

# B-cell Line Exchange #273

## FEBRUARY 7, 2018

B-cell Lines 545-546

The results for B-cell Line Exchange #273 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8.

We would like to acknowledge and thank the labs performing NGS typing

for sharing their results and encourage other NGS labs to share their findings. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

**Ter-545.** The consensus type for this sample from a Caucasian donor is DRB1\*11:01-DRB1\*13:02-DRB3\*02:02-DRB3\*03:01-DQA1\*01:02-DQA1\*05:09-DQB1\*03:01-DQB1\*06:04-DPA1\*01:03-DPB1\*02:01-DPB1\*04:01/A\*02:01-A\*03:01-B\*15:71-B\*40:01-C\*03:03-C\*03:04. One likely association present in this cell is DRB1\*11:01:01-DRB3\*02:02:01-DQA1\*05:09-DQB1\*03:01:01-DPB1\*04:01:01, observed in cell 28137, one of the reference cells for DQA1\*05:09. The other likely haplotype present may then be DRB1\*13:02-DRB3\*03:01-DQA1\*01:02-DQB1\*06:04-DPB1\*02:01. The DRB1\*13:02-DQB1\*06:04 association in this cell is observed commonly across all populations, with HF=0.03208, in Caucasians.

This cell is FH67, a reference cell for B\*15:71 and DQA1\*05:09. It was previously studied in the workshops as IHW9455 and in the class I DNA Extract Exchange as extracts 458 (2009), 311 (2004), and 213 (2002). In this present retyping, B\*15:71 was reported by 95% of labs reporting at high resolution, a significant improvement from a 26% detection level back in 2002. A\*02:01, A\*03:01, B\*40:01, C\*03:03, and C\*03:04 were all assigned in complete consensus, with 5 labs assigning A\*03:01:01 and 6 labs assigning A\*02:01:01, B\*40:01:02, C\*03:03:01, and C\*03:04:01.

DRB1\*11:01 and DRB1\*13:02 were each assigned in complete consensus by labs reporting at high resolution, with 8 labs assigning DRB1\*11:01:01 and 9 labs assigning DRB1\*13:02:01. DQA1\*05:09 was also reported in complete consensus, along with DQA1\*01:02.

**Ter-546.** The consensus type for this sample from a Filipino donor is DRB1\*04:03-DRB1\*15:02-DRB4\*01:03-DRB5\*01:01-DQA1\*01:02-DQA1\*03:01-DQB1\*03:02-DQB1\*05:02-DPA1\*02:02-DPB1\*01:01-DPB1\*05:01/A\*24:37-A\*34:01-B\*15:21-B\*15:35-C\*04:03-C\*07:02. This cell is the offspring of cell 1253 (same as cell 1198) and extract 242. From family studies, the class I haplotypes in this cell were determined to be A\*24:37-B\*15:35-C\*07:02 and A\*34:01-B\*15:21-C\*04:03. A\*34:01-B\*15:21-C\*04:03 is observed exclusively in Asians, with HF=0.0017.

This cell is TER1132, a reference cell for A\*24:37. It has been examined numerous times in the exchange as cells 1256 (2005), 1197 (2004), 1145 (2003), and 1132 (2002), and as extracts 552 (2012) and 243 (2003). In this present retyping, A\*24:37 was reported in complete consensus by labs reporting at high resolution, an improvement from a detection level of only 27% back in 2003. A\*34:01, B\*15:21, B\*15:35, C\*04:03, and C\*07:02 were also each assigned in complete consensus, with 5 labs assigning C\*04:03:01 and 6 labs assigning A\*34:01:01 and C\*07:02:01.

DRB1\*04:03 and DRB1\*15:02 were each reported in complete consensus as the DRB1 types, with 9 labs assigning DRB1\*04:03:01 and 6 labs assigning DRB1\*15:02:01. The DQ types were also reported in complete consensus as DQA1\*01:02, DQA1\*03:01, DQB1\*03:02, and DQB1\*05:02. DPB1\*01:01 (100%) and DPB1\*05:01 (100%) were the reported DPB1 types, with 7 labs assigning DPB1\*01:01:01 and DPB1\*05:01:01.

**NEXT MAILING DATE: March 7, 2018**

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



**Table 2: Summary of the 273<sup>rd</sup> B-cell Line Exchange**

**Ter-546**

DNA Typing - class II		<b>32 labs High; 33 labs low-DRB1</b>		<b>16 labs High; 23 labs Low-DRB3/4/5</b>		<b>20 labs High; 27 labs Low-DQA1</b>		<b>31 High Labs; 31 labs Low-DQB1</b>		<b>13 High Labs; 13 labs Low-DPA1</b>		<b>26 High Labs; 17 labs Low-DPB1</b>		
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DNA Typing - class II		DRB1*04:03:01	28(9)	DRB4*01:03:01	25(4)	DQA1*01:02:01:01	5 (1)	DQB1*03:02:01	23(7)	DPA1*02:02:02	36(5)	DPB1*01:01:01	27(7)	
		DRB1*04:03	72(23)	DRB4*01:03	75(12)	DQA1*01:02:01	25(5)	DQB1*03:02	77(24)	DPA1*02:02P	7 (1)	DPB1*01:01:01G	4 (1)	
		DRB1*04	100(33)	DRB4*01	78(18)	DQA1*01:02	70(14)	DQB1*03(DQ8)	3 (1)	DPA1*02:02	57(8)	DPB1*01:01	69(18)	
				DRB4*PRESENT	22(5)	DQA1*01	100(27)	DQB1*03	97(30)	DPA1*02	100(13)	DPB1*01	100(17)	
DNA Typing - class I		<b>20 labs High; 24 labs low- A</b>		<b>23 labs High; 24 labs low- B</b>		<b>20 labs High; 25 labs low- C</b>		<b>31 High Labs; 31 labs Low-DQB1</b>		<b>13 High Labs; 13 labs Low-DPA1</b>		<b>26 High Labs; 17 labs Low-DPB1</b>		
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
		A*24:37	100(20)	B*15:21	100(23)	C*04:03:01	25(5)	DQB1*05:02:01	26(8)	DPA1*02:02:02	36(5)	DPB1*05:01:01	27(7)	
		A*24	100(24)	B*15 (B75)	4 (1)	C*04:03	75(15)	DQB1*05:02	74(23)	DPA1*02:02P	7 (1)	DPB1*05:01:01G	4 (1)	
				B*15	96(23)	C*04	100(25)	DQB1*05	100(31)	DPA1*02:02	57(8)	DPB1*05:01	69(18)	
										DPA1*02	100(13)	DPB1*05	100(17)	
DNA Typing - class I		<b>20 labs High; 23 labs low- A</b>		<b>23 labs High; 24 labs low- B</b>		<b>20 labs High; 24 labs low- C</b>		<b>31 High Labs; 31 labs Low-DQB1</b>		<b>13 High Labs; 13 labs Low-DPA1</b>		<b>26 High Labs; 17 labs Low-DPB1</b>		
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
		A*34:01:01	30(6)	B*15:35	100(23)	C*07:02:01:01	15(3)	DQB1*05:02:01	26(8)	DPA1*02:02:02	36(5)	DPB1*05:01:01	27(7)	
		A*34:01	70(14)	B*15(B62)	4 (1)	C*07:02:01	15(3)	DQB1*05:02	74(23)	DPA1*02:02P	7 (1)	DPB1*05:01:01G	4 (1)	
				B*15	96(23)	C*07:02P	5 (1)	DQB1*05	100(31)	DPA1*02:02	57(8)	DPB1*05:01	69(18)	
						C*07:02	65(13)			DPA1*02	100(13)	DPB1*05	100(17)	
						C*07	100(24)							

**Table 3a: Individual laboratory results for B-cell #545-Class II**

		Low resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon			3*02	3*03	*01	*05							SSP SSO SBT	
5462	Arnold , Paula	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		NT	NT	SSO RT-PCR	
774	Cecka , J. Michael	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02(DP201)	*04(DP401)	SSP SSO	
9916	Charlton , Ronald K.	*11	*13	3*PRESENT				*03	*06					SSP	
3224	Chen , Dong-Feng	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*04(DP401)	SSO	
3632	Colombe , Beth W.	*11	*13	3*02	3*03	*01	*05	*03	*06	*01		*02	*04	SSP SSO	
5130	Costeas , Paul A.	*11	*13	3*02	3*03	*01	*05	*03	*06			*02	*04	SSP SSO NGS	
779	Daniel , Claude	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*04(DP401)	SSP SSO	
5219	Daniel , Dolly	*11	*13			*01	*05	*03	*06					SSO	
87	Di Paola , Nicholas F	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*04(DP401)	RT-PCR	
747	Ferrari-Lacraz , Sylv	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*04	SSP SSO NGS	
4079	Fort , Marylise	*11	*13			*01	*05	*03	*06			*02(DP201)	*04(DP401)	SSP	
792	Gandhi , Manish	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*04	SSO SBT	
5214	Gebel , Howard	*11	*13	3*02	3*03	*01	*05	*03(DQ7)	*06	*01		*02(DP201)	*04(DP401)	RT-PCR	
8043	Gideoni , Osnat	*11	*13			*01	*05	*03	*06					SSP SSO	
810	Hamdi , Nuha	*11	*13			*01	*05	*03	*06					SSO	
8087	Hernandez Rosales	*11	*13			*01	*05	*03	*06					SSO	
771	Israel , Shoshana	*11	*13			*01	*05	*03	*06					SSP SSO	
725	Lardy , N.M.	*11	*13	3*PRESENT		*01	*05	*03	*06					SSO	
278	Lee , Jar-How	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*04		
6649	Lim , Young Ae	*11	*13	3*PRESENT	3*PRESENT									SSP	
2400	Liu , Chang	*11	*13	3*02	3*03							*02	*04		
731	Loewenthal , Ron	*11	*13			*01	*05	*03	*06					SSP SSO SBT	
206	McAlack , Robert	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02	*04		
735	Moussa , Omar	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*04(DP401)	SSP SSO SBT	
8001	Rao , Prakash	*11	*13			*01	*05	*03	*06					SSP SSO	
3519	Renac , Virginie	*11	*13					*03	*06			*02(DP201)	*04(DP401)	SSP NGS	
793	Rubocki , Ronald	*11	*13	3*02	3*03	*01	*05	*03	*06			*02(DP201)	*04(DP401)		
4251	Schiller , Jennifer	*11	*13	3*02	3*03	*01	*05	*03	*06	*01	*01	*02(DP201)	*04(DP401)	SSO NGS	
8068	Shanmugam , Hema	*11	*13	3*02	3*03			*03	*06					SSO	
8029	Tarigopula , Anil	*11	*13			*01	*05	*03	*06					SSO	
5451	Tilanus , Marcel G.J.	*11	*13	3*02	3*03	*01	*05	*03	*06					SSP SSO SBT	
5642	Varnavidou-Nicolaid	*11	*13	3*PRESENT				*03	*06						
2847	Wakita , Atsushi	*11	*13											SSO	

**Table 3b: Individual laboratory results for B-cell #545-Class II**

High resolution														METHOD	Other Alleles
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5488	Adams , Sharon	*11:01:01	*13:02:01					*03:01:01	*06:04:01			*02:01	*04:01:01	SSP SSO SBT	DQB1*03:22 DQB1*03:01:02 DQB1*06:39 DQB1*06:04:08
5133	Askar , Medhat	*11:01:01	*13:02:01	3*02:02:01:02	3*03:01:01	*01:02:01	*05:09	*03:01:01:03	*06:04:01	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01	NGS	
4492	Caillat-Zucman ,	*11:01:01	*13:02:01	3*02:02	3*03:01	*01:02:01	*05:09	*03:01:01	*06:04:01	*01:03	*01:03	*02:01:02	*04:01:01	SSP SSO NGS	DPA1*01:13
774	Cecka , J. Michael	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04	*01:03		*02:01	*04:01	SSP SSO	DQB1*03:73 DRB3*02:29N DQB1*03:92 DQB1*03:93 DRB3*02:28 DPA1*01:13 DRB1*11:97 DRB1*11:100 DRB1*11:117 DRB1*11:157 DRB1*11:158
8070	Chang , Uckjin	*11:01	*13:02											SBT	
8021	Clark , Brendan	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04	*01:03		*02:01	*04:01	SSO SBT	
3632	Colombe , Beth V	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04	*01:03		*02:01	*04:01	SSP SSO	
5130	Costeas , Paul A.	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04			*02:01	*04:01	SSP SSO NGS	
779	Daniel , Claude					*01:02	*05:09	*03:01	*06:04	*01:03	*01:03	*02:01	*04:01	SSP SSO	
8086	Du , Keming	*11:01	*13:02			*01:02	*05:09	*03:01	*06:04	*01:03	*01:03	*02:01	*04:01	SSP SSO SBT	
3135	Enczmann , J	*11:01	*13:02	3*02:02	3*03:01			*03:01	*06:04			*02:01	*04:01		
747	Ferrari-Lacraz , S	*11:01:01	*13:02:01	3*02:02:01:02	3*03:01:01	*01:02:01:04	*05:09	*03:01:01:03	*06:04:01	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01:01	SSP SSO NGS	
762	Fischer , Gottfried	*11:01:01	*13:02:01	3*02:02:01	3*03:01:01	*01:02:01	*05:09	*03:01:01:03	*06:04:01	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01	NGS	
4079	Fort , Marylise	*11:01	*13:02			NT	NT	*03:01	*06:04			*02:01	*04:01	SSP	DPB1*428:01 DPB1*434:01 DPB1*453:01 DPB1*454:01 DPB1*433:01 DPB1*444:01 DPB1*452:01 DPB1*457:01 DPB1*467:01 DPB1*469:01 DPB1*418:01 DPB1*426:01
792	Gandhi , Manish	*11:01	*13:02					*03:01	*06:04			*02:01	*04:01	SSO SBT	
8043	Gideoni , Osnat	*11:01	*13:02			*01:02	*05:09	*03:01	*06:04					SSP SSO	
2344	Hurley & Hartzma	*11:01:01	*13:02:01			*01:02:01	*05:09	*03:01:01:03	*06:04:01	*01:03:01:01	*01:03:01:04	*02:01:02	*04:01:01:01	NGS	DQA1*01:02:01:04 DPB1*04:01:01:02
771	Israel , Shoshana	*11:01	*13:02					*03:01	*06:04					SSP SSO	
4337	Kim , Tai-Gyu	*11:01	*13:02					*03:01	*06:04			*02:01	*04:01	SSP SBT	
278	Lee , Jar-How	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04	*01:03	*01:03	*02:01	*04:01		
2400	Liu , Chang	*11:01	*13:02			*01:02	*05:09	*03:01	*06:04			*02:01:02G	*04:01:01G		
731	Loewenthal , Rol	*11:01:01G	*13:02:01					*03:01:01G	*06:04:01G					SSP SSO SBT	

**Table 3b: Individual laboratory results for B-cell #545-Class II**

		High resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
735	Moussa , Omar	*11:01	*13:02					*03:01	*06:04	*01:03	*01:03	*02:01	*04:01	SSP SSO SBT	DPA1*01:13
3966	Permpikul , Vejba	*11:01	*13:02	3*02:02	3*03:01			*03:01	*06:04					SSP SSO	
8001	Rao , Prakash	*11:01	*13:02	3*02:02	3*03:01			*03:01	*06:04			*02:01	*04:01	SSP SSO	
3753	Reed , Elaine F.	*11:01:01	*13:02:01	3*02:02:01	3*03:01:01	*01:02:01	*05:09	*03:01:01	*06:04:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	NGS	
3519	Renac , Virginie	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04			*02:01	*04:01	SSP NGS	
793	Rubocki , Ronald					*01:02	*05:09					*02:01	*04:01		
4251	Schiller , Jennifer	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04	*01:03	*01:03	*02:01	*04:01	SSO NGS	
8042	Supino , Lia	*11:01	*13:02					*03:01	*06:04						
230	Thoni , Deborah	*11:01	*13:02					*03:01	*06:04			*02:01	*04:01	SSO SBT	
5451	Tilanus , Marcel	*11:01:01	*13:02:01											SSP SSO SBT	
5642	Varnavidou-Nicol	*11:01	*13:02					*03:01	*06:04						
3511	Zeevi , Adriana	*11:01	*13:02	3*02:02	3*03:01	*01:02	*05:09	*03:01	*06:04			*02:01	*04:01	SSP SSO	

**Table 4: Individual laboratory results for B-cell #545-Class II**

		Serology									
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1		Others			
910	Hahn,Amy B.	DR11	DR13	DR52				DQ7	DQ1	DR4	DR53

**Table 5: Individual laboratory results for B-cell #545-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	*03:01	*15:71	*40:01:02	*03:03:01	*03:04:01	SSP SSO SBT	B*15:225 B*40:74 C*03:20N C*03:227 A*02:01:52 A*02:01:36
5462	Arnold , Paula	*02	*03	*15	*40	*03	*03							SSO RT-PCR	
5133	Askar , Medhat							*02:01:01:01	*03:01:01:01	*15:71	*40:01:02	*03:03:01:01	*03:04:01:01	NGS	
4492	Caillat-Zucman ,							*02:01:01	*03:01:01:01	*15:71	*40:01:02	*03:03:01	*03:04:01:01	SSP SSO NGS	
774	Cecka , J. Michael	*02	*03	*15	*40	*03	*03							SSP SSO	
9916	Charlton , Ronald	*02	*03	*15	*40	*03	*03							SSP	
3224	Chen , Dong-Fen	*02	*03	*15	*40	*03								SSO	
8021	Clark , Brendan							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSO SBT	
5130	Costeas , Paul A.	*02	*03	*15	*40	*03	*03	*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSP SSO NGS	A*02:01L
779	Daniel , Claude	*02	*03	*15	*40	*03	*03			*15:01	*40:01	*03:03	*03:04	SSP SSO	
5219	Daniel , Dolly	*02	*03	*15	*40	*03	*03							SSO	
87	Di Paola , Nicholas	*02	*03	*15	*40	*03	*03							RT-PCR	
8086	Du , Keming							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSP SSO SBT	
3135	Enczmann , J							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04		A*02:01L
747	Ferrari-Lacraz , S	*02	*03	*15	*40	*03	*03	*02:01:01:01	*03:01:01:01	*15:71	*40:01:02	*03:03:01:01	*03:04:01:01	SSP SSO NGS	
792	Gandhi , Manish	*02	*03	*15	*40	*03	*03	*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSO SBT	A*02:01:01:02L A*03:01:01:02N
5214	Gebel , Howard	*02	*03	*15 (B62)	*40 (B60)	*03 (Cw9)	*03 (Cw10)							RT-PCR	
810	Hamdi , Nuha	*02	*03	*15	*40	*03	*03							SSO	
8087	Hernandez Rosa	*02	*03	*15	*40	*03	*03							SSO	
2344	Hurley & Hartzma							*02:01:01:01	*03:01:01:01	*15:71	*40:01:02	*03:03:01:01	*03:04:01:01	NGS	
4337	Kim , Tai-Gyu							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSP SBT	
278	Lee , Jar-How	*02	*03	*15	*40	*03	*03	*02:01	*03:01	*15:71	*40:01	*03:03	*03:04		
2400	Liu , Chang	*02	*03	*15	*40	*03	*03	*02:01	*03:01:01G	*15:71	*40:01	*03:03	*03:04		
206	McAlack , Robert	*02	*03	*15	*40	*03	*03								
735	Moussa , Omar	*02	*03	*15	*40	*03	*03	*02:01P	*03:01	*15:71	*40:01P	*03:03P	*03:04	SSP SSO SBT	
3966	Permpikul , Vejba	*02	*03	*15	*40	*03	*03			*15:71	*40:01			SSP SSO	
3753	Reed , Elaine F.							*02:01:01	*03:01:01	*15:71	*40:01:02	*03:03:01	*03:04:01	NGS	
3519	Renac , Virginie	*02	*03	*15	*40	*03		*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSP NGS	
793	Rubocki , Ronald	*02	*03	*15	*40	*03									
4251	Schiller , Jennifer	*02	*03	*15	*40	*03	*03	*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSO NGS	
8068	Shanmugam , He	*02	*03	*15	*40	*03	*03							SSO	
8042	Supino , Lia							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04		C*03:147
8029	Tarigopula , Anil	*02	*03	*15	*40	*03	*03							SSO	
230	Thoni , Deborah							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSO SBT	
2847	Wakita , Atsushi	*02	*03	*15	*40	*03	*03							SSO	
3511	Zeevi , Adriana							*02:01	*03:01	*15:71	*40:01	*03:03	*03:04	SSP SSO	

**Table 6a: Individual laboratory results for B-cell #546-Class II**

Center	Investigator	Low resolution												METHOD	Other Alleles	
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1				
5488	Adams , Sharon		*15	4*01	5*01										SSP SSO SBT	
5462	Arnold , Paula	*04	*15	4*01	5*01	*01	*03	*03	*05	*02		NT	NT		SSO RT-PCR	
774	Cecka , J. Michael	*04	*15	4*01	5*01	*01	*03	*03	*05	*02		*01	*05		SSP SSO	
9916	Charlton , Ronald	*04	*15	4*PRESENT	5*PRESENT			*03	*05						SSP	
3224	Chen , Dong-Fen	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSO	
3632	Colombe , Beth V	*04	*15	4*01	5*01	*01	*03	*03	*05	*02		*01	*05		SSP SSO	
5130	Costeas , Paul A.	*04	*15	4*01	5*01	*01	*03	*03	*05			*01	*05		SSP SSO NGS	
779	Daniel , Claude	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSP SSO	
5219	Daniel , Dolly	*04	*15			*01	*03	*03	*05						SSO	
87	Di Paola , Nicholas	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		RT-PCR	
747	Ferrari-Lacraz , S	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSP SSO NGS	
4079	Fort , Marylise	*04	*15			*01	*03	*03	*05			*01	*05		SSP	
792	Gandhi , Manish	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSO SBT	
5214	Gebel , Howard	*04	*15	4*01	5*01	*01	*03	*03 (DQ8)	*05	*02		*01	*05		RT-PCR	
8043	Gideoni , Osnat	*04	*15			*01	*03	*03	*05						SSP SSO	
810	Hamdi , Nuha	*04	*15			*01	*03	*03	*05						SSO	
8087	Hernandez Rosal	*04	*15			*01	*03	*03	*05						SSO	
771	Israel , Shoshana	*04	*15			*01	*03	*03	*05						SSP SSO	
725	Lardy , N.M.	*04	*15	4*PRESENT	5*PRESENT	*01	*03	*03	*05						SSO	
278	Lee , Jar-How	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05			
6649	Lim , Young Ae	*04	*15	4*PRESENT	5*PRESENT										SSP	
2400	Liu , Chang	*04	*15	4*01	5*01	*01	*03	*03	*05			*01	*05			
731	Loewenthal , Ro	*04	*15			*01	*03	*03	*05						SSP SSO SBT	
206	McAlack , Robert	*04	*15	4*01	5*01	*01	*03	*03	*05	*02		*01	*05			
735	Moussa , Omar	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSP SSO SBT	
8001	Rao , Prakash	*04	*15			*01	*03	*03	*05						SSP SSO	
3519	Renac , Virginie	*04	*15					*03	*05			*01	*05		SSP NGS	
793	Rubocki , Ronald	*04	*15	4*PRESENT	5*PRESENT	*01	*03	*03	*05			*01	*05			
4251	Schiller , Jennifer	*04	*15	4*01	5*01	*01	*03	*03	*05	*02	*02	*01	*05		SSO NGS	
8068	Shanmugam , He	*04	*15	4*01	5*01			*03	*05						SSO	
8029	Tarigopula , Anil	*04	*15			*01	*03	*03	*05						SSO	
5451	Tilanus , Marcel C	*04	*15	4*01	5*01	*01	*03	*03	*05						SSP SSO SBT	
5642	Varnavidou-Nicol	*04	*15	4*PRESENT	5*PRESENT			*03	*05							
2847	Wakita , Atsushi	*04	*15												SSO	



**Table 6b: Individual laboratory results for B-cell #546-Class II**

		High resolution													
Center	Investigator	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon	*04:03:01				*01:02	*03:01	*03:02	*05:02:01			*01:01:01	*05:01:01	SSP SSO SBT	DQB1*05:02:04 DQB1*05:02:02
5133	Askar , Medhat	*04:03:01	*15:02:01	4*01:03:01	5*01:01:01	*01:02:01	*03:01:01	*03:02:01	*05:02:01	*02:02:02		*01:01:01	*05:01:01	NGS	
4492	Caillat-Zucman ,	*04:03:01	*15:02:01	4*01:03	5*01:01	*01:02:01	*03:01:01	*03:02:01	*05:02:01	*02:02	*02:02	*01:01:01	*05:01:01	SSP SSO NGS	DPA1*02:06 DPA1*02:07 DPA1*02:06 DPA1*02:07
774	Cecka , J. Micha	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02	*02:02		*01:01	*05:01	SSP SSO	DRB4*01:09 DRB4*01:10 DRB5*01:16 DRB5*01:17 DRB1*04:181
8070	Chang , Uckjin	*04:03	*15:02											SBT	
8021	Clark , Brendan	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02	*02:02		*01:01	*05:01	SSO SBT	
3632	Colombe , Beth V	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02	*02:02		*01:01	*05:01	SSP SSO	
5130	Costeas , Paul A	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02			*01:01	*05:01	SSP SSO NGS	
779	Daniel , Claude					*01:02	*03:01	*03:02	*05:02	*02:02	*02:02	*01:01	*05:01	SSP SSO	
8086	Du , Keming	*04:03	*15:02			*01:02	*03:01	*03:02	*05:02	*02:02	*02:02	*01:01	*05:01	SSP SSO SBT	
3135	Enczmann , J	*04:03	*15:02	4*01:03	5*01:01			*03:02	*05:02			*01:01	*05:01		
747	Ferrari-Lacruz , S	*04:03:01	*15:02:01:02	4*01:03:01	5*01:01:01	*01:02:01:01	*03:01:01	*03:02:01	*05:02:01	*02:02:02	*02:02:02	*01:01:01	*05:01:01	SSP SSO NGS	
762	Fischer , Gottfrie	*04:03:01	*15:02:01	4*01:03:01	5*01:01:01	*01:02:01	*03:01:01	*03:02:01	*05:02:01	*02:02:02		*01:01:01	*05:01:01	NGS	
4079	Fort , Marylise	*04:03	*15:02			NT	NT	*03:02	*05:02			*01:01	*05:01	SSP	DPB1*436:01
792	Gandhi , Manish	*04:03	*15:02					*03:02	*05:02			*01:01	*05:01	SSO SBT	
8043	Gideoni , Osnat	*04:03	*15:02			*01:02	*03:01	*03:02	*05:02					SSP SSO	
2344	Hurley & Hartzma	*04:03:01	*15:02:01:01			*01:02:01	*03:01:01	*03:02:01	*05:02:01	*02:02:02	*02:02:02	*01:01:01	*05:01:01	NGS	DQA1*01:02:01:01 DQA1*01:02:01:03 DRB1*15:02:01:02
771	Israel , Shoshana	*04:03	*15:02					*03:02	*05:02					SSP SSO	
4337	Kim , Tai-Gyu	*04:03	*15:02					*03:02	*05:02			*01:01	*05:01	SSP SBT	
278	Lee , Jar-How	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02	*02:02	*02:02	*01:01	*05:01		
2400	Liu , Chang	*04:03	*15:02			*01:02	*03:01	*03:02	*05:02			*01:01:01G	*05:01:01G		
731	Loewenthal , Ro	*04:03:01	*15:02:01G					*03:02:01	*05:02:01					SSP SSO SBT	
735	Moussa , Omar	*04:03	*15:02:01G					*03:02	*05:02	*02:02P	*02:02P	*01:01	*05:01	SSP SSO SBT	
3966	Permpikul , Vejba	*04:03	*15:02	4*01:03	5*01:01			*03:02	*05:02					SSP SSO	
8001	Rao , Prakash	*04:03	*15:02	4*01:03	5*01:01			*03:02	*05:02			*01:01	*05:01	SSP SSO	
3753	Reed , Elaine F.	*04:03:01	*15:02:01G	4*01:03:01	5*01:01:01	*01:02:01	*03:01:01	*03:02:01	*05:02:01	*02:02:02	*02:02:02	*01:01:01	*05:01:01	NGS	
3519	Renac , Virginie	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02			*01:01	*05:01	SSP NGS	
793	Rubocki , Ronald					*01:02	*03:01					*01:01	*05:01		
4251	Schiller , Jennife	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02	*02:02	*02:02	*01:01	*05:01	SSO NGS	
8042	Supino , Lia	*04:03	*15:02					*03:02	*05:02						
230	Thoni , Deborah	*04:03	*15:02					*03:02	*05:02			*01:01	*05:01	SSO SBT	
5451	Tilanus , Marcel	*04:03:01	*15:02:01											SSP SSO SBT	
5642	Varnavidou-Nico	*04:03	*15:02					*03:02	*05:02						
3511	Zeevi , Adriana	*04:03	*15:02	4*01:03	5*01:01	*01:02	*03:01	*03:02	*05:02			*01:01	*05:01	SSP SSO	

**Table 7: Individual laboratory results for B-cell #546-Class II**

Serology											
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1		Others			
910	Hahn,Amy B.	DR4	DR15	DR53	DR51			DQ3	DQ1	DR10	

**Table 8: Individual laboratory results for B-cell #546-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					*04		*24:37	*34:01:01	*15:21	*15:35		*07:02:01	SSP SSO SBT	C*07:172:01
5462	Arnold , Paula	*24	*34	*15	*15	*04	*07							SSO RT-PCR	
5133	Askar , Medhat							*24:37	*34:01:01	*15:21	*15:35	*04:03:01	*07:02:01:01	NGS	
4492	Caillat-Zucman ,							*24:37	*34:01:01	*15:21	*15:35	*04:03:01	*07:02:01	SSP SSO NGS	
774	Cecka , J. Micha	*24	*34	*15	*15	*04	*07			*15:21	*15:35	*04:03		SSP SSO	C*04:171
9916	Charlton , Ronald	*24	*34	*15	*15	*04	*07							SSP	
3224	Chen , Dong-Fer	*24	*34	*15	*15	*04	*07							SSO	
8021	Clark , Brendan							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSO SBT	
5130	Costeas , Paul A	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSP SSO NGS	
779	Daniel , Claude	*24	*34	*15	*15	*04	*07			*15:21	*15:35			SSP SSO	
5219	Daniel , Dolly	*24	*34	*15	*15	*04	*07							SSO	
87	Di Paola , Nichol	*24	*34	*15	*15	*04	*07							RT-PCR	
8086	Du , Keming							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSP SSO SBT	
3135	Enczmann , J							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02		
747	Ferrari-Lacraz , S	*24	*34	*15	*15	*04	*07	*24:37	*34:01:01	*15:21	*15:35	*04:03:01	*07:02:01:01	SSP SSO NGS	
792	Gandhi , Manish	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSO SBT	
5214	Gebel , Howard	*24	*34	*15	*15	*04	*07							RT-PCR	
810	Hamdi , Nuha	*24	*34	(B75)	(B62)	*04	*07							SSO	
8087	Hernandez Rosa	*24	*34	*15	*15	*04	*07							SSO	
2344	Hurley & Hartzman ,							*24:37	*34:01:01	*15:21	*15:35	*04:03:01	*07:02:01:01	NGS	
4337	Kim , Tai-Gyu							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSP SBT	
278	Lee , Jar-How	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02		
2400	Liu , Chang	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02		
206	McAlack , Rober	*24	*34	*15	*15	*04	*07								
735	Moussa , Omar	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02P	SSP SSO SBT	
3966	Permpikul , Vej	*24	*34	*15	*15	*04	*07			*15:21	*15:35			SSP SSO	
3753	Reed , Elaine F.							*24:37	*34:01:01	*15:21	*15:35	*04:03:01	*07:02:01	NGS	
3519	Renac , Virginie	*24	*34	*15		*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSP NGS	
793	Rubocki , Ronald	*24	*34	*15	*15	*04	*07								A*66
4251	Schiller , Jennife	*24	*34	*15	*15	*04	*07	*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSO NGS	
8068	Shanmugam , H	*24	*34	*15	*15	*04	*07							SSO	
8042	Supino , Lia							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02		
8029	Tarigopula , Anil	*24	*34	*15	*15	*04	*07							SSO	
230	Thoni , Deborah							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSO SBT	
2847	Wakita , Atsushi	*24	*34	*15	*15	*04	*07							SSO	
3511	Zeevi , Adriana							*24:37	*34:01	*15:21	*15:35	*04:03	*07:02	SSP SSO	