08:01P			*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		RT-PCR	DRB1*01:100
3966	*01:01	*08:01					*04:02	*05:01					SSP	
4251	*01:01:01G	*08:01:01G			*01:01	*04:01	*04:02:01G	*05:01:01G	*01:03:01G	*01:03:01G	*02:01	*02:01	NGS	
4337	*01:01	*08:01					*04:02	*05:01			*02:01	*02:01	SSP SBT NGS	
														DRB1*08:105 DRB1*01:100
5130	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01			*02:01	*02:01		
5133	*01:01:01	*08:01:01			*01:01:01	*04:01:01	*04:02:01	*05:01:01	*01:03:01		*02:01:02		NGS	
5219	*01:01:01	*08:01:01					*04:02:01	*05:01:01			*02:01:02	*02:01:02	SSO NGS	
5451	*01:01:01	*08:01:01			*01:01:01	*04:01:01	*04:02:01	*05:01:01	*01:03:01		*02:01:02		NGS	
5462	*01:01	*08:01	NP	NP	*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	
5488	*01:01:01G	*08:01:01G	NP	NP	*01:01:01	*04:01:01	*04:02:01	*05:01:01	*01:03:01		*02:01:02		SSO SBT NGS	
5642	*01:01	*08:01					*04:02	*05:01					SSP SBT	
8001	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	
8021	*01:01	*08:01			*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		SSO NGS	
8029	*01:01:01G	*08:01:01G					*04:02:01G	*05:01:01G			*02:01:02G	*02:01:02G		
														DQB1*05:223 DQB1*05:290 DQB1*04:78
8038	*01:01P	*08:01P	NP	NP	NT	NT	*04:02:01G	*05:01:01G	NT	NT	*02:01P	*02:01P	SSO SBT	
8043	*01:01	*08:01					*04:02	*05:01					SSP SSO NGS	
8122	*01:01	*08:01	NP	NP	*01:01	*04:01	*04:02	*05:01	*01:03		*02:01		NGS	

Table 4: Individual laboratory results for B-cell #605 - Class I

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*68:01	*68:01	*35:03	*44:02	*04:01	*07:04	NGS	
278	*68	*68	*35	*44	*04	*07	*68:01	*68:01	*35:03	*44:02	*04:01	*07:04		
725	*68		*35	*44	*04	*07							SSO	
731	*68	*68	*35	*44	*04	*07	*68:01	*68:01	*35:03	*44:02:01	*04:01	*07:04	NGS RT-PCR	
747	*68	*68	*35	*44	*04	*07	*68:01:01	*68:01:02	*35:03:01	*44:02:01	*04:01:01	*07:04:02	SSP SSO NGS	
762							*68:01:01	*68:01:02	*35:03	*44:02	*04:01	*07:04	NGS	
													SSP SSO SBT	
771	*68		*35	*44	*04	*07	*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
792	*68	*68	*35	*44	*04	*07							SSO	
793	*68		*35	*44	*04	*07							SSP	
2344							*68:01:01	*68:01:02	*35:03:01	*44:02:01G	*04:01:01	*07:04:02		
2400	*68		*35	*44	*04	*07	*68:01		*35:03	*44:02	*04:01	*07:04	SSO NGS	
2847	*68	*68	*35	*44	*04	*07							SSO	
3135							*68:01:01G	*68:01:02G	*35:03:01G	*44:02:01G	*04:01:01G	*07:04		
3224							*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
3511							*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
													SSP NGS	
3519	*68		*35	*44	*04	*07	*68:01		*35:03	*44:02	*04:01	*07:04	RT-PCR	
3753	*68	*68	*35	*44	*04	*07							SSO	
3966	*68	*68	*35	*44	*04	*07							SSP	
4079	*68		*35	*44	*04	*07							SSO	
4251							*68:01	*68:01	*35:03	*44:02	*04:01	*07:04	NGS	
4337							*68:01:01	*68:01:02	*35:03	*44:02	*04:01	*07:04:02	SSP SBT NGS	
5130	*68	*68	*35	*44	*04	*07	*68:01	*68:01	*35:03	*44:02	*04:01	*07:04		
5133							*68:01:01:02	*68:01:02:02	*35:03:01:03	*44:02:01:03	*04:01:01:14	*07:04:02:02	NGS	
5214	*68	*68	*35	*44	*04	*07							SSO	
5219	*68	*68	*35	*44	*04	*07	*68:01:01	*68:01:02	*35:03:01	*44:02:01	*04:01:01	*07:04:02	SSO NGS	
5451							*68:01:01	*68:01:02	*35:03:01	*44:02:01	*04:01:01	*07:04:02	NGS	
5462							*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
5488							*68:01:01	*68:01:02	*35:03:01	*44:02:01	*04:01:01	*07:04:02	SSO SBT NGS	
5642	*68		*35	*44	*04	*07							SSP SBT	
6649	*68	*68	*35	*44									SSO	
8001							*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
8021							*68:01		*35:03	*44:02	*04:01	*07:04	SSO NGS	
8029							*68:01:01:02	*68:01:02:02	*35:03:01	*44:02:01	*04:01:01	*07:04:02		
														A*68:152 C*04:01:110 C*04:423
8038	*68	*68	*35	*44	*04	*07	*68:01P	*68:01P	*35:03P	*44:02P	*04:01P	*07:04:02	SSO SBT	
8043	*68		*35	*44	*04	*07	*68:01		*35:03	*44:02	*04:01:01G	*07:04	SSP SSO NGS	
8058	NT	NT	NT	NT	NT	NT							SSP	
8068	*68	*68	*35	*44	*04	*07							SSO	
8122							*68:01		*35:03	*44:02	*04:01	*07:04	NGS	
8123	*68	*68	*35	*44	*04	*07							RT-PCR	

Table 5a: Individual laboratory results for B-cell #606 - Class II

	Low resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*03	*11	3*01	3*02	*05	*05	*02	*03	*01	*02	*01	*04(DP401)		
725	*03(DR17)	*11	3*01	3*02	*05		*02	*03(DQ7)					SSO	
731	*03	*11			*05	*05	*02	*03			*01	*04	NGS RT-PCR	
747	*03	*11	3*01	3*02	*05	*05	*02	*03	*01	*02	*01	*04	SSP SSO NGS	
771	*03	*11			*05		*02	*03					SSP SSO SBT NGS	
792	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSO	
793	*03(DR17)	*11	3*01	3*02	*05	*03	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSP	
2400	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03	NT	NT	*01	*04	SSO NGS	
2847	*03	*11											SSO	
													SSP NGS	
3519	*03(DR17)	*11	3*01	3*02	*05		*02	*03(DQ7)	*01	*02	*01	*04(DP401)	RT-PCR	
3753	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSO	
3966	NT												SSP	
4079	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSO	
5130	*03	*11	3*01	3*02	*05	*05	*02	*03			*01	*04		
5214	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSO	
5219	*03	*11			*05	*05	*02	*03					SSO NGS	
5488			3*01	3*02									SSO SBT NGS	
5642	*03(DR17)	*11	3*PRESENT				*02	*03(DQ7)					SSP SBT	
6649	*03	*11					*02	*03(DQ7)					SSO	
8038	*03	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	SSO SBT	
8043	*03	*11			*05	*05	*02	*03					SSP SSO NGS	
8058	*03	*11					*04	*03					SSP	
8068	*03	*11			*05	*05	*02	*03					SSO	
8123	*03(DR17)	*11	3*01	3*02	*05	*05	*02	*03(DQ7)	*01	*02	*01	*04(DP401)	RT-PCR	

Table 5b: Individual laboratory results for B-cell #606 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	
278	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01		
731	*03:01	*11:01			*05:01	*05:05	*02:01	*03:01			*01:01	*04:01	NGS RT-PCR	DQB1*02:163N
														DQB1*03:297 DQB1*02:163N DRB3*01:91 DRB3*02:133
747	*03:01	*11:01	3*01:01	3*02:02	*05:01:01	*05:05:01	*02:01	*03:01	*01:03:01	*02:01:02	*01:01:01	*04:01:01	SSP SSO NGS	DRB3*01:91 DRB3*02:133
762	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	DRB3*02:133
771	*03:01	*11:01					*02:01	*03:01			*01:01	*04:01	SSP SSO SBT NGS	
793					*05:01	*03:03					*01:01	*04:01	SSP	
2344	*03:01:01G	*11:01:01G	NT	NT	NT	NT	*02:01:01G	*03:01:01G	NT	NT	*01:01:01	*04:01:01		
														DQB1*03:297 DQB1*03:419 DQB1*02:163N
2400	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	NT	NT	01:01:01G	*04:01:01G	SSO NGS	
3135	*03:01P	*11:01P	3*01:01	3*02:02	*05:01	*05:01:01G	*02:01P	*03:01P	*01:03	*02:01	*01:01:01	*04:01P		
3224	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	
3511	*03:01	*11:01	3*01:01P	3*02:02P	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	
														DRB1*03:147 DRB3*01:91 DRB3*02:133
3519	*03:01P	*11:01	3*01:01P	3*02:02P	*05:01	*05:05	*02:01	*03:01			*01:01	*04:01	SSP NGS RT-PCR	
3966	*03:01	*11:01	3*01:01	3*02:02			*02:01	*03:01					SSP	
4251	*03:01:01G	*11:01	3*01:01:02G	3*02:02:01G	*05:01	*05:05	*02:01:01G	*03:01:01G	*01:03:01G	*02:01:02G	*01:01	*04:01	NGS	
4337	*03:01	*11:01					*02:01	*03:01			*01:01	*04:01	SSP SBT NGS	
														DRB1*03:147 DQB1*03:358N
5130	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01			*01:01	*04:01		
														DRB3*01:91 DRB3*02:133 DRB1*11:01:30 DRB1*03:01:08
5133	*03:01:01	*11:01:01	3*01:01:02	3*02:02:01	*05:01:01	*05:05:01	*02:01:01	*03:01:01	*01:03:01	*02:01:02	*01:01:01	*04:01:01	NGS	
5219	*03:01:01	*11:01:01					*02:01:01	*03:01:01			*01:01:01	*04:01:01	SSO NGS	
5451	*03:01:01	*11:01:01	3*01:01P	3*02:02P	*05:01:01	*05:05:01	*02:01:01	*03:01:01	*01:03:01	*02:01:02	*01:01:01	*04:01:01	NGS	
														DRB3*02:133 DRB3*01:91
5462	*03:01	*11:01	3*01:01P	3*02:02P	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	
5488	*03:01:01G	*11:01:01			*05:01:01	*05:05:01	*02:01:01	*03:01:01	*01:03:01	*02:01:02	*01:01:01	*04:01:01	SSO SBT NGS	
5642	*03:01	*11:01					*02:01	*03:01					SSP SBT	
														DQB1*03:454 DPB1*939:01 DRB3*02:133 DRB3*01:91 DRB3*01:62
8001	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	
8021	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	SSO NGS	
8029	*03:01:01G	*11:01					*02:01:01G	*03:01:01G			*01:01:01	*04:01:01G		

Table 5b: Individual laboratory results for B-cell #606 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DPB1*377:01 DQB1*02:01:32 DQB1*02:01:40 DQB1*03:01:26 DQB1*02:111 DRB3*01:36 DRB3*02:134 DRB3*01:67 DQB1*02:01:27 DQB1*03:01:09 DRB3*01:15 DRB3*02:10 DRB3*02:09 DQB1*03:243 DQB1*03:373 DQB1*03:428 DRB3*01:32 DRB3*01:76 DRB3*01:41 DRB3*01:56 DRB3*01:75 DPB1*1226:01 DPB1*01:01:05 DPB1*278:01 DPB1*150:01 DPB1*158:01 DPB1*440:01 DPB1*417:01 DPB1*849:01 DPB1*65:01 DPB1*199:01 DPB1*89:01 DRB1*03:15+
8038	*03:01P	*11:01:01G	3*01:01P	3*02:02:01G	NT	NT	*02:01:01G	*03:01:01G	NT	NT	*01:01:01	*04:01:01G	SSO SBT	
8043	*03:01	*11:01			*05:01	*05:05		*03:01					SSP SSO NGS	
8122	*03:01	*11:01	3*01:01	3*02:02	*05:01	*05:05	*02:01	*03:01	*01:03	*02:01	*01:01	*04:01	NGS	DRB3*01:62 DPB1*939:01 DPB1*162:01 DPB1*350:01

Table 6: Individual laboratory results for B-cell #606 - Class I

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
278	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01		
725	*01	*02	*08	*53	*02	*07							SSO	
731	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS RT-PCR	
747	*01	*02	*08	*53	*02	*07	*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01:01	SSP SSO NGS	
762							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
													SSP SSO SBT	
771	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
792	*01	*02	*08	*53	*02	*07							SSO	
793	*01	*02	*08	*53	*02	*07							SSP	
2344							*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01:01		
2400	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	SSO NGS	
2847	*01	*02	*08	*53	*02	*07							SSO	
3135							*01:01P	*02:01P	*08:01P	*53:06	*02:02P	*07:01P		
3224							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
3511							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
													SSP NGS	
3519	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	RT-PCR	
3753	*01	*02	*08	*53	*02	*07							SSO	
3966	*01	*02	*08	*53	*02	*07							SSP	
4079	*01	*02	*08	*53	*02	*07							SSO	
4251							*01:01	*02:01	*08:01:01G	*53:06	*02:02	*07:01	NGS	
4337							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	SSP SBT NGS	
5130	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01		A*02:01L
5214	*01	*02	*08	*53	*02	*07				*53:06			SSO	
5133							*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02:01	*07:01:01:01	NGS	
5219	*01	*02	*08	*53	*02	*07	*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01:01	SSO NGS	
5451							*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01:01	NGS	
5462							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
5488							*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01:01	SSO SBT NGS	
5642	*01	*02	*08	*53	*02	*07							SSP SBT	
6649	*01	*02	*08	*53									SSO	
8001							*01:01	*02:01	*08:01P	*53:06	*02:02	*07:01	NGS	
8021							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	SSO NGS	
8029							*01:01:01	*02:01:01	*08:01:01	*53:06	*02:02:02	*07:01		
														A*01:01:118 A*02:01:170 A*02:884 B*08:267 B*08:276 C*07:848 C*07:877 B*08:207 A*01:383
8038	*01	*02	*08	*53	*02	*07	*01:01:01G	*02:01:01G	*08:01P	*53:06	*02:02P	*07:01:01G	SSO SBT	
8043	*01	*02	*08	*53	*02	*07	*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	SSP SSO NGS	
8058	NT	NT	NT	NT	NT	NT							SSP	
8068	*01	*02	*08	*53	*02	*07							SSO	
8122							*01:01	*02:01	*08:01	*53:06	*02:02	*07:01	NGS	
8123	*01	*02	*08	*53	*02	*07							RT-PCR	