

B-cell Line Exchange #269

MAY 3, 2017

B-cell Lines 537-538

The results for B-cell Line Exchange #269 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8. We would like to express our appreciation to **Eric Mickelson and John Hansen, Fred Hutchinson Cancer Research Center**, for providing us with the many interesting workshop cells typed in the exchange over the years.

We also wish to thank the labs performing NGS typing for sharing their results and encourage other NGS labs to do so as well. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <http://bioinformatics.nmdp.org/>.

Ter-537. The reported consensus type for this sample from a Hispanic donor is DRB1*10:01-DRB1*16:01-DRB5*02:02-DQA1*01:02-DQA1*01:05-DQB1*05:01-DQB1*05:02-DPA1*01:03-DPB1*02:01-DB1*04:01/A*24:02-A*29:01-B*07:05-B*27:02-C*02:02-C*15:05. One likely haplotype present in this cell is DRB1*10:01-DQA1*01:05-DQB1*05:01, observed in previous exchange cells Ter 440 (same as Ter 358 and Ter 305) and Ter 285 (same as Ter 121). The other likely association present is DRB1*16:01-DRB5*02:02-DQA1*01:02-DQB1*05:02, observed in the workshop cell, IHW9015 (same as Ter 228). The DRB1*10:01-DQB1*05:01 and DRB1*16:01-DQB1*05:02 associations in this cell are observed in Hispanics, with respective HF=0.01809 and HF=0.00881.

This cell is FH06, studied in the international workshops as IHW9380. It was also previously studied in the exchange as extract 387 (2007). In this present study, DRB1*16:01 was reported by 100% of labs reporting at high resolution, with 8 labs assigning DRB1*10:01:01 and DRB1*16:01:01. Two subtypes of DQA1*01 (DQA1*01:02 and DQA1*01:05) were present in this cell, along with 2 subtypes of DQB1*05 (DQB1*05:01 and DQB1*05:02); each were reported in complete consensus. For class I, A*24:02, A*29:01, B*07:05, B*27:02, C*02:02, and C*15:05 were each assigned in complete consensus, with A*24:02:01:01, A*29:01:01:01 and C*02:02:02:01 assigned by labs reporting by NGS.

Ter-538. The consensus type for this sample from a Caucasian donor is DRB1*04:04-DRB1*16:04-DRB4*01:03-DRB5*02:02-DQA1*01:02-DQA1*03:01-DQB1*03:02-DQB1*05:02-DPA1*01:03-DPB1*03:01-DPB1*06:01/A*02:01-A*24:02-B*15:01-B*51:01-C*03:03-C*14:02. One possible haplotype present in this cell is DRB1*04:04-DRB4*01:03-DQA1*03:01-DQB1*03:02, observed in a number of previous exchange cells, most recently, Ter 481 (same as Ter 378 and Ter 329) and Ter 453 (same as Ter 204). The DRB1*04:04-DQB1*03:02 association in this cell is observed commonly in Caucasian, with HF=0.03557. The other likely haplotype in this cell is DRB1*16:04-DRB5*02:02-DQA1*01:02-DQB1*05:02-DPB1*03:01, observed in BONA, one of the reference cells for DRB1*16:04.

This cell is FORE, another reference cell for DRB1*16:04. It was previously studied in the international workshops as IHW9317 and in the exchange as Ter 372 (2006) and Ter 330 (2003). In this present retyping, DRB1*16:04 was assigned in complete consensus by labs reporting at high resolution. DRB1*04:04 (100%) was assigned as the second DRB1 type, with 8 labs assigning DRB1*04:04:01. DQB1*03:02 and DQB1*05:02 were the assigned DQB1 types, with 7 labs assigning DQB1*03:02:01 and DQB1*05:02:01. The assigned class I types were A*02:01, A*24:02, B*15:01, B*51:01, C*03:03, and C*14:02, each assigned in complete consensus, with A*02:01:01:01, A*24:02:01:01, B*15:01:01:01, and B*51:01:01:01 assigned by NGS.

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Table 1: Summary of the 269th B-cell Line Exchange

Ter-537

DNA Typing - class II		<u>20 labs High; 22 labs Low-DRB3/4/5</u>		<u>20 labs High; 24 labs Low-DQA1</u>		<u>31 High Labs; 28 labs Low-DQB1</u>		<u>16 High Labs; 12 labs Low-DPA1</u>		<u>28 High Labs; 14 labs Low-DPB1</u>	
			%(n)		%(n)		%(n)		%(n)		%(n)
DNA Typing - class II	<u>32 labs High; 32 labs low-DRB1</u>	%(n)		<u>20 labs High; 24 labs Low-DQA1</u>	%(n)		<u>31 High Labs; 28 labs Low-DQB1</u>	%(n)		<u>16 High Labs; 12 labs Low-DPA1</u>	%(n)
	DRB1*10:01:01	25(8)		DQA1*01:02:02	20(4)		DQB1*05:01:01:01	6(2)		DPA1*01:03:01:01	13(2)
	DRB1*10:01	75(23)		DQA1*01:02:01G	5 (1)		DQB1*05:01:01	13(4)		DPA1*01:03:01	6 (1)
	DRB1*10	100(32)		DQA1*01:02P	5 (1)		DQB1*05:01	81(25)		DPA1*01:03	81(13)
				DQA1*01:02	70(14)		DQB1*05	100(28)		DPA1*01	100(12)
				DQA1*01	100(24)						
DNA Typing - class I	<u>33 labs High; 32 labs low-DRB1</u>	%(n)		<u>21 labs High-DQA1</u>	%(n)		<u>32 High Labs-DQB1</u>	%(n)		<u>28 High Labs; 14 labs Low-DPB1</u>	%(n)
	DRB1*16:01:01	24(8)		DQA1*01:05:01	19(4)		DQB1*05:02:01	22(7)		DPB1*04:01:01:01	4 (1)
	DRB1*16:01	76(24)		DQA1*01:01:01G	5 (1)		DQB1*05:02	78(25)		DPB1*04:01:01:02	7 (2)
	DRB1*16	100(32)		DQA1*01:01P	5 (1)					DPB1*04:01:01	11(3)
				DQA1*01:05	71(15)					DPB1*04:01:01G	7 (2)
										DPB1*04:01	71(20)
										DPB1*04(DP401)	43(6)
										DPB1*04	57(8)
DNA Typing - class I	<u>22 labs High; 23 labs low- A</u>	%(n)		<u>22 labs High; 23 labs low- B</u>	%(n)		<u>22 labs High; 23 labs low- C</u>	%(n)			
	A*24:02:01:01	14(3)		B*07:05:01	23(5)		C*02:02:02:01	18(4)			
	A*24:02:01	14(3)		B*07:05:01G	9 (2)		C*02:02:02	5 (1)			
	A*24:02	72(16)		B*07:05P	4 (1)		C*02:02	77(17)			
	A*24	100(23)		B*07:05	64(14)		C*02	100(23)			
				B*07	100(23)						
DNA Typing - class I	<u>22 labs High; 23 labs low- A</u>	%(n)		<u>22 labs High; 23 labs low- B</u>	%(n)		<u>22 labs High; 23 labs low- C</u>	%(n)			
	A*29:01:01:01	18(4)		B*27:02:01	23(5)		C*15:05:02	18(4)			
	A*29:01:01	5 (1)		B*27:02	77(17)		C*15:05:01G	5 (1)			
	A*29:01:01G	5 (1)		B*27	100(23)		C*15:05P	5 (1)			
	A*29:01	72(16)					C*15:05	72(16)			
	A*29	100(23)					C*15	100(23)			

Table 3a: Individual laboratory results for B-cell #537-Class II

		Low resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5462	Arnold , Paula	*10	*16	5*02	NP	*01		*05		*01		NT	NT	RT-PCR	
774	Cecka , J. Michael	*10	*16	5*02		*01	*01	*05	*05	*01		*02(DP201)	*04(DP401)	SSP SSO	
9916	Charlton , Ronald K	*10	*16	5*PRESENT				*05						SSP	
3632	Colombe , Beth W.	*10	*16	5*02		*01	*01	*05	*05	*01		*02	*04	SSP SSO	
5130	Costeas , Paul A.	*10	*16	5*02		*01	*01					*02	*04	SSP SSO	
779	Daniel , Claude	*10	*16	5*02	5*02	*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)	SSP SSO	
5219	Daniel , Dolly	*10	*16			*01	*01	*05	*05					SSO	
87	Di Paola , Nicholas	*10	*16	5*02		*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)	RT-PCR	
5214	Eckels/CPMC ,	*10	*16	5*02		*01	*01	*05	*05	*01	*01			SSO	
747	Ferrari-Lacruz , Syl	*10	*16	5*02		*01	*01	*05	*05	*01		*02	*04	SSP SSO NGS	
4079	Fort , Marylise	*10	*16					*05						SSP	
792	Gandhi , Manish	*10	*16	5*02		*01	*01	*05	*05	*01	*01	*02	*04	SSO SBT	
8043	Gideoni , Osnat	*10	*16			*01	*01	*05	*05					SSP SSO	
810	Hamdi , Nuha	*10	*16	5*02	5*02	*01	*01	*05	*05					SSO	
8087	Hernandez Rosales	16	*16			*01	*01	*05	*05					SSO	
771	Israel , Shoshana	*10	*16						*05					SSP SSO	
794	Jaatinen , Taina	*10	*16	5*02		*01		*05		*01		*02	*04	SSP SSO SBT	
5488	Khuu , Hanh			5*02										RT-PCR	
725	Lardy , N.M.	*10	*16	5*PRESENT		*01		*05						SSP SSO SBT	
278	Lee , Jar-How	*10	*16	5*02	NT	*01	*01	*05	*05	*01	*01	*02	*04	SSP SSO	
6649	Lim , Young Ae	*10	*16	5*PRESENT										SSP	
2400	Liu , Chang	*10	*16	5*02	NP	*01	*01	*05	*05			*02	*04	SSP SSO SBT	
731	Loewenthal , Ron	*10	*16			*01		*05						NGS	
206	McAlack , Robert	*10	*16	5*02		*01	*01	*05	*05	*01	*01	*02	*04	SSO SBT	
735	Moussa , Omar													SSO	
3966	Permpikul , Vejbae													SSP SSO SBT	
8001	Rao , Prakash	*10	*16	5*PRESENT		*01		*05	*05					SSP	
3519	Renac , Virginie	*10	*16					*05				*02(DP201)	*04(DP401)	SSP NGS	
793	Rubocki , Ronald	*10	*16	5*PRESENT		*01	*01	*05				*02(DP201)	*04(DP401)	SSP	
4251	Schiller , Jennifer	*10	*16	5*02		*01	*01	*05	*05	*01	*01	*02(DP201)	*04(DP401)	SSO NGS	
8068	Shanmugam , Hem	*10	*16	5*02	5*02			*05	*05					SSO	
8029	Tarigopula , Anil	*10	*16			*01	*01	*05	*05					SSO	
5451	Tilanus , Marcel G.	*10	*16	5*02		*01		*05						SSP SSO SBT	
5642	Varnavidou-Nicolaï	*10	*16	5*PRESENT				*05						SSP	
2847	Wakita , Atsushi	*10	*16											SSO	

Table 3b: Individual laboratory results for B-cell #537-Class II

High resolution														
Center	Investigator	DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5133	Askar , Medhat	*10:01:01	*16:01:01	5*02:02	*01:02:02	*01:05:01	*05:01:01	*05:02:01	*01:03:01		*02:01:02	*04:01:01	NGS	
4492	Caillat-Zucman , Sc	*10:01:01	*16:01:01	5*02:02	*01:02:02	*01:05:01	*05:01:01	*05:02:01	*01:03	*01:03	*02:01:02	*04:01:01	SSP SSO NGS	DPA1*01:13
774	Cecka , J. Michael	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02	*01:03		*02:01	*04:01	SSP SSO	DQB1*05:54 DQB1*05:48 DRB5*02:06 DQB1*05:55 DQB1*05:61 DQB1*05:68 DQB1*05:74 DQB1*05:76 DQB1*05:65 DQB1*05:53 DQB1*05:59
8070	Chang , Uckjin	*10:01	*16:01										SBT	
3224	Chen , Dong-Feng	*10:01	*16:01	5*02:02:01G	NT	NT	*05:01	*05:02	NT	NT	NT	NT	SSP SSO SBT	
8021	Clark , Brendan	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02	*01:03		*02:01	*04:01	SSO NGS	
3632	Colombe , Beth W.	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02	*01:03		*02:01	*04:01	SSP SSO	
5130	Costeas , Paul A.	*10:01	*16:01	5*02:02	*01:02	*01:05					*02:01	*04:01	SSP SSO	DRB1*10:03
779	Daniel , Claude				*01:02	*01:05	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01	SSP SSO	
8086	Du , Keming	*10:01	*16:01		*01:02	*01:05	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01	SSO SBT	
5214	Eckels/CPMC ,								*01:03		*02:01	*04:01:01G		SSO
3135	Enczmann , J	*10:01	*16:01	5*02:02			*05:01	*05:02			*02:01	*04:01		
747	Ferrari-Lacraz , Syl	*10:01:01	*16:01:01	5*02:02			*05:01:01:01	*05:02:01	*01:03	*01:03	*02:01:02	*04:01:01:02	SSP SSO NGS	DPA1*01:13
762	Fischer , Gottfried	*10:01:01	*16:01:01	5*02:02	*01:02:02	*01:05:01	*05:01:01	*05:02:01	*01:03:01:01	*01:03:01:02	*02:01:02	*04:01:01:02	SSO NGS	
4079	Fort , Marylise										*02:01	*04:01	SSP	
792	Gandhi , Manish	*10:01	*16:01				*05:01	*05:02			*02:01	*04:01	SSO SBT	
8043	Gideoni , Osnat	*10:01	*16:01		*01:02	*01:05	*05:01	*05:02					SSP SSO	
810	Hamdi , Nuha							*05:02:01					SSO	
2344	Hurley & Hartzman	*10:01:01	*16:01:01		*01:02:02	*01:05:01	*05:01:01:01	*05:02:01	*01:03:01:01	*01:03:01:02	*02:01:02	*04:01:01:01	SSO NGS	DQB1*05:01:01:02 DQB1*05:01:01:03
771	Israel , Shoshana	*10:01	*16:01				*05:01	*05:02					SSP SSO	DPB1*04:01:01:02
794	Jaatinen , Taina	*10:01	*16:01	5*02:02		*01:05	*05:01	*05:02	*01:03		*02:01	*04:01	SSP SSO SBT RT-PCR	DRB5*02:06 DQA1*01:11 DQA1*01:08 DQA1*01:09 DQA1*01:01 DQA1*01:04 DPA1*01:13 DPB1*459:01 DQA1*01:12 DPB1*464:01 DQB1*05:83

Table 3b: Individual laboratory results for B-cell #537-Class II

		High resolution												
Center	Investigator	DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Khuu , Hanh	*10:01:01	*16:01:01		*01:02	*01:05	*05:01:01	*05:02:01			*02:01:02	*04:01:01	SSP SSO SBT	DQB1*05:02:04 DQB1*05:01:03 DQB1*05:01:12 DQB1*05:02:10
4337	Kim , Tai-Gyu	*10:01	*16:01				*05:01	*05:02			*02:01	*04:01	SSP SBT	
278	Lee , Jar-How	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01		
2400	Liu , Chang	*10:01	*16:01		*01:02	*01:05	*05:01	*05:02			*02:01	*04:01:01G	SSP SSO SBT NGS	
731	Loewenthal , Ron	*10:01:01	*16:01:01				*05:01	*05:02					SSO SBT	
735	Moussa , Omar	*10:01	*16:01	5*02:02P	*01:02P	*01:01P	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01	SSP SSO SBT	DPA1*01:13
8042	Muncher, Liora		*16:01	5*02:02			*05:01	*05:02						
3966	Permpikul , Vejbaes	*10:01	*16:01	5*02:02			*05:01	*05:02					SSP	
8001	Rao , Prakash	*10:01	*16:01	5*02:02:01G			*05:01	*05:02			*02:01	*04:01		
3753	Reed , Elaine F.	*10:01	*16:01	5*02:02:01G	*01:02:01G	*01:01:01G	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01	SSO SBT	DRB1*16:30 DQB1*05:79 DPA1*01:13 DRB1*10:14
3519	Renac , Virginie	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02			*02:01	*04:01	SSP NGS	
793	Rubocki , Ronald				*01:02	*01:05					*02:01	*04:01	SSP	
4251	Schiller , Jennifer	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02	*01:03	*01:03	*02:01	*04:01	SSO NGS	
230	Thoni , Deborah	*10:01	*16:01				*05:01	*05:02			*02:01	*04:01		
5451	Tilanus , Marcel G.	*10:01:01	*16:01:01										SSP SSO SBT	
5642	Varnavidou-Nicolaï	*10:01	*16:01				*05:01	*05:02					SSP	
3511	Zeevi , Adriana	*10:01	*16:01	5*02:02	*01:02	*01:05	*05:01	*05:02			*02:01	*04:01	SSP SSO	

Table 4: Individual laboratory results for B-cell #537-Class II

		Serology					
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1	
910	Hahn,Amy B.	DR10	DR15	DR51		DQ1	

Table 5: Individual laboratory results for B-cell #537-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold , Paula	*24	*29	*07	*27	*02	*15							RT-PCR	
5133	Askar , Medhat							*24:02:01	*29:01:01:01	*07:05:01	*27:02:01	*02:02:02:01	*15:05:02	NGS	
4492	Caillat-Zucman , Sc							*24:02:01:01	*29:01:01:01	*07:05:01	*27:02:01	*02:02:02:01	*15:05:02	SSP SSO	
774	Cecka , J. Michael	*24	*29	*07	*27	*02	*15							NGS	
8070	Chang , Uckjin													SSP SSO	
9916	Charlton , Ronald K	*24	*29	*07	*27	*02	*15							SBT	
3224	Chen , Dong-Feng							*24:02:01	*29:01	*07:05:01G	*27:02	*02:02	*15:05:01G	SSP	
8021	Clark , Brendan							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SSO	
3632	Colombe , Beth W.													SSO NGS	
5130	Costeas , Paul A.	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SSO	
779	Daniel , Claude	*24	*29	*07	*27	*02	*15							SSP SSO	
5219	Daniel , Dolly	*24	*29	*07	*27	*02	*15							SSO	
87	Di Paola , Nicholas	*24	*29	*07	*27	*02	*15							RT-PCR	
8086	Du , Keming							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSO SBT	
5214	Eckels/CPMC ,	*24	*29	*07	*27	*02	*15							SSO	
3135	Enczmann , J							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05		
747	Ferrari-Lacraz , Syl	*24	*29	*07	*27	*02	*15	*24:02:01:01	*29:01:01	*07:05:01	*27:02:01	*02:02:02:01	*15:05:02	SSP SSO	
762	Fischer , Gottfried													NGS	
4079	Fort , Marylise													SSO NGS	
792	Gandhi , Manish	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP	
8043	Gideoni , Osnat													SSO SBT	
810	Hamdi , Nuha	*24	*29	*07	*27	*02	*15							SSP SSO	
8087	Hernandez Rosales	*24	*29	*07	*27	*02	*15							SSO	
2344	Hurley & Hartzman							*24:02:01:01	*29:01:01:01	*07:05:01	*27:02:01	*02:02:02:01	*15:05:02	SSO	
771	Israel , Shoshana													SSO NGS	
794	Jaatinen , Taina	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SSO	
5488	Khuu , Hanh							*24:02:01	*29:01:01:01	*07:05:01	*27:02:01	*02:02:02	*15:05	SBT RT-PCR	B*07:06 C*15:29
4337	Kim , Tai-Gyu							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SSO	A*24:53 A*29:49
725	Lardy , N.M.													SSO	C*15:09 C*02:43
*278	Lee , Jar-How	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SBT	
6649	Lim , Young Ae													SSP SSO	
2400	Liu , Chang	*24	*29	*07	*27	*02	*15	*24:02	*29:01:01G	*07:05	*27:02	*02:02	*15:05	SSP	
731	Loewenthal , Ron													SSO SBT	
206	McAlack , Robert	*24	*29	*07	*27	*02	*15							SSO	
735	Moussa , Omar							*24:02	*29:01	*07:05P	*27:02	*02:02	*15:05P	SSP SSO	
8042	Muncher , Liora							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SBT	

Table 5: Individual laboratory results for B-cell #537-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
3966	Permpikul , Vejbæ	*24	*29	*07	*27	*02	*15							SSP	
8001	Rao , Prakash														
3753	Reed , Elaine F.							*24:02	*29:01	*07:05:01G	*27:02	*02:02	*15:05	SSO SBT	A*24:07 C*02:43 C*15:09 C*15:29 A*24:53 A*24:82 A*29:20 A*29:49 A*29:56 C*02:111 A*24:13 A*29:77 C*15:111
3519	Renac , Virginie	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP NGS	
793	Rubocki , Ronald	*24	*29	*07	*27	*02	*15							SSP	
4251	Schiller , Jennifer	*24	*29	*07	*27	*02	*15	*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSO NGS	
8068	Shanmugam , Hem	*24	*29	*07	*27	*02	*15							SSO	
8029	Tarigopula , Anil	*24	*29	*07	*27	*02	*15							SSO	
230	Thoni , Deborah							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05		
5451	Tilanus , Marcel G.													SSP SSO SBT	
5642	Varnavidou-Nicolaïd													SSP	
2847	Wakita , Atsushi	*24	*29	*07	*27	*02	*15							SSO	
3511	Zeevi , Adriana							*24:02	*29:01	*07:05	*27:02	*02:02	*15:05	SSP SSO	

Table 6a: Individual laboratory results for B-cell #538-Class II

Center	Investigator	Low resolution												METHOD	Other Alleles
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5462	Arnold , Paula	*04	*16	4*01	5*02	*01	*03	*03	*05	*01		NT	NT	RT-PCR	
774	Cecka , J. Michael	*04	*16	4*01	5*02	*01	*03	*03	*05	*01		*03	*06	SSP SSO	
9916	Charlton , Ronald K	*04	*16	4*PRESENT	5*PRESENT			*03	*05					SSP	
3632	Colombe , Beth W.	*04	*16	4*01	5*02	*01	*03	*03	*05	*01		*03	*06	SSP SSO	
5130	Costeas , Paul A.	*04	*16	4*01	5*02	*01	*03	*03	*05			*03	*06	SSP SSO	
779	Daniel , Claude	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06	SSP SSO	
5219	Daniel , Dolly	*04	*16			*01	*03	*03	*05					SSO	
87	Di Paola , Nicholas	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06	RT-PCR	DPB1*124
5214	Eckels/CPMC ,	*04	*16	4*01	5*02	*01	*03	*03 (DQ8)	*05	*01		*03		SSO	
747	Ferrari-Lacraz , Syl	*04	*16		5*02	*01	*03	*03	*05	*01		*03	*06	SSP SSO NGS	
4079	Fort , Marylise	*04	*16					*03	*05					SSP	
792	Gandhi , Manish	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06	SSO SBT	
8043	Gideoni , Osnat	*04	*16			*01	*03	*03	*05					SSP SSO	
810	Hamdi , Nuha	*04		4*01	5*02	*01	*03	*03	*05					SSO	
8087	Hernandez Rosales	*04	*16			*01	*03	*03	*05					SSO	
771	Israel , Shoshana	*04	*16					*03	*05					SSP SSO	
794	Jaatinen , Taina	*04	*16	4*01	5*02	*01	*03	*03	*05	*01		*03	*06	SSP SSO SBT RT-PCR	
5488	Khuu , Hanh			4*01	5*02									SSP SSO SBT	
725	Lardy , N.M.	*04	*16	4*PRESENT	5*PRESENT	*01	*03	*03	*05					SSP SSO	
278	Lee , Jar-How	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06		
6649	Lim , Young Ae	*04	*16	4*PRESENT	5*PRESENT									SSP	
2400	Liu , Chang	*04	*16	4*01	5*02	*01	*03	*03	*05			*03	*06	SSP SSO SBT NGS	
731	Loewenthal , Ron	*04	*16			*01	*03	*03	*05					SSO SBT	
206	McAlack , Robert	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06	SSO	
735	Moussa , Omar													SSP SSO SBT	
3966	Perpikul , Vejbaes													SSP	
8001	Rao , Prakash	*04	*16	4*PRESENT	5*PRESENT	*01	*03	*03	*05						
3519	Renac , Virginie	*04	*16					*03	*05			*03	*06	SSP NGS	
793	Rubocki , Ronald	*04	*16	4*PRESENT	5*PRESENT	*01	*03	*03	*05					SSP	
4251	Schiller , Jennifer	*04	*16	4*01	5*02	*01	*03	*03	*05	*01	*01	*03	*06	SSO NGS	
8068	Shanmugam , Hem	*04	*16	4*01	5*02			*03	*05					SSO	
8029	Tarigopula , Anil	*04	*16			*01	*03	*03	*05					SSO	
5451	Tilanus , Marcel G..	*04	*16	4*01	5*02	*01	*03	*03	*05					SSP SSO SBT	
5642	Varnavidou-Nicolaic	*04	*16	4*PRESENT	5*PRESENT			*03	*05					SSP	
2847	Wakita , Atsushi	*04	*16											SSO	

Table 6b: Individual laboratory results for B-cell #538-Class II

Center	Investigator	High resolution												METHOD	Other Alleles
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5133	Askar , Medhat	*04:04:01	*16:04	4*01:03:01	5*02:02	*01:02:02	*03:01:01	*03:02:01	*05:02:01	*01:03:01		*03:01:01	*06:01	NGS	
4492	Caillat-Zucman , Sc	*04:04:01	*16:04	4*01:03	5*02:02	*01:02:02	*03:01:01	*03:02:01	*05:02:01	*01:03	*01:03	*03:01:01	*06:01	SSP SSO NGS	DPA1*01:13
774	Cecka , J. Michael	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03		*03:01	*06:01	SSP SSO	DRB4*01:09 DRB4*01:10 DRB*02:06
8070	Chang , Uckjin	*04:04	*16:04											SBT	
3224	Chen , Dong-Feng	*04:04	*16:04	4*01:01:01G	5*02:02:01G	NT	NT	*03:02	*05:02	NT	NT	NT	NT	SSP SSO SBT	
8021	Clark , Brendan	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03		*03:01	*06:01	SSO NGS	
3632	Colombe , Beth W.	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03		*03:01	*06:01	SSP SSO	
5130	Costeas , Paul A.	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02			*03:01	*06:01	SSP SSO	
779	Daniel , Claude	*04:04	*16:04		5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01	SSP SSO	
8086	Du , Keming	*04:04	*16:04			*01:02	*03:01	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01	SSO SBT	
5214	Eckels/CPMC									*01:03		*03:01:01G	*20:01		
3135	Enczmann , J	*04:04	*16:04	4*01:03	5*02:02			*03:02	*05:02			*03:01	*06:01		
747	Ferrari-Lacruz , Syl	*04:04:01	*16:04	4*01:03:01	5*02:02			*03:02:01	*05:02:01	*01:03	*01:03	*03:01:01	*06:01	SSP SSO NGS	DPA1*01:13
762	Fischer , Gottfried	*04:04:01	*16:04	4*01:03:01	5*02:02	*01:02:02	*03:01:01	*03:02:01	*05:02:01	*01:03:01:03		*03:01:01	*06:01	SSO NGS	
4079	Fort , Marylise											*03:01	*06:01	SSP	DPB1*20:01
792	Gandhi , Manish	*04:04	*16:04					*03:02	*05:02			*03:01	*06:01	SSO SBT	
8043	Gideoni , Osnat													SSP SSO	
810	Hamdi , Nuha		*16:04											SSO	
2344	Hurley & Hartzman	*04:04:01	*16:04			*01:02:02	*03:01:01	*03:02:01	*05:02:01	*01:03:01:03	*01:03:01:03	*03:01:01	*06:01	SSO NGS	
771	Israel , Shoshana	*04:04	*16:04					*03:02	*05:02					SSP SSO	
794	Jaatinen , Taina	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03		*03:01	*06:01	SSP SSO SBT RT-PCR	DRB4*01:09 DQA1*03:02 DQA1*03:03 DPA1*01:13 DPB1*104:01 DQA1*01:09 DRB5*02:06 DQA1*01:08 DQA1*01:11
5488	Khuu , Hanh	*04:04:01	*16:04			*01:02	*03:01	*03:02:01	*05:02:01			*03:01:01	*06:01	SSP SSO SBT	DQB1*03:02:11 DQB1*05:02:02 DPB1*29:01 DPB1*20:01:01
4337	Kim , Tai-Gyu	*04:04	*16:04					*03:02	*05:02			*03:01	*06:01	SSP SBT	
278	Lee , Jar-How	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01		
2400	Liu , Chang	*04:04	*16:04			*01:02	*03:01	*03:02	*05:02			*03:01:01G	*06:01	SSP SSO SBT	
731	Loewenthal , Ron	*04:04:01	*16:04					*03:02:01	*05:02:01					NGS	
														SSO SBT	

Table 6b: Individual laboratory results for B-cell #538-Class II

		High resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
735	Moussa , Omar	*04:04	*16:04	4*01:01	5*02:02	*01:02P	*03:01P	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01	SSP SSO SBT	DRB4*01:03 DRB4*01:09 DRB4*01:10 DRB4*01:06 DRB4*01:07 DRB5*02:06 DPA1*01:13
8042	Muncher, Liora	*04:04	*16:04	4*01:03	5*02:02			*03:02	*05:02						
3966	Permpikul , Vejbaes	*04:04	*16:04	4*01:03	5*02:02			*03:02	*05:02					SSP	
8001	Rao , Prakash	*04:04		4*01:03	5*02:02:01G			*03:02	*05:02			*03:01:01G	*06:01		
3753	Reed , Elaine F.	*04:04	*16:04	4*01:01	5*02:02:01G	*01:02:01G	*03:01:01G	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01	SSO SBT	DPA1*01:13 DRB4*01:03 DRB4*01:06 DRB4*01:09 DRB4*01:10 DQB1*05:79 DPB1*20:01 DPB1*29:01 DQB1*03:161 DQB1*05:100 DQB1*05:125 DQB1*03:11
3519	Renac , Virginie	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02			*03:01	*06:01	SSP NGS	
793	Rubocki , Ronald					*01:02	*03:01					*03:01:01G	*06:01	SSP	
4251	Schiller , Jennifer	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02	*01:03	*01:03	*03:01	*06:01	SSO NGS	
230	Thoni , Deborah	*04:04	*16:04					*03:02	*05:02			*03:01	*20:01		
5451	Tilanus , Marcel G.	*04:04:01	*16:04											SSP SSO SBT	
5642	Varnavidou-Nicolaïd	*04:04	*16:04					*03:02	*05:02					SSP	
3511	Zeevi , Adriana	*04:04	*16:04	4*01:03	5*02:02	*01:02	*03:01	*03:02	*05:02			*03:01	*06:01	SSP SSO	

Table 7: Individual laboratory results for B-cell #538-Class II

		Serology									
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1		Others			
910	Hahn,Amy B.	DR4	DR15	DR53	DR51			DQ3	DQ1	DR7, DR9	

Table 8: Individual laboratory results for B-cell #538-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles	
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C				
5462	Arnold , Paula	*02	*24	*15	*51	*03	*14								RT-PCR	
5133	Askar , Medhat							*02:01:01:01	*24:02:01	*15:01:01:01	*51:01:01:01	*03:03:01	*14:02:01		NGS	
4492	Caillat-Zucman , Sc							*02:01:01:01	*24:02:01:01	*15:01:01:01	*51:01:01	*03:03:01	*14:02:01		SSP SSO NGS	
774	Cecka , J. Michael	*02	*24	*15	*51	*03	*14								SSP SSO	
8070	Chang , Uckjin														SBT	
9916	Charlton , Ronald K	*02	*24	*15	*51	*03	*14								SSP	
3224	Chen , Dong-Feng							*02:01	*24:02:01	*15:01	*51:01:01G	*03:03	*14:02		SSP SSO SBT	
8021	Clark , Brendan							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSO NGS	
3632	Colombe , Beth W.														SSP SSO	
5130	Costeas , Paul A.	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSP SSO	
779	Daniel , Claude	*02	*24	*15	*51	*03	*14			*15:01		*03:03			SSP SSO	
5219	Daniel , Dolly	*02	*24	*15	*51	*03	*14								SSO	
87	Di Paola , Nicholas	*02	*24	*15	*51	*03	*14								RT-PCR	
5214	Eckels/CPMC ,	*02	*24	*15 (B62)	*51	*03 (Cw9)	*14									
8086	Du , Keming							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSO SBT	
3135	Enczmann , J							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02			
747	Ferrari-Lacraz , Syl	*02	*24	*15	*51	*03	*14	*02:01:01:01	*24:02:01:01	*15:01:01:01	*51:01:01	*03:03:01	*14:02:01		SSP SSO NGS	
762	Fischer , Gottfried														SSO NGS	
4079	Fort , Marylise														SSP	
792	Gandhi , Manish	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSO SBT	
8043	Gideoni , Osnat														SSP SSO	
810	Hamdi , Nuha	*02	*24	*15	*51	*03	*14								SSO	
8087	Hernandez Rosales	*02	*24	*15	*51	*03	*14								SSO	
2344	Hurley & Hartzman ,							*02:01:01:01	*24:02:01:01	*15:01:01:01	*51:01:01	*03:03:01	*14:02:01		SSO NGS	
771	Israel , Shoshana														SSP SSO	
794	Jaatinen , Taina	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSP SSO SBT RT-PCR	C*03:227
5488	Khuu , Hanh							*02:01:01	*24:02:01	*15:01:01:01	*51:01:01:01	*03:03:01	*14:02:01		SSP SSO SBT	A*02:01:36 A*02:01:09 B*15:01:02 B*15:01:20 B*15:39:02 B*51:06:01 B*51:37 B*51:61:01 C*03:227 C*03:49 C*14:55 A*24:02:06 B*15:38:01 B*51:61:02 B*51:01:35 C*03:20N C*03:43:01 C*14:46 C*14:06 B*15:04:01 B*15:30 B*15:39:01 B*15:38:02 B*51:02:01 B*51:01:04 B*51:02:05 C*14:20 C*03:04:01 C*03:55
4337	Kim , Tai-Gyu							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		SSP SBT	A*24:02:02
725	Lardy , N.M.														SSP SSO	

Table 8: Individual laboratory results for B-cell #538-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	Lee , Jar-How	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		
6649	Lim , Young Ae													SSP	
2400	Liu , Chang	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSP SSO SBT	
731	Loewenthal , Ron													NGS	
206	McAlack , Robert	*02	*24	*15	*51	*03	*14							SSO SBT	
735	Moussa , Omar							*02:01P	*24:02	*15:01	*51:01P	*03:03P	*14:02	SSO	
8042	Muncher, Liora							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSP SSO SBT	
3966	Permpikul , Vejbaes	*02	*24		*51	*03	*14			*15:01				SSP	
8001	Rao , Prakash														
															A*02:70 A*02:86 A*02:87 A*02:110 A*02:90 A*02:118 A*02:226N A*24:29 A*24:30 A*24:52 A*24:53 A*24:94 A*24:104 A*24:207 A*24:218 B*15:30 B*15:38 B*15:39 B*15:202 B*15:239 B*51:06 B*51:07 C*03:20N C*03:43 C*03:46 C*03:49 C*03:55 C*03:227 A*02:58 B*15:56 A*02:04 A*02:12 A*02:17 A*02:36 A*02:37 A*02:46 B*51:37 B*51:61 B*51:63 B*51:104 B*51:147 B*51:185 B*51:193 C*03:04 C*14:05 C*14:06 C*14:20 C*14:46 C*03:341 C*14:55 A*24:324 C*03:276 A*02:417 A*02:629 A*24:03 A*24:14 A*24:28 A*24:93 B*15:04 B*15:63 B*15:135 A*02:76 A*02:628 A*24:13 A*24:293 A*24:310
3753	Reed , Elaine F.							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSO SBT	
3519	Renac , Virginie	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSP NGS	
793	Rubocki , Ronald	*02	*24	*15	*51	*03	*14							SSP	
4251	Schiller , Jennifer	*02	*24	*15	*51	*03	*14	*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSO NGS	
8068	Shanmugam , Hem	*02	*24	*15	*51	*03	*14							SSO	
8029	Tarigopula , Anil	*02	*24	*15	*51	*03	*14							SSO	
230	Thoni , Deborah							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02		
5451	Tilanus , Marcel G.													SSP SSO SBT	
5642	Varnavidou-Nicolaïd													SSP	
2847	Wakita , Atsushi	*02	*24	*15	*51	*03	*14							SSO	
3511	Zeevi , Adriana							*02:01	*24:02	*15:01	*51:01	*03:03	*14:02	SSP SSO	