

B-cell Line Exchange #264

JULY 1, 2016

B-cell Lines 527-528

The results for B-cell Line Exchange #264 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 Nancy Goeken, University of Iowa, Iowa City, Fu-Meei Robbins, National Institutes of Health, Bethesda, and to Helen Bass, Jane Rowlands, and Tracey Reese, Welsh Blood Service,

Pontyclun, for generously donating the valuable reference cells examined in this exchange.

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

Ter-527. The consensus type for this sample is DRB1*03:01-DRB1*13:06-DRB3*01:01-DQA1*01:03-DQA1*05:01-DQB1*02:01-DQB1*06:03-DPA1*01:03-DPA1*02:01-DPB1*01:01-DPB1*03:01/A*01:01-A*32:01-B*08:01-B*44:02-C*05:01-C*07:01. No race information was available for this cell. One likely class II association in this cell is DRB1*03:01-DRB3*01:01-DQA1*05:01-DQB1*02:01, observed numerous times in the exchange, most recently in Ter 483 (same as Ter 298, 278, and 217) and Ter 477 (same as Ter 402 and 352). The other likely association present may then be DRB1*13:06-DRB3*01:01-DQA1*01:03-DQB1*06:03.

This cell is Ter331, a reference cell for DRB1*13:06. It was previously studied in the exchange as Ter 406 (2008) and Ter 331 (2004), as astutely noted by Chen, Rao, and Tiercy. In this present retyping, DRB1*13:06 was assigned by 100% of labs reporting at high resolution. Although the ethnicity of this cell is unknown, DRB1*13:06 is found to be observed exclusively in Hispanics, with HF=0.00025. DRB1*03:01 (100%) was reported as the second DRB1 type, with 7 labs reporting DRB1*03:01:01. A*01:01 (100%), A*32:01 (100%), B*08:01 (100%), B*44:02 (100%), C*05:01 (100%), and C*07:01 (94%) were the assigned class I types. A*01:01:01, A*32:01:01, B*08:01:01, B*44:02:01, C*05:01:01, and C*07:01:01 were each assigned by 5 labs.

Ter-528. The consensus type for this sample from a Caucasian donor is DRB1*04:01-DRB1*13:17-DRB3*02:02-DRB4*01:03-DQA1*03:01-DQA1*04:01-DQB1*03:02-DQB1*04:02-DPA1*01:03-DPB1*04:01-DPB1*04:02/A*02:01-A*32:01-B*15:01-C*03:03. One likely class II association in this cell is DRB1*04:01-DRB4*01:03-DQA1*03:01-DQB1*03:02, observed in previous exchange cells, Ter 517 (same as Ter 385) and Ter 441 (same Ter 432 and 347). The other likely association in this cell is DRB1*13:17-DRB3*02:02-DQA1*04:01-DQB1*04:02.

This cell is R.B, a reference cell for DRB1*13:17. It was previously examined in the exchange as Ter 405 (2008) and Ter 351 (2005), as correctly identified by Chen, Rao, and Tiercy. In this present retyping, DRB1*13:17 was reported in complete consensus by labs reporting at high resolution. By serology, 1 lab reported DR8 and the other DR13. The discrepancy in the serology results concurs with data showing that DRB1*13:17 resulted "from a reciprocal recombination event between DR8 and DR13 alleles" (1). DRB1*04:01 was reported as the second DRB1 type, with 9 labs reporting DRB1*04:01:01. A*02:01, A*32:01, and B*15:01 were reported in complete consensus. A*02:01:01 and A*32:01:01 were each assigned by 6 labs, and B*15:01:01:01 was assigned by 5 labs (3 NGS, 2 SBT). C*03:03 was reported by 95% as the sole C-locus type, with NGS assigning C*03:03:01.

References:

1. Rosenberg SM, Wollenzien TF, Robbins FM, et al. Yet another novel HLA DRB1 allele (DRB1*1317) and its misidentification by PCR-SSP. Tissue Antigens 1995;46:128-130.

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Table 2: Summary of the 264th B-cell Line Exchange

Ter-528

DNA Typing - class II		<u>33 labs High; 35 labs low-DRB1</u>		<u>21 labs High; 24 labs Low-DRB3/4/5</u>		<u>24 labs High; 25 labs Low-DQA1</u>		<u>33 High Labs; 32 labs Low-DQB1</u>		<u>13 High Labs; 13 labs Low-DPA1</u>		<u>28 High Labs; 16 labs Low-DPB1</u>	
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
		DRB1*04:01:01	27(9)	DRB3*02:02:01	14(3)	DQA1*03:01:01	8 (2)	DQB1*03:02:01	21(7)	DPA1*01:03:01:02	8 (1)	DPB1*04:01:01:01	4 (1)
		DRB1*04:01	73(24)	DRB3*02:02:01G	14(3)	DQA1*03:01:01G	4 (1)	DQB1*03:02	79(26)	DPA1*01:03:01	8 (1)	DPB1*04:01:01	18(5)
		DRB1*04	100(35)	DRB3*02:02	72(15)	DQA1*03:01P	4 (1)	DQB1*03(DQ8)	3 (1)	DPA1*01:03	84(11)	DPB1*04:01:01G	18(5)
				DRB3*02	83(20)	DQA1*03:01	83(20)	DQB1*03	97(31)	DPA1*01	100(13)	DPB1*04:01P	4 (1)
				DRB3*PRESENT	17(4)	DQA1*03	100(25)					DPB1*04:01	57(16)
												DPB1*04(DP401)	50(8)
												DPB1*04	50(8)
		<u>36 labs High; 35 labs low-DRB1</u>	%(n)	<u>21 labs High; 25 labs Low-DRB3/4/5</u>	%(n)	<u>24 labs High; 25 labs Low-DQA1</u>	%(n)	<u>32 High Labs; 32 labs Low-DQB1</u>	%(n)			<u>28 High Labs; 16 labs Low-DPB1</u>	%(n)
		DRB1*13:17	100(36)	DRB4*01:03:01:01	5 (1)	DQA1*04:01:01	8 (2)	DQB1*04:02:01	22(7)			DPB1*04:02:01:02	7 (2)
		DRB1*13	97(34)	DRB4*01:01:01G	9 (2)	DQA1*04:01	92(22)	DQB1*04:02	78(25)			DPB1*04:02:01	14(4)
		DRB1*12	3 (1)	DRB4*01:03	81(17)	DQA1*04	100(25)	DQB1*04	100(32)			DPB1*04:02:01G	18(5)
				DRB4*01:01	5 (1)							DPB1*04:02P	4 (1)
				DRB4*01	76(19)							DPB1*04:02	57(16)
				DRB4*PRESENT	24(6)							DPB1*04(DP402)	50(8)
												DPB1*04	50(8)
DNA Typing - class I		<u>19 labs High; 25 labs low- A</u>		<u>21 labs High; 24 labs low- B</u>		<u>20 labs High; 25 labs low- C</u>							
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
		A*02:01:01:01	16(3)	B*15:01:01:01	24(5)	C*03:03:01	20(4)						
		A*02:01:01	16(3)	B*15:01:01	5 (1)	C*03:03:01G	10(2)						
		A*02:01	68(13)	B*15:01	71(15)	C*03:02:01	5 (1)						
		A*02	100(25)	B*15(B62)	4 (1)	C*03:03	65(13)						
				B*15	96(23)	C*03(Cw9)	4 (1)						
						C*03	96(24)						
		<u>19 labs High; 25 labs low- A</u>	%(n)										
		A*32:01:01	32(6)										
		A*32:01	68(13)										
		A*32	100(25)										

Table 3a: Individual laboratory results for B-cell #527-Class II

Center	Investigator	Low resolution											METHOD	Other Alleles	
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5488	Adams , Sharon			3*01										SSP SSO SBT	
5462	Arnold , Paula	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSP SSO SBT RT-PCR	
774	Cecka , J. Michael	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSP SSO	
8021	Clark , Brendan													SSO	
3632	Colombe , Beth W	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSP SSO	
5130	Costeas , Paul A.	*03	*13	3*01		*01	*05	*02	*06					SSP SSO	
779	Daniel , Claude	*03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03	SSO	
5219	Daniel , Dolly	*03	*13					*02	*06						
8099	Danish , Adel	*03	*13			*01	*05	*02	*06					SSO	
1108	DeConinck , Marth	*03	*13	3*PRESENT		*01	*05	*02	*06	*01	*02	*01	*03	SSO	DPB1*104
87	Di Paola , Nicholas	*03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03	RT-PCR	
5214	Eckels/CPMC ,	(DR17) *03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03	SSO	
4079	Fort , Marylise	*03	*13					*02	*06					SSP SSO	
792	Gandhi , Manish	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSP SSO SBT	
8087	Guerra , Q.F.B. Elk	*03	*13			*01	*05	*02	*06					SSO	
810	Hamdi , Nuha													SSO	
1694	Hesse , Nicole	*03	*13	3*PRESENT				*02	*03					SSP	
8043	Hod , Reut	*03	*13			*01	*05	*02	*06					SSP SSO	
771	Israel , Shoshana	*03	*13					*02	*06					SSP SSO	
794	Jaatinen , Taina	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSP SSO SBT RT-PCR	
725	Lardy , N.M.	*03	*13	3*PRESENT		*01	*05	*02	*06					SSO	
278	Lee , Jar-How	*03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03		
6649	Lim , Young Ae	*03	*13	3*PRESENT										SSP	
2400	Liu , Chang	*03	*13	3*01		*01	*05	*02	*06			*01	*03	SSP SSO SBT	
731	Loewenthal , Ron	*03	*13			*01	*05	*02	*06					SSO SBT	
206	McAlack , Robert	*03	*13	3*01		*01	*05	*02	*06	*01	*02	*01	*03	SSO	
8042	Muncher , Liora	*03	*13	3*01	3*01	NT	NT	*02	*06	NT	NT	NT	NT	SSP SSO	
2847	Murase , Junko	*03	*13											SSO	
54	Pancoska , Carol	*03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03	SSO	
3966	Permpikul , Vejbae													SSP	
8001	Rao , Prakash					*01	*05							SSP SSO	
3519	Renac , Virginie	*03	*13					*02	*06			*01	*03	SSP SBT	
793	Rubocki , Ronald	*03	*13	3*01		*01	*05	*02	*06			*01	*03	SSP	
4251	Schiller , Jennifer	*03	*13	3*01	3*01	*01	*05	*02	*06	*01	*02	*01	*03	SSO SBT	
8068	Shanmugam , Hen	*03	*13	3*01				*02	*06					SSO	
8029	Tarigopula , Anil	*03	*13			*01	*05	*02	*06					SSO	
747	Tiercy , Jean-Marie	*03	*13	3*01		*01	*05	*02	*06			*01	*03	SSP SSO SBT	
5451	Tilanus , Marcel G	*03	*13	3*01	3*01	*01	*05	*02	*06					SSO SBT	
5642	Varnavidou-Nicola	*03	*13	3*PRESENT				*02	*06					SSP	
8052	Yanina Marcos , C	*03	*13											SSO	

Table 3b: Individual laboratory results for B-cell #527-Class II

		High resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams, Sharon	*03:01:01	*13:06			*01:03	*05:01	*02:01:01	*06:03:01			*01:01:01	*03:01:01	SSP SSO SBT	
5462	Arnold, Paula	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SSO SBT RT-PCR	DRB3*01:14/*01:16, DQA1*01:10, DPA1*01:13
5133	Askar, Medhat	*03:01:01	*13:06	3*01:01:02		*01:03:01	*05:01:01	*02:01:01	*06:03:01	*01:03:01	*02:01:02	*01:01:01	*03:01:01	NGS	
4492	Caillat-Zucman, Sc	*03:01:01	*13:06	3*01:01		*01:03	*05:01	*02:01:01	*06:03:01	*01:03	*02:01	*01:01:01	*03:01:01	SSO NGS	DPA1*01:13, DQA1*01:10
774	Cecka, J. Michael	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SSO	DRB1*03:68N/ *03:83/*03:100/ *03:104/*03:107/ *03:108/*03:112, DRB3*01:16, DQB1*02:07/*02:14/*0 2:27, DQB1*06:41/*06:90/*0 6:110/*06:148, DPB1*417:01/*222:01/ *329:01
9916	Charlton, Ronald K	*03:01:01	*13:06	3*01:01				*02:01:01	*06:03:01			*01:01:01	*03:01:01	SSP SBT	
3224	Chen, Dong-Feng	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SBT	DRB3*01:16
8021	Clark, Brendan	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSO	
3632	Colombe, Beth W.	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SSO	
5130	Costeas, Paul A.	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03					SSP SSO	DQB1*06:44
779	Daniel, Claude	*03:01	*13:06			*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01:01G	SSO	
5214	Eckels/CPMC ,		*13:06									*01:01:01G	*03:01:01G	SSO	
3135	Enczmann, J	*03:01	*13:06	3*01:01				*02:01	*06:03			*01:01	*03:01:01		
762	Fischer, Gottfried	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03			*01:01	*03:01	SSP SSO SBT	DRB3*01:16, DPB1*104:01
4079	Fort, Marylise											*01:01	*03:01	SSP SSO	
792	Gandhi, Manish	*03:01	*13:06			*01:03	*05:01	*02:01	*06:03			*01:01	*03:01	SSP SSO SBT	
810	Hamdi, Nuha	*03:01	*13:06	3*01:01	3*01:02	*01:03	*05:01	*02:01	*06:03					SSO	
8043	Hod, Reut	*03:01	*13:06			*01:03	*05:01	*02:01	*06:03					SSP SSO	
2344	Hurley, Hartzman	*03:01:01:01	*13:06			*01:03:01:01	*05:01:01:01	*02:01:01	*06:03:01	*01:03:01:03	*02:01:02	*01:01:01	*03:01:01	NGS	DQA1*01:03:01:02, DQA1*05:01:01:02, DPB1*104:01
771	Israel, Shoshana	*03:01	*13:06					*02:01	*06:03					SSP SSO	
794	Jaatinen, Taina	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SSO SBT RT-PCR	DRB1*03:68N/ *03:83/*03:104, DQA1*01:10, DPB1*417:01, DPB1*351:01
8086	Keming, Du	*03:01	*13:06			*01:03	*05:01	*02:01	*06:03	*01:03	*02:01	*01:01	*03:01	SSP SSO SBT	DPB1*105:01, DPB1*126:01
4337	Kim, Tai-Gyu	*03:01	*13:06					*02:01	*06:03			*01:01	*03:01	SBT	
278	Lee, Jar-How	*03:01	*13:06	3*01:01	3*01:01	*01:03	*05:01	*02:01	*06:03	*01:05	*02:01	*01:01	*03:01		
2400	Liu, Chang	*03:01	*13:06			*01:03	*05:01	*02:01	*06:03			*01:01:01G	*03:01:01G	SSP SSO SBT	
731	Loewenthal , Ron	*03:01:01G	*13:06					*02:01:01	*06:03:01					SSO SBT	
8042	Muncher, Liora	*03:01	*13:06	3*01:01	3*01:01	NT	NT	*02:01	*06:03	NT	NT	NT	NT	SSP SSO	

Table 3b: Individual laboratory results for B-cell #527-Class II

High resolution															
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
3966	Permpikul, Vejbae	*03:01	*13:06	3*01:01	3*01:01			*02:01	*06:03					SSP	
8001	Rao, Prakash	*03:01	*13:06	3*01:01				*02:01	*06:03			*01:01	*03:01	SSP SSO	DPB1*104:01
3753	Reed, Elaine F.	*03:01:01	*13:06	3*01:01		*01:03	*05:01	*02:01:01	*06:03:01	*01:03	*02:01	*01:01:01	*03:01:01	SSO NGS	DRB3*01:04, DQA1*01:10, DPA1*01:13
3519	Renac, Virginie	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03			*01:01	*03:01	SSP SBT	
793	Rubocki, Ronald					*01:03	*05:01					*01:01	*03:01	SSP	
4251	Schiller, Jennifer	*03:01	*13:06					*02:01	*06:03			*01:01	*03:01	SSO SBT	
747	Tiercy, Jean-Marie	*03:01:01G	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03			*01:01:01	*03:01	SSP SSO SBT	DQA1*01:10
5451	Tilanus, Marcel G.	*03:01:01	*13:06											SSO SBT	
5642	Varnavidou-Nicola	*03:01	*13:06					*02:01	*06:03					SSP	
8052	Yanina Marcos , C		*13:06											SSO	
3511	Zeevi, Adriana	*03:01	*13:06	3*01:01		*01:03	*05:01	*02:01	*06:03			*01:01	*03:01	SSP SSO	

Table 4: Individual laboratory results for B-cell #527-Class II									
Serology									
CTR	DIRNAME	DR13	DR17	DR52	DQ1	DQ2		OTH1	OTH2
910	Hahn,Amy B.	+	+	+	+	+			
4908	Kvam,Vonnet	+	+	+	+	+			

Table 5: Individual laboratory results for B-cell #527-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles	
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C				
5488	Adams , Sharon			*08	*44	*05	*07	*01:01:01	*32:01:01						SSP SSO SBT	A*01:100/*01:145, A*32:62/*32:30, B*08:01/*08:50/*08:71+, B*44:02/*44:19N/*44:49+, C*05:01/*05:04:01/*05:23+, C*07:01/*07:06/*07:18+
5462	Arnold , Paula	NT													SSP SSO SBT RT-PCR	
5133	Askar , Medhat							*01:01:01:01	*32:01:01	*08:01:01	*44:02:01:01	*05:01:01:02	*07:01:01:01	NGS		
4492	Caillat-Zucman , So							*01:01:01:01	*32:01:01	*08:01:01	*44:02:01:01	*05:01:01:02	*07:01:01:01	SSO NGS		
774	Cecka , J. Michael	*01	*32	*08	*44	*05	*07							SSP SSO		
9916	Charlton , Ronald K.							*01:01	*32:01	*08:01:01	*44:02:01	*05:01:01	*07:01:01	SSP SBT	A*01:04N, A*01:32, A*32:53	
3224	Chen , Dong-Feng							*01:01	*32:01	*08:01	*44:02	*05:01	*07:01:01G	SSP SBT		
8021	Clark , Brendan	*01	*32	*08	*44	*05	*07							SSO		
5130	Costeas , Paul A.	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SSO		
779	Daniel , Claude	*01	*32	*08	*44	*05	*07							SSO		
5219	Daniel , Dolly	*01	*32	*08	*44	*05	*07									
8099	Danish , Adel	*01	*32	*08	*44	*05	*07							SSO		
1108	DeConinck , Martha	*01	*32	*08	*44	*05	*07							SSO		
87	Di Paola , Nicholas	*01	*32	*08	*44	*05	*07							RT-PCR		
5214	Eckels/CPMC ,	*01	*32	*08	*44	*05	*07							SSO		
3135	Enczmann , J							*01:01	*32:01	*08:01	*44:02	*05:01	*07:01		C*07:06/*07:18	
8087	Guerra , Q.F.B. Elba	*01	*32	*08	*44	*05	*07							SSO		
792	Gandhi , Manish	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SSO SBT		
810	Hamdi , Nuha							*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSO		
1694	Hesse , Nicole	*01	*32	*08	*44	*05	*07							SSP		
2344	Hurley , Hartzman&							*01:01:01:01	*32:01:01	*08:01:01	*44:02:01:01	*05:01:01:02	*07:01:01:01	NGS		
794	Jaatinen , Taina	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SSO SBT RT-PCR	C*07:06/*07:18/*07:343	
8086	Keming , Du							*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SSO SBT		
4337	Kim , Tai-Gyu							*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SBT		
278	Lee , Jar-How	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01			
2400	Liu , Chang	*01	*32	*08	*44	*05	*07	*01:01:01G	*32:01	*08:01	*44:02:01G	*05:01	*07:02:01G	SSP SSO SBT		
206	McAlack , Robert	*01	*32	*08	*44	*05	*07							SSO		
8042	Muncher , Liora	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SSO		
2847	Murase , Junko	*01	*32	*08	*44	*05	*07							SSO		
54	Pancoska , Carol	*01	*32	*08	*44	*05	*07							SSO		
3966	Permpikul , Vejbaes	*01	*32	*08	*44	*05	*07							SSP		
3753	Reed , Elaine F.							*01:01:01	*32:01:01	*08:01:01	*44:02:01	*05:01:01	*07:01:01	SSO NGS		
3519	Renac , Virginie	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSP SBT		
4251	Schiller , Jennifer	*01	*32	*08	*44	*05	*07	*01:01	*32:01	*08:01	*44:02	*05:01	*07:01	SSO SBT		
8068	Shanmugam , Hema	*01	*32	*08	*44	*05	*07							SSO		
8029	Tarigopula , Anil	*01	*32	*08	*44	*05	*07							SSO		
8052	Yanina Marcos , Cir	*01	*32	*08	*44	*05	*07							SSO		

Table 6a: Individual laboratory results for B-cell #528-Class II

		Low resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon			3*02	4*01									SSP SSO SBT	
5462	Arnold , Paula	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04(DP401)	*04(DP402)	SSP SSO SBT	
774	Cecka , J. Michael	*04	*13	3*02	4*01	*03	*04	*03	*04	*01		*04(DP401)	*04(DP402)	RT-PCR	
8021	Clark , Brendan													SSP SSO	
3632	Colombe , Beth W.	*04	*13	3*02	4*01	*03	*04	*03	*04	*01		*04	*04	SSP SSO	
5130	Costeas , Paul A.	*04	*13	3*02	4*01	*03	*04	*03	*04					SSP SSO	
779	Daniel , Claude	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04	*04	SSO	
5219	Daniel , Dolly	*04	*13					*03	*04						
8099	Danish , Adel	*04	*13			*03	*04	*03	*04					SSO	
1108	DeConinck , Martha	*04	*13		4*PRESENT	*03	*04	*03	*04	*01	*01	*04(DP401)	*04(DP402)	SSO	DQB1*03, DPB1*105
87	Di Paola , Nicholas	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04(DP401)	*04(DP402)	RT-PCR	
5214	Eckels/CPMC ,	*04	*13	3*02	4*01	*03	*04	*03 (DQ8)	*04	*01	*01	*04(DP401)	*04(DP402)	SSO	
4079	Fort , Marylise	*04	*13					*03	*04					SSP SSO	
792	Gandhi , Manish	*04	*13	3*02	4*01	*03	*04	*03	*04	*01		*04	*04	SSP SSO SBT	
8087	Guerra , Q.F.B. Elba	*04	*13			*03	*04	*03	*04					SSO	
810	Hamdi , Nuha													SSO	
1694	Hesse , Nicole	*04	*13	3*PRESENT	4*PRESENT			*03	*04					SSP	
8043	Hod , Reut	*04	*13			*03	*04	*03	*04					SSP SSO	
771	Israel , Shoshana	*04	*13					*03	*04					SSP SSO	
794	Jaatinen , Taina	*04	*13	3*02	4*01	*03	*04	*03	*04	*01		*04		SSP SSO SBT	
725	Lardy , N.M.	*04	*13	3*PRESENT	4*PRESENT	*03	*04	*03	*04					RT-PCR	
278	Lee , Jar-How	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04	*04	SSO	
6649	Lim , Young Ae	*04	*12	3*PRESENT	4*PRESENT									SSP	
2400	Liu , Chang	*04	*13	3*02	4*01	*03	*04	*03	*04			*04	*04	SSP SSO SBT	
731	Loewenthal , Ron	*04	*13			*03	*04	*03	*04					SSO SBT	
206	McAlack , Robert	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04	*04	SSO	
8042	Muncher , Liora	*04	*13	3*02	4*01	NT	NT	*03	*04	NT	NT	NT	NT	SSP SSO	
2847	Murase , Junko	*04	*13											SSO	
54	Pancoska , Carol	*04	*13	3*02	4*01	*03	*04	*03	*04	*01		*04		SSO	
3966	Permpikul , Vejbaes													SSP	
8001	Rao , Prakash					*03	*04							SSP SSO	
3519	Renac , Virginie	*04	*13					*03	*04			*04(DP401)	*04(DP402)	SSP SBT	
793	Rubocki , Ronald	*04	*13	3*02	4*PRESENT	*03	*04	*03	*04					SSP	
4251	Schiller , Jennifer	*04	*13	3*02	4*01	*03	*04	*03	*04	*01	*01	*04(DP401)	*04(DP402)	SSO SBT	
8068	Shanmugam , Hema	*04	*13	3*02	4*01			*03	*04					SSO	
8029	Tarigopula , Anil	*04	*13			*03	*04	*03	*04					SSO	
747	Tiercy , Jean-Marie	*04	*13	3*02	4*01	*03	*04	*03	*04			*04(DP401)	*04(DP402)	SSP SSO SBT	
5451	Tilanus , Marcel G.J	*04	*13	3*02	4*01	*03	*04	*03	*04					SSO SBT	
5642	Varnavidou-Nicolaïd	*04	*13	3*PRESENT	4*PRESENT			*03	*04					SSP	
8052	Yanina Marcos , Cir	*04	*13											SSO	

Table 6b: Individual laboratory results for B-cell #528-Class II

High resolution															
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon	*04:01:01	*13:17			*03:01	*04:01	*03:02:01	*04:02:01			*04:01:01	*04:02:01	SSP SSO SBT	DQB1*03:05:03, DQB1*04:03:02, DPB1*105:01, DPB1*126:01
5462	Arnold , Paula	*04:01	*13:17	3*02:02:01G	4*01:03	*03:01P	*04:01	*03:02	*04:02	*01:03	*01:03	*04:01P	*04:02P	SSP SSO SBT RT-PCR	DPB1*105:01, DPB1*126:01, DPA1*01:13, DQA1*03:02/*03:03, DRB3*02:28, DRB3*02:29N
5133	Askar , Medhat	*04:01:01	*13:17	3*02:02:01	4*01:03:01:01	*03:01:01	*04:01:01	*03:02:01	*04:02:01	*01:03:01		*04:01:01	*04:02:01	NGS	
4492	Caillat-Zucman ,	*04:01:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02:01	*04:02:01	*01:03	*01:03	*04:01:01	*04:02:01:02	SSO NGS	DQA1*03:02/*03:03, DPA1*01:13, DPB1*105:01, DPB1*126:01
774	Cecka , J. Michael	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO	DRB1*04:171/*04:175, DRB3*02:28/*02:29N, DRB4*01:09, DQB1*03:106, DQB1*04:11/*04:13 /*04:18/*04:19/*04:21 /*04:22/*04:23, DPA1*01:13, DPB1*126:01, DPB1*105:01
9916	Charlton , Ronald	*04:01:01	*13:17	3*02:02	4*01:03			*03:02:01	*04:02:01			*04:01	*04:02	SSP SBT	DRB4*01:09, DPB1*105:01, DPB1*126:01
3224	Chen , Dong-Fen	*04:01	*13:17	3*02:02:01G	4*01:01:01G	*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SBT	DPB1*144:01
8021	Clark , Brendan	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSO	
3632	Colombe , Beth V	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO	DPB1*105:01, DPB1*126:01
5130	Costeas , Paul A.	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02					SSP SSO	
779	Daniel , Claude		*13:17			*03:01	*04:01	*03:02		*01:03	*01:03	*04:01:01G	*04:02:01G	SSO	
5214	Eckels/CPMC ,		*13:17									*04:01:01G	*04:02:01G	SSO	
3135	Enczmann , J	*04:01	*13:17	3*02:02:01	4*01:03			*03:02	*04:02			*04:01:01	*04:02:01		
762	Fischer , Gottfried	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO SBT	DRB3*02:28, DQB1*04:13, DPB1*126:01, DPB1*105:01, DRB3*02:12, DRB3*02:29N
4079	Fort , Marylise											*04:01	*04:02	SSP SSO	
792	Gandhi , Manish	*04:01	*13:17			*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO SBT	DPB1*126:01, DPB1*105:01
810	Hamdi , Nuha	*04:01	*13:17	3*02:02:01	4*01:01	*03:01	*04:01	*03:02	*04:02					SSO	DRB3*02:02
8043	Hod , Reut	*04:01	*13:17			*03:01	*04:01	*03:02	*04:02					SSP SSO	

Table 6b: Individual laboratory results for B-cell #528-Class II

		High resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
2344	Hurley , Hartzmar	*04:01:01	*13:17			*03:01:01	*04:01:01	*03:02:01	*04:02:01	*01:03:01:02	*01:03:01:05	*04:01:01:01	*04:02:01:02	NGS	DPB1* 04:01:01:02, DPB1*105:01, DPB1*126:01
771	Israel , Shoshana	*04:01	*13:17					*03:02	*04:02					SSP SSO	
794	Jaatinen , Taina	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO SBT RT-PCR	DQA1*03:02/*03:03, DPB1*126:01, DPB1*350:01, DPB1*105:01
8086	Keming , Du	*04:01	*13:17			*03:01	*04:01	*03:02	*04:02	*01:03	*01:03	*04:01	*04:02	SSP SSO SBT	DPB1*105:01, DPB1*126:01
4337	Kim , Tai-Gyu	*04:01	*13:17					*03:02	*04:02			*04:01	*04:02	SBT	
278	Lee , Jar-How	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02	*01:03	*01:03	*04:01	*04:02		
2400	Liu , Chang	*04:01	*13:17			*03:01	*04:01	*03:02	*04:02			*04:01:01G	*04:02:01G	SSP SSO SBT	
731	Loewenthal , Ron	*04:01:01	*13:17					*03:02:01	*04:02:01					SSO SBT	DQB1*04:04
8042	Muncher , Liora	*04:01	*13:17	3*02:02	4*01:03	NT	NT	*03:02	*04:02	NT	NT	NT	NT	SSP SSO	
3966	Permpikul , Vejba	*04:01	*13:17	3*02:02	4*01:03			*03:02	*04:02					SSP	
8001	Rao , Prakash	*04:01	*13:17	3*02:02	4*01:03			*03:02	*04:02			*04:01	*04:02	SSP SSO	
3753	Reed , Elaine F.	*04:01:01	*13:17	3*02:02:01G	4*01:01:01G	*03:01:01G	*04:01	*03:02:01	*04:02:01	*01:03	*01:03	*04:01:01	*04:02:01	SSO NGS	DPA1*01:13, DPB1*126:01, DPB1*105:01
3519	Renac , Virginie	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SBT	DPB1*105:01, DPB1*126:01
793	Rubocki , Ronald					*03:01	*04:01					*04:01:01G	*04:02:01G	SSP	
4251	Schiller , Jennifer	*04:01	*13:17					*03:02	*04:02			*04:01:01G	*04:02:01G	SSO SBT	
747	Tiercy , Jean-Mar	*04:01:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO SBT	DQA1*03:02/ *03:03
5451	Tilanus , Marcel C	*04:01:01	*13:17											SSO SBT	
5642	Varnavidou-Nicol	*04:01	*13:17					*03:02	*04:02					SSP	
8052	Yanina Marcos , C		*13:17											SSO	
3511	Zeevi , Adriana	*04:01	*13:17	3*02:02	4*01:03	*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO	

Table 7: Individual laboratory results for B-cell #528-Class II

Serology										
CTR	DIRNAME	DR4	DR13	DR52	DR53	DQ8	DQ4		OTH1	OTH2
910	Hahn,Amy B.	+			+	+	+		DR8	
4908	Kvam,Vonnet	+	+	+	+	+	+			

Table 8: Individual laboratory results for B-cell #528-Class I

Center	Investigator	Low resolution						High resolution						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams , Sharon							*02:01:01	*32:01:01	*15:01:01:01		*03:03:01G		SSP SSO SBT	
5462	Arnold , Paula	NT												SSP SSO SBT RT-PCR	
5133	Askar , Medhat							*02:01:01:01	*32:01:01	*15:01:01:01		*03:03:01		NGS	
4492	Caillat-Zucman , So							*02:01:01:01	*32:01:01	*15:01:01:01	*15:01:01	*03:03:01	*03:03:01	SSO NGS	
774	Cecka , J. Michael	*02	*32	*15		*03								SSP SSO	
8021	Clark , Brendan	*02	*32	*15		*03								SSO	
9916	Charlton , Ronald K							*02:01:01	*32:01:01	*15:01:01:01		*03:02:01		SSP SBT	
3224	Chen , Dong-Feng							*02:01	*32:01	*15:01		*03:03		SSP SBT	
5130	Costeas , Paul A.	*02	*32	*15	*15	*03	*03	*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SSP SSO	A*02:74
779	Daniel , Claude	*02	*32	*15	*15	*03				*15:01	*15:01	*03:03		SSO	
5219	Daniel , Dolly	*02	*32	*15	*15	*03	*03								
8099	Danish , Adel	*02	*32	*15	*15	*03	*03							SSO	
1108	DeConinck , Martha	*02	*32	*15	*15	*03	*03							SSO	
87	Di Paola , Nicholas	*02	*32	*15	*15	*03	*03							RT-PCR	
5214	Eckels/CPMC ,	*02	*32	*15 (B62)	*15 (B62)	*03 (Cw9)	*03 (Cw9)							SSO	
3135	Enczmann , J							*02:01	*32:01	*15:01	*15:01	*03:03	*03:03		A*02:01L
792	Gandhi , Manish	*02	*32	*15		*03		*02:01	*32:01	*15:01		*03:03		SSP SSO SBT	
8087	Guerra , Q.F.B. Elba	*02	*32	*15	*15	*03	*03							SSO	
810	Hamdi , Nuha							*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SSO	
1694	Hesse , Nicole	*02	*32	*15		*03								SSP	
2344	Hurley , Hartzman&							*02:01:01:01	*32:01:01	*15:01:01:01	*15:01:01:01	*03:03:01	*03:03:01	NGS	
794	Jaatinen , Taina	*02	*32	*15		*03		*02:01	*32:01	*15:01		*03:03		SSP SSO SBT RT-PCR	C*03:227
8086	Keming , Du							*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SSP SSO SBT	
4337	Kim , Tai-Gyu							*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SBT	
278	Lee , Jar-How	*02	*32	*15	*15	*03	*03	*02:01	*32:01	*15:01	*15:01	*03:03	*03:03		
2400	Liu , Chang	*02	*32	*15		*03		*02:01	*32:01	*15:01		*03:03:01G		SSP SSO SBT	
206	McAlack , Robert	*02	*32	*15		*03	*03							SSO	
8042	Muncher , Liora	*02	*32	*15	*15	*03	*03	*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SSP SSO	
2847	Murase , Junko	*02	*32	*15		*03								SSO	
54	Pancoska , Carol	*02	*32	*15		*03								SSO	
3966	Permpikul , Vejbaes	*02	*32			*03	*03			*15:01	*15:01			SSP	
3753	Reed , Elaine F.							*02:01:01	*32:01:01	*15:01:01	*15:01:01	*03:03:01	*03:03:01	SSO NGS	
3519	Renac , Virginie	*02	*32	*15		*03		*02:01	*32:01	*15:01		*03:03		SSP SBT	
4251	Schiller , Jennifer	*02	*32	*15	*15	*03	*03	*02:01	*32:01	*15:01	*15:01	*03:03	*03:03	SSO SBT	
8068	Shanmugam , Hema	*02	*32	*15	*15	*03	*03							SSO	
8029	Tarigopula , Anil	*02	*32	*15	*15	*03	*03							SSO	
8052	Yanina Marcos , Cir	*02	*32	*15	*15	*03	*03							SSO	