

# B-cell Line Exchange #261

**FEBRUARY 3, 2016**

The results for B-cell Line Exchange #261 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables

3 - 8. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <http://bioinformatics.nmdp.org/>.

**Ter-521.** The consensus type for this sample from a Filipino donor is DRB1\*15:01-DRB1\*15:02-DRB5\*01:01-DQA1\*01:02-DQB1\*05:02-DPA1\*01:03-DPA1\*02:02-DPB1\*01:01-DPB1\*03:01-A\*11:01-A\*34:01-B\*07-B\*15:21-C\*04:03-C\*07:02. One likely class II association in this is DRB1\*15:01-DRB5\*01:01-DQA1\*01:02-DQB1\*05:02, observed in exchange cells Ter 482 (same as Ter 393) and Ter 243 (same as IHW9262). The other likely association in this cell is then DRB1\*15:02-DRB5\*01:01-DQA1\*01:02-DQB1\*05:02, observed in Ter 433 (same as Ter 269) from an Asian donor.

This cell was previously typed for class II as Ter 276 (2001), as correctly identified by Tiercy. In this present retyping, DRB1\*15:01 and DRB1\*15:02 were each assigned by 97% of labs reporting at high resolution. DRB1\*15:01:01 was reported by 5 labs, and DRB1\*15:02:01 was reported by 6 labs. This sample was homozygous for DRB5\*01:01 (100%), DQA1\*01:02 (100%), and DQB1\*05:02 (97%).

This sample was also previously typed for class I as extracts 279 (2004) and 112 (1999). In this present study, A\*11:01 and A\*34:01 were each assigned by 95% of labs reporting at high resolution. A\*11:01:01 and A\*34:01:01 were each assigned by 4 labs. C\*04:03 (95%) and C\*07:02 (100%) were the C-locus types. For the B-locus, B\*15:21 was well assigned by 96%. However, as in the 2004 typing, the assignment of the second B-locus allele remained unresolved, as 10 labs assigned B\*07:06, 5 labs assigned B\*07:05:01G, 3 labs assigned B\*07:05, and 1 lab assigned B\*07:05P. B\*07:06 was found to differ from B\*07:05 in exon 5 by a single nucleotide substitution at codon 282 (ATC → GTC) in which isoleucine is replaced by valine in B\*07:06 (1).

**Ter-522.** The consensus type for this sample from a Chinese donor is DRB1\*04:05-DRB1\*08:14-DRB4\*01:03-DQA1\*01:03-DQA1\*03-DQB1\*04:01-DQB1\*06:01-DPA1\*02:02-DPB1\*02:02-DPB1\*05:01-A\*02:03-A\*11:01-B\*15:02-B\*38:02-C\*07:02-C\*08. One likely association in this cell may be DRB1\*04:05-DRB4\*01:03-DQA1\*03-DQB1\*04:01. DRB1\*04:05-DQB1\*04:01 is commonly observed in Asians, with HF=04545. The other likely association is then, DRB1\*08:14-DQA1\*01:03-DQB1\*06:01.

This cell is KE, the reference cell for DRB1\*08:14, as astutely noted by Tiercy. It is also known as FH44 and was studied in the workshops as cell IHW9432 and in the exchange as Ter 467 (2012), Ter 384 (2007), and Ter 334 (2004). In this present retyping, DRB1\*08:14 was assigned by 94%, compared to 76% of labs assigning DRB1\*08:14 in 2012. DRB1\*04:05 was reported as the second DRB1 type by 97%. DQA1\*01:03 (100%) was assigned in complete consensus. The assignment of the second DQA1 type, however, remained unresolved, as DQA1\*03:03 was reported by 12 labs, DQA1\*03:01:01G by 4 labs, and DQA1\*03:01 by 3 labs.

A\*02:03, A\*11:01, B\*15:02, and B\*38:02 were all assigned by 95% of labs reporting at high resolutions. A\*02:03:01, A\*11:01:01, B\*15:02:01, and B\*38:02:01 were each reported by 4 labs. The presence of a possible new C-locus allele was noted by Arnold, Hartzman and Hurley, Renac, and Reed. The new allele is observed to differ from C\*08:01 by 2 nucleotides changes in exon 4. One is at position 766, codon 232 (GAG → AAG), which results in an amino acid change from glutamic acid to lysine. The other is a silent mutation at position 855, codon 261 (GTG → GTA).

## References:

1. Sanz L, Vilches R, de Pablo R, et al. Haplotypic association of two new HLA class I alleles: Cw\*15052 and B\*0706: evolutionary relationships of HLA -Cw\*15 alleles. *Tissue Antigens* 1996; 47:329-332.

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**Table 2: Summary of the 261<sup>st</sup> B-cell Line Exchange**

Ter-522

**DNA Typing - class II**

<u>34 labs High; 34 labs low-DRB1</u>		%(n)
DRB1*04:05:01		18(6)
DRB1*04:05		79(27)
<i>DRB1*15:01</i>		3 (1)
DRB1*04		100(34)
<u>36 labs High; 30 labs low-DRB1</u>		%(n)
DRB1*08:14		94(34)
<i>DRB1*15:02</i>		3 (1)
<i>DRB1*04:05</i>		3 (1)
DRB1*08		83(25)
DRB1*04		17(5)

<u>20 labs High; 25 labs Low-DRB4</u>		%(n)
DRB4*01:03		90(18)
<i>DRB4*01:01</i>		5 (1)
DRB4*01:01+		5 (1)
DRB4*01		76(19)
DRB4*PRESENT		14(6)

<u>20 labs High; 23 labs Low-DQA1</u>		%(n)
DQA1*01:03		100(20)
DQA1*01		100(23)
<u>19 labs High; 23 labs Low-DQA1</u>		%(n)
DQA1*03:01:01G		21(4)
DQA1*03:03		63(12)
DQA1*03:01		16(3)
DQA1*03		100(23)

<u>30 High Labs; 33 labs Low-DQB1</u>		%(n)
DQB1*04:01:01		17(5)
DQB1*04:01		80(24)
<i>DQB1*05:02</i>		3 (1)
DQB1*04		100(33)
<u>30 High Labs; 36 labs Low-DQB1</u>		%(n)
DQB1*06:01:01		13(4)
DQB1*06:01		83(25)
<i>DQB1*05:02</i>		3 (1)
DQB1*06		100(33)

<u>12 High Labs; 15 labs Low-DPA1</u>		%(n)
DPA1*02:02:02		8 (1)
DPA1*02:02		92(11)
DPA1*02		100(15)

<u>29 High Labs; 15 labs Low-DPB1</u>		%(n)
DPB1*02:02		97(28)
<i>DPB1*148:01</i>		3 (1)
DPB1*02		100(15)
<u>29 High Labs; 15 labs Low-DPB1</u>		%(n)
DPB1*05:01:01		10(3)
DPB1*05:01:01G		17(5)
DPB1*05:01P		7 (2)
DPB1*05:01		66(19)
DPB1*05		100(15)

**Serology - class II**

<u>3 LABS- DR</u>		%(n)
DR4		100(3)

<u>3 LABS - DRX</u>		%(n)
DR53		100(3)

<u>3 LABS - DQ</u>		%(n)
DQ1		100(3)
DQ4		100(2)

**DNA Typing - class I**

<u>22 labs High; 24 labs low- A</u>		%(n)
A*02:03:01		18(4)
A*02:03		77(17)
<i>A*34:01</i>		5 (1)
A*02		96(23)
A*02(A203)		4 (1)
<u>20 labs High; 24 labs low- A</u>		%(n)
A*11:01:01		20(4)
A*11:01		75(15)
<i>A*11:54</i>		5 (1)
A*11		100(24)

<u>22 labs High; 24 labs low- B</u>		%(n)
B*15:02:01		18(4)
B*15:02		77(17)
<i>B*15:21</i>		5 (1)
B*15		91(22)
B*15(B75)		9 (2)
<u>21 labs High; 24 labs low- B</u>		%(n)
B*38:02:01		19(4)
B*38:02		76(16)
<i>B*07:06</i>		5 (1)
B*38		100(24)

<u>19 labs High; 25 labs low- C</u>		%(n)
C*07:02:01:01		5 (1)
C*07:02:01G		11(2)
C*07:02P		5 (1)
C*07:02		63(12)
<i>C*07:90</i>		5 (1)
<i>C*07:260</i>		5 (1)
C*NEW		5 (1)
C*07		100(25)
<u>19 labs High; 25 labs low- C</u>		%(n)
C*08:01:01G		11(2)
C*08:01:01		5 (1)
C*08:01P		5 (1)
C*08:01		58(11)
<i>C*08:72</i>		5 (1)
<i>C*04:03</i>		5 (1)
C*NEW		11 (2)
C*08		100(25)

**Table 3a: Individual laboratory results for B-cell #521-Class II**

Center	Investigator	Low resolution												METHOD	Other Alleles
		DRB1	DRB5	DQA1	DQB1	DPA1	DPB1								
5488	Adams , Sharon		5*01											SSP SSO SBT	
4691	Al Ajlan , Abdulaziz						*05	*05							
5133	Askar , Medhat	*15	*15	5*01		*01		*05		*01	*02			SSO SBT	
774	Cecka , J. Michael	*15		5*01		*01		*05		*01	*02	*01	*03		
3632	Colombe , Beth W.	*15	*15	5*01		*01		*05		*01	*02	*01	*03	SSP SSO	
5130	Costeas , Paul A.	*15	*15					*05	*05					SSP SSO	
779	Daniel , Claude	*15	*15	5*01	5*01	*01		*05		*01	*02	*01	*03	SSP SSO	
5219	Daniel , Dolly	*15	*15					*05	*05						
1108	DeConinck , Martha	*15		5*01		*01		*05		*01	*02	*01	*03	SSO	
3766	Dunckley , Heather	*15	*15	5*01		*01		*05		*01	*02	*01	*03	SSP SSO RT-PCR	
5214	Eckels/CPMC ,	*15	*15	5*01		*01		*05	*05					SSO	
792	Gandhi , Manish	*15	*15	5*01		*01		*05		*01	*02	*01	*03	SSP SSO SBT	
910	Hahn , Amy B.	*15	*15	5*PRESENT	5*PRESENT			*05	*05					SSP	
1694	Hesse , Nicole	*15		5*PRESENT				*05						SSP	
8043	Hod , Reut	*15	*15			*01		*05						SSP SSO	
771	Israel , Shoshana	*15						*05						SSP SSO	
794	Jaatinen , Taina	*15		5*01		*01		*05		*01	*02	*01	*03	SSP SSO SBT RT-PCR	
2847	Kihara , Masaaki	*15	*15											SSO	
87	Land , Geoffrey A.	*15	*15	5*01	5*01	*01	*01	*05	*05	*01	*02	*01	*03	SSP	
725	Lardy , N.M.	*15		5*PRESENT		*01		*05						SSP SSO	
278	Lee , Jar-How	*15	*15	5*01	5*01	*01	*01	*05	*05	*01	*02	*01	*03		
6649	Lim , Young Ae	*15		5*PRESENT										SSP	
759	Lopez-Cepero , May	*15		5*01		*01		*05		*01	*02	*01	*03	SSP SSO	DPB1*78
206	McAlack-Hanau ,	*15	*15	5*01		*01		*05	*05	*01	*02	*01	*03		
8042	Muncher , Liora	*15	*15	5*01	5*01	NT	NT	*05	*05	NT	NT	NT	NT	SSP SSO	
54	Pancoska , Carol	*15		5*01		*01		*05		*01	*02	*01	*03	SSO	
3966	Permpikul , Vejbaes	NT													
2400	Phelan , Donna L.	*15	*15	5*01	NP	*01		*05				*01	*03		
8001	Rao , Prakash					*01									
3519	Renac , Virginie	*15						*05				*01	*03	SSP SBT	
1160	Rosen-Bronson , Sa	*15		5*01		*01		*05		*01	*02			SSO SBT	
793	Rubocki , Ronald	*15		5*PRESENT		*01		*05				*01	*03	SSP	
4251	Schiller , Jennifer	*15	*15	5*01	5*01	*01	*01	*05	*05	*01	*02	*01	*03	SSO SBT	
8068	Shanmugam , Hem	*15	*15			*01	*01	*05	*05					SSO	
8029	Tarigopula , Anil	*15	*15					*05	*05					SSO	
747	Tiercy , Jean-Marie	*15	*15			*01		*05						SSP SSO SBT	
5451	Tilanus , Marcel G.J.	*15	*15	5*PRESENT				*05						SSP SBT	
5642	Varnavidou-Nicolaic	*15		5*PRESENT				*05						SSP	
8052	Yanina Marcos , Cir	*15	*15			*01	*01	*05	*05					SSO	

Table 3b: Individual laboratory results for B-cell #521-Class II									
Serology									
CTR	DIRNAME	DR15		DR51		DQ1		OTH1	OTH2
4492	Charron,D.	+		+		+		DR13	
910	Hahn,Amy B.	+		+		+			
4908	Kvam,Vonnett	+		+		+			

**Table 4: Individual laboratory results for B-cell #521-Class II**

Center	Investigator	High resolution										METHOD	Other Alleles	
		DRB1	DRB5	DQA1		DQB1		DPA1		DPB1				
5488	Adams , Sharon	*15:01:01	*15:02:01		*01:02		*05:02:01				*01:01:01	*03:01:01	SSP SSO SBT	DQA1*01:11
4691	Al Ajlan , Abdulaziz	*15:01	*15:02											
5462	Arnold , Paula	*15:01	*15:02	5*01:01	NT	NT	*05:02		NT	NT	*01:01	*03:01	SSP SSO SBT	DRB5*01:15
5133	Askar , Medhat	*15:01	*15:02	5*01:01					*01:03	*02:02	*01:01:01G	*03:01	SSO SBT	DRB1*15:74/15:85/15:86/15:106/15:107/15:108/15:110/15:111/15:112, DPB1*222:01/270:01/293:01/326:01/327:01/329:01/346:01, DRB5*01:15,
774	Cecka , J. Michael	*15:01	*15:02	5*01:01	*01:02		*05:02	*05:05	*01:03	*02:02	*01:01	*03:01	SBT	DRB1*15:85/15:86/15:106/15:107/15:108/15:111/15:112/15:113N, DRB5*01:15, DQB1*05:14/05:17/05:19/05:26/05:33/05:34/05:36/05:37/05:46/05:47/05:57/05:58 /05:87Q
8070	Chang , Uckjin	*15:01	*15:02										SSP SBT	
9916	Charlton , Ronald K	*15:01:01	*15:02:01	5*01:01			*05:02:01				*01:01:01	*03:01:01	SSP SBT	
4492	Charron , Dominiqu	*15:01	*15:02	5*01:01	*01:02		*05:02		*01:03	*02:02	*01:01	*03:01	SSP SSO	DRB1*15:74/15:85/15:86/15:106/15:107, DRB1*05:14/05:17/05:19/05:26/05:33/05:34, DQA1*01:08/01:09/01:11, DPB1*104:01
8021	Clark , Brendan	*15:01	*15:02	5*01:01	*01:02		*05:02				*01:01	*03:01	SSP SSO	
3632	Colombe , Beth W.	*15:01	*15:02	5*01:01	*01:02		*05:02		*01:03	*02:02	*01:01	*03:01	SSP SSO	
5130	Costeas , Paul A.	*15:01	*15:02	5*01:01	*01:02	*01:02	*05:02	*05:02					SSP SSO	
779	Daniel , Claude				*01:02				*01:03	*02:02	*01:01	*03:01	SSP SSO	
3766	Dunckley , Heather										*01:01	*03:01	SSP SSO RT-PCR	
5214	Eckels/CPMC ,								*01:03	*02:02	*01:01:01G	*03:01:01G	SSO	
3135	Enczmann , J	*15:01	*15:02	5*01:01			*05:02	*05:02			*01:01	*03:01	SSP SSO SBT	
762	Fischer , Gottfried	*15:01	*15:02	5*01:01	*01:02		*05:02				*01:01	*03:01	SSP SSO SBT	DQB1*05:47
4079	Fort , Marylise	*15:01	*15:02				*05:02				*01:01	*03:01	SSP SSO	DPB1*104:01, DRB1*15:113N/15:116, DQB1*05:87Q
792	Gandhi , Manish	*15:01	*15:02	5*01:01	*01:02		*05:02				*01:01	*03:01	SSP SSO SBT	
810	Hamdi , Nuha	*15:01	*15:02	5*01:01	*01:02	*01:02	*05:02	*05:02					SSO	
8043	Hod , Reut	*15:01	*15:02		*01:02		*05:02						SSP SSO	

**Table 4: Individual laboratory results for B-cell #521-Class II**

Center	Investigator	High resolution											METHOD	Other Alleles
		DRB1		DRB5	DQA1		DQB1		DPA1		DPB1			
2344 771	Hurley , Hartzman & Israel , Shoshana	*15:01:01:01 *15:01	*15:02:01 *15:02		*01:02:01:01	*01:02:02	*05:02:01 *05:02	*05:02:01	*01:03:01:03	*02:02:02	*01:01:01	*03:01:01	OTHER SSP SSO	DQA1*01:02:01:03, DPB1*104:01, DRB1*15:01:01:02/15: 01:01:03/15:01:01:04
794	Jaatinen , Taina	*15:01	*15:02	5*01:01	*01:02		*05:02		*01:03	*02:02	*01:01	*03:01	SSP SSO SBT RT-PCR	DRB1*15:86, DQA1*01:08/01:09/01: 11
8086	Jie , Pan	*04:05	*08:14				*06:01	*04:01					SSP SSO SBT	
4337	Kim , Tai-Gyu	*15:01	*15:02				*05:02	*05:02			*01:01	*03:01	SBT	
278	Lee , Jar-How	*15:01	*15:02	5*01:01	*01:02	*01:02	*05:02	*05:02	*01:03	*02:02	*01:01	*03:01		
759	Lopez-Cepero , May										*01:01P	*03:01P	SSP SSO	
731	Loewenthal , Ron	*15:01:01	*15:02:01				*05:02:01						SSO SBT	DRB1*15:01:17
8042	Muncher , Liora	*15:01	*15:02	5*01:01	NT	NT	*05:02	*05:02	NT	NT	NT	NT	SSP SSO	
54	Pancoska , Carol								*01:03	*02:02			SSO	
3966	Permpikul , Vejbaes	NT												
2400	Phelan , Donna L.	*15:01	*15:02		*01:02		*05:02				*01:01:01G	*03:01:01G		
8001	Rao , Prakash	*15:01	*15:02	5*01:01				*05:02			*01:01	*03:01		DPB1*104:01
3753	Reed , Elaine F.	*15:01	*15:02	5*01:01	*01:02:01G	*01:02:01G	*05:02	*05:02	*01:03	*02:02	*01:01	*03:01	SSO SBT OTHER	DRB5*01:15, DPB1*326:01/327:01/3 46:01, DPB1*104:01/221:01/2 22:01/270:01/293:01/3 29:01
3519	Renac , Virginie	*15:01	*15:02	5*01:01	*01:02		*05:02				*01:01	*03:01	SSP SBT	
1160	Rosen-Bronson , Sa	*15:01	*15:02	5*01:01			*05:02		*01:03	*02:02	*01:01	*03:01	SSO SBT	
793	Rubocki , Ronald										*01:01	*03:01	SSP	
4251	Schiller , Jennifer	*15:01	*15:02				*05:02	*05:02			*01:01:01G	*03:01:01G	SSO SBT	
747	Tiercy , Jean-Marie	*15:01	*15:02:01	5*01:01	*01:02		*05:02:01				*01:01	*03:01	SSP SSO SBT	DQA1*01:08/01:09/01: 11
5451	Tilanus , Marcel G.	*15:01:01	*15:02:01										SSP SBT	
5642	Varnavidou-Nicolaic	*15:01	*15:02				*05:02	*05:02					SSP	DRB1*15:33/15:39, DQB1*05:01
3511	Zeevi , Adriana	*15:01	*15:02	5*01:01	*01:02		*05:02				*01:01	*03:01	SSP SSO	

**Table 5: Individual laboratory results for B-cell #521-Class I**

Center	Investigator	Low Resolution						Intermediate/High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams , Sharon							*11:01:01	*34:01:01	*07:05:01/06	*15:21	*04:03:01	*07:02:01	SSP SSO SBT	C*07:50/07:349
4691	Al Ajlan , Abdulaziz	*11	*34	*07	*15	*04	*07								
5462	Arnold , Paula							*11:01	*34:01	*07:05P	*15:21	*04:03	*07:02	SSP SSO SBT	
5133	Askar , Medhat	*11	*34	*07	*15	*04	*07	*11:01:01	*34:01:01	*07:06	*15:21	*04:03:01	*07:02:01	SSO SBT	C*07:349
774	Cecka , J. Michael	*11	*34	*07	*15	*04	*07				*15:21	*04:03			C*04:160/04:171
9916	Charlton , Ronald K							*11:01:01	*34:01:01	*07:06	*15:21	*04:03:01	*07:02:01	SSP SBT	
4492	Charron , Dominiqu							*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SSO	A*11:20/11:100/11:154/11:163/11:173/11:174/11:179+, B*07:159/07:195/07:213/07:245/07:306/07:319/07:320
8021	Clark , Brendan							*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SSO	
5130	Costeas , Paul A.	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SSO	A*11:10
779	Daniel , Claude	*11	*34	*07	*15	*04	*07				*15:21			SSP SSO	
5219	Daniel , Dolly	*11	*34	*07	*15	*04	*07								
1108	DeConinck , Martha	*11	*34	*07	*15	*04	*07							SSO	
3766	Dunckley , Heather	*11	*34	*07	*15	*04	*07							SSP SSO RT-PCR	
5214	Eckels/CPMC ,	*11	*34	*07		*04	*07				*15:21			SSO	
3135	Enczmann , J							*11:01	*34:01	*07:05	*15:21	*04:03	*07:02	SSP SSO SBT	
792	Gandhi , Manish	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SSO SBT	
810	Hamdi , Nuha							*11:54	*34:01	*07:05	*15:21			SSO	
1694	Hesse , Nicole	*11	*34	*07	*15	*04	*07							SSP	
2344	Hurley , Hartzman&							*11:01:01	*34:01:01	*07:06	*15:21	*04:03:01	*07:02:01:01	OTHER	
794	Jaatinen , Taina	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:05/06	*15:21	*04:03	*07:02	SSP SSO SBT RT-PCR	C*07:50
8086	Jie , Pan							*11:01	*02:03	*38:02	*15:02	*08:01:06	*07:02:35	SSP SSO SBT	C*07:13/07:161/07:260, C*08:16:01/08:72:01, C*08:59
2847	Kihara , Masaaki	*11	*34	*07	*15	*04	*07							SSO	
87	Land , Geoffrey A.	*11	*34	*07	*15(B75)	*04	*07							SSP	
4337	Kim , Tai-Gyu							*11:01	*34:01	*07:05	*15:21	*04:03	*07:02	SBT	
278	Lee , Jar-How	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:06	*15:21	*04:03	*07:02		
206	McAlack-Hanau ,	*11	*34	*07	*15	*04	*07								
8042	Muncher , Liora	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SSO	
54	Pancoska , Carol	*11	*34	*07	*15	*04	*07				*15:21			SSO	
2400	Phelan , Donna L.	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:05:01G	*15:21	*04:03	*07:02:01G		
3519	Renac , Virginie	*11	*34	*07	*15	*04	*07							SSP SBT	
3753	Reed , Elaine F.							*11:01	*34:01	*07:05:01G	*15:21	*04:03	*07:02	SSO SBT OTHER	C*04:06, C*07:37/07:50/07:349
3519	Renac , Virginie							*11:01	*34:01	*07:06	*15:21	*04:03	*07:02	SSP SBT	
4251	Schiller , Jennifer	*11	*34	*07	*15	*04	*07	*11:01	*34:01	*07:05:01G	*15:21	*04:03	*07:02	SSO SBT	
8068	Shanmugam , Hem	*11	*34	*07	*15	*04	*07							SSO	
8029	Tarigopula , Anil	*11	*34	*07	*15	*04	*07							SSO	
8052	Yanina Marcos , Cil	*11	*34	*07	*15	*04	*07				*15:21			SSO	



**Table 6a: Individual laboratory results for B-cell #522-Class II**

		Low resolution													
Center	Investigator	DRB1		DRB5		DQA*01		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon			4*01										SSP SSO SBT	
4691	Al Ajlan , Abdulaziz							*04	*06						
5133	Askar , Medhat	*04	*08	4*01		*01	*03	*04	*06	*02				SSO SBT	
774	Cecka , J. Michael	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05		
3632	Colombe , Beth W.	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO	
5130	Costeas , Paul A.	*04	*08					*04	*06					SSP SSO	
779	Daniel , Claude	*04	*08	4*01	4*01	*01	*03	*04	*06	*02		*02	*05	SSP SSO	
5219	Daniel , Dolly	*04	*04					*04	*06						
1108	DeConinck , Martha	*04		4*01		*01	*03	*04	*06	*02		*02	*05	SSO	
3766	Duncley , Heather	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO RT-PCR	
5214	Eckels/CPMC ,	*04		4*01		*01	*03	*04	*06					SSO	
792	Gandhi , Manish	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO SBT	
910	Hahn , Amy B.	*04	*04	4*PRESENT	4*PRESENT			*04	*06					SSP	
1694	Hesse , Nicole	*04		4*PRESENT				*04	*06					SSP	
8043	Hod , Reut	NT												SSP SSO	
771	Israel , Shoshana	*04						*04	*06					SSP SSO	
794	Jaatinen , Taina	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO SBT RT-PCR	
2847	Kihara , Masaaki	*04	*08											SSO	
87	Land , Geoffrey A.	*04	*04	4*01	4*01	*01	*03	*04	*06	*02	*02	*02	*05	SSP	
725	Lardy , N.M.	*04	*08	4*PRESENT		*01	*03	*04	*06					SSP SSO	
278	Lee , Jar-How	*04	*08	4*01	NT	*01	*03	*04	*06	*02	*02	*02	*05		
6649	Lim , Young Ae	*04	*08		4*PRESENT									SSP	
759	Lopez-Cepero , Ma	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05	SSP SSO	DPB1*38
206	McAlack-Hanau ,	*04	*08	4*01		*01	*03	*04	*06	*02		*02	*05		
8042	Muncher , Liora	*04	*08	4*01	NP	NT	NT	*04	*06	NT	NT	NT	NT	SSP SSO	
54	Pancoska , Carol	*04	*08	4*01		*01	*03	*04	*06	*02			*05	SSO	
3966	Permpikul , Vejbaes	NT													
2400	Phelan , Donna L.	*04	*08	4*01	NP	*01	*03	*04	*06			*02	*05		
8001	Rao , Prakash					*01	*03								
3519	Renac , Virginia	*04	*08					*04	*06			*02	*05	SSP SBT	
1160	Rosen-Bronson , S	*04	*08	4*01		*01	*03	*04	*06	*02				SSO SBT	
793	Rubocki , Ronald	*04	*08	4*PRESENT		*01	*03	*04	*06			*02		SSP	
4251	Schiller , Jennifer	*04	*08	4*01		*01	*03	*04	*06	*02	*02	*02	*05	SSO SBT	
8068	Shanmugam , Hem	*04	*04			*01	*03	*04	*06					SSO	
8029	Tarigopula , Anil	*04	*04					*04	*06					SSO	
747	Tiercy , Jean-Marie	*04	*08			*01	*03	*04	*06					SSP SSO SBT	
5451	Tilanus , Marcel G.	*04	*08	4*PRESENT				*04	*06					SSP SBT	
5642	Varnavidou-Nicola	*04	*08	4*PRESENT				*04	*06					SSP	
8052	Yanina Marcos , C	*04	*08			*01	*03	*04	*06					SSO	

Table 6b: Individual laboratory results for B-cell #522-Class II								
Serology								
CTR	DIRNAME	DR4		DR53	DQ1	DQ4	OTH1	OTH2
4492	Charron,D.	+		+	+	+	DR1,DR8	DR14
910	Hahn,Amy B.	+		+	+	+	DR1	
4908	Kvam,Vonnett	+		+	+		DR8,DQ8	

**Table 7: Individual laboratory results for B-cell #522-Class II**

Intermediate/High resolution														
Center	Investigator	DRB1		DRB4	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon	*04:05:01	*08:14		*01:03	*03:03	*04:01:01	*06:01:01			*02:02	*05:01:01	SSP SSO SBT	DQA1*01:10
4691	Al Ajlani , Abdulaziz	*04:05	*08:14											
5462	Arnold , Paula	*04:05	*08:14	4*01:03	NT	NT	*04:01	*06:01	NT	NT	*02:02	*05:01	SSP SSO SBT	
5133	Askar , Medhat	*04:05	*08:14		*01:03						*02:02	*05:01:01G	SSO SBT	DRB1*04:178N, DQA1*01:10
774	Cecka , J. Michael	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01	*02:02		*02:02	*05:01		DRB1*04:78N, DRB4*01:09, DQB1*04:07/04:14/04:15/04:16/04:17, DQB1*06:99/06:105
8070	Chang , Uckjin	*04:05											SBT	
9916	Charlton , Ronald K	*04:05:01	*08:14	4*01:03			*04:01:01	*06:01			*02:02	*05:01:01	SSP SBT	DRB4*01:09
4492	Charron , Dominique	*04:05	*08:14	4*01:03	*01:03	*03:01/02/03	*04:01	*06:01	*02:02		*02:02	*05:01	SSP SSO	DRB1*04:178N, DQA1*01:10, DQB1*04:07/04:14/04:15/04:16/04:17, DQB1*06:43/06:99/06:100/06:101/06:102N , DPB1*135:01
8021	Clark , Brendan	*04:05	*08:14	4*01:03	*01:03	*03:01	*04:01	*06:01			*02:02	*05:01	SSP SSO	
3632	Colombe , Beth W.	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01	*02:02		*02:02	*05:01	SSP SSO	
5130	Costeas , Paul A.	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01					SSP SSO	
779	Daniel , Claude		*08:14		*01:03	*03:03					*02:02	*05:01	SSP SSO	
3766	Dunckley , Heather		*08:14								*02:02	*05:01	SSP SSO RT-PCR	
5214	Eckels/CPMC ,		*08:14						*02:02		*148:01	*05:01:01G	SSO	
3135	Enczmann , J	*04:05	*08:14	4*01:03			*04:01	*06:01			*02:02	*05:01	SSP SSO SBT	
762	Fischer , Gottfried	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01			*02:02	*05:01	SSP SSO SBT	DQB1*06:105
4079	Fort , Marylise	*04:05	*08:14				*04:01	*06:01			*02:02	*05:01	SSP SSO	DPB1*135:01
792	Gandhi , Manish	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01			*02:02	*05:01	SSP SSO SBT	
810	Hamdi , Nuha	*04:05	*08:14	4*01:01	*01:03	*03:01	*04:01	*06:01					SSO	
8043	Hod , Reut	NT											SSP SSO	
2344	Hurley , Hartzman&	*04:05:01	*08:14		*01:03	*03:02/03:03:01	*04:01:01	*06:01:01	*02:02:02	*02:02:02	*02:02	*05:01:01	OTHER	DQA1*01:03:01:02, DPB1*135:01
771	Israel , Shoshana	*04:05					*04:01	*06:01					SSP SSO	
794	Jaatinen , Taina	*04:05	*08:14	4*01:03	*01:03	*03:01/02/03	*04:01	*06:01	*02:02		*02:02	*05:01	SSP SSO SBT RT-PCR	DPB1*135:01, DQA1*01:10
8086	Jie , Pan	*15:01	*15:02				*05:02	*05:02					SSP SSO SBT	
4337	Kim , Tai-Gyu	*04:05	*04:05				*04:01	*06:01			*02:02	*05:01	SBT	
278	Lee , Jar-How	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01	*02:02	02:02	*02:02	*05:01		
759	Lopez-Cepero , Ma										*02:02	*05:01P	SSP SSO	
731	Loewenthal , Ron	*04:05:01					*04:01:01	*06:01:01					SSO SBT	DQB1*04:08, DQB1*06:45
8042	Muncher , Liora	*04:05	*08:14	4*01:03	NT	NT	*04:01	*06:01	NT	NT	NT	NT	SSP SSO	
54	Pancoska , Carol		*08:14						*02:02				SSO	

Table 7: Individual laboratory results for B-cell #522-Class II														
		Intermediate/High resolution												
Center	Investigator	DRB1	DRB4	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
3966	Permpikul , Vejbaes	NT												
2400	Phelan , Donna L.	*04:05	*08:14		*01:03	*03:03	*04:01	*06:01			*02:02	*05:01P		
8001	Rao , Prakash	*04:05	*08:14	4*01:03			*04:01	*06:01			*02:02	*05:01		
3753	Reed , Elaine F.	*04:05	*08:14	4*01:01/0 3/06/08	*01:03	*03:01:01G	*04:01	*06:01	*02:02	*02:02	*02:02	*05:01:01G	SSO SBT OTHER	DQA1*01:10
3519	Renac , Virginie	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01			*02:02	*05:01	SSP SBT	
1160	Rosen-Bronson , S	*04:05	*08:14	4*01:03	*01:03	*03:03	*04:01	*06:01	*02:02		*02:02	*05:01	SSO SBT	
793	Rubocki , Ronald										*02:02	*05:01:01G	SSP	
4251	Schiller , Jennifer	*04:05	*08:14				*04:01	*06:01			*02:02	*05:01:01G	SSO SBT	
747	Tiercy , Jean-Marie	*04:05:01	*08:14	4*01:03	*01:03	*03:03	*04:01:01	*06:01:01			*02:02	*05:01	SSP SSO SBT	DQA1*01:10/03:01/03:02
5451	Tilanus , Marcel G.	*04:05:01	*08:14										SSP SBT	
5642	Varnavidou-Nicolaïd	*04:05	*08:14				*04:01	*06:01					SSP	DRB1*04:80
8052	Yanina Marcos , Ci		*08:14										SSO	
3511	Zeevi , Adriana	*04:05	*08:14	4*01:03	*01:03	*03:01	*04:01	*06:01			*02:02	*05:01	SSP SSO	

**Table 8: Individual laboratory results for B-cell #522-Class I**

Center	Investigator	Low Resolution						Intermediate/High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams , Sharon					*07	*08	*02:03:01	*11:01:01	*15:02:01	*38:02:01			SSP SSO SBT	A*02:427, A*11:12
4691	Al Ajlan , Abdulaziz	*02	*11	*15	*38	*07	*08								
5462	Arnold , Paula							*02:03	*11:01	*15:02	*38:02	*07:02P	*08:01P	SSP SSO SBT	
5133	Askar , Medhat	*02	*11	*15	*38	*07	*08	*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02	*08:01	SSO SBT	C*07:02:35, C*08:01:06
774	Cecka , J. Michael	*02	*11	*15	*38	*07	*08	*02:03		*15:02	*38:02				A*02:281/02:315/02:345/0 2:370/02:427/02:431/02:4 63/02:466/02:480/02:505, B*15:214/15:302N, B*38:18
9916	Charlton , Ronald K							*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02	*08:01	SSP SBT	
4492	Charron , Dominiqu							*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO	A*02:253/02:264/02:370/0 2:480/02:505, A*11:100/11:120/11:154/1 1:163/11:173, C*07:159/07:195/07:245/0 7:305/07:306, C*08:78/08:79/08:85/08:8 9N/08:95
8021	Clark , Brendan							*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO	
5130	Costeas , Paul A.	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO	C*08:36N/08:78
779	Daniel , Claude	*02	*11	*15	*38	*07	*08			*15:02				SSP SSO	
5219	Daniel , Dolly	*02	*11	*15	*38	*07	*08								
1108	DeConinck , Martha	*02	*11	*15	*38	*07	*08							SSO	
3766	Dunckley , Heather	*02	*11	*15	*38	*07	*08							SSP SSO RT-PCR	
5214	Eckels/CPMC ,	*02	*11	*15(B75)	*38	*07	*08							SSO	
3135	Enczmann , J							*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO SBT	
792	Gandhi , Manish	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO SBT	
810	Hamdi , Nuha							*02:03	*11:54	*15:02	*38:02	*07:90	*08:01	SSO	
1694	Hesse , Nicole	*02	*11	*15	*38	*07	*08							SSP	
8043	Hod , Reut	NT												SSP SSO	
2344	Hurley , Hartzman&							*02:03:01	*11:01:01	*15:02:01	*38:02:01	*07:02:01:01	*08:01:01	OTHER	
794	Jaatinen , Taina	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:260	*08:72	SSP SSO SBT RT-PCR	
8086	Jie , Pan							*34:01	*11:01	*15:21	*07:06	*07:02	*04:03	SSP SSO SBT	
2847	Kihara , Masaaki	*02	*11	*15	*38	*07	*08							SSO	
4337	Kim , Tai-Gyu							*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SBT	
87	Land , Geoffrey A.	*02(A203)	*11	*15(B75)	*38	*07	*08							SSP	
278	Lee , Jar-How	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:01		
206	McAlack-Hanau ,	*02	*11	*15	*38	*07	*08								
8042	Muncher , Liora	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02	*08:01	SSP SSO	
54	Pancoska , Carol	*02	*11	*15	*38	*07	*08	*02:03						SSO	
2400	Phelan , Donna L.	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02:01G	*08:01:01G		

Table 8: Individual laboratory results for B-cell #522-Class I															
Center	Investigator	Low Resolution						Intermediate/High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
3753	Reed , Elaine F.							*02:03	*11:01	*15:02	*38:02	*07:02	NEW	SSO SBT OTHER	A*02:267/02:355/02:427/02:447, A*11:04/11:12/11:20/11:199
3519	Renac , Virginie	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	NEW	NEW	SSP SBT	C*07:02, C*08:01
4251	Schiller , Jennifer	*02	*11	*15	*38	*07	*08	*02:03	*11:01	*15:02	*38:02	*07:02:01G	*08:01:01G	SSO SBT	
8068	Shanmugam , Hem	*02	*11	*15	*38	*07	*08							SSO	
8029	Tarigopula , Anil	*02	*11	*15	*38	*07	*08							SSO	
8052	Yanina Marcos , Ci	*02	*11	*15	*38	*07	*08							SSO	