

B-CELL LINE EXCHANGE #271

SEPTEMBER 28, 2017

B-cell Lines 541-542

The results for B-cell Line Exchange #271 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 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-541. The consensus type for this sample from a Caucasian donor is DRB1*01:01-DRB1*12:01-DRB3*02:02-DQA1*01:01-DQA1*05:05-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPA1*02:01-DPB1*02:01-DPB1*04:01/A*02:01-A*02:291-B*35:03-B*44:12-C*04:01-C*05:01. A likely association present in this cell is B*35:03-C*04:01-DRB1*12:01-DQB1*03:01, observed in Caucasians, with HF = 0.00204. The other likely association present may then be B*44:12-C*05:01-DRB1*01:01-DQB1*05:01.

This cell is MOV002AN, a reference cell for A*02:291 and B*44:12. It was previously studied in the class I DNA extract exchange as extracts 522 (2011), 497 (2010), 274 (2004), and 201 (2002). In this present retyping, the rare A*02:291 allele was assigned by 78% of labs reporting at high resolution, an improvement from a 40% detection level in 2011. A*02:01 was assigned by 2 labs. A*02:291 differs from A*02:01 in exon 4 by a single nucleotide substitution at codon 270 (CTC → TTC), which results in an amino acid change from leucine to phenylalanine. B*35:03 and B*44:12 were each assigned in complete consensus, with 5 labs assigning B*35:03:01. The C-locus types were reported as C*04:01 (100%) and C*05:01 (100%), with 3 NGS labs assigning C*04:01:01:01 and C*05:01:01:02.

DRB1*01:01 and DRB1*12:01 were each reported in complete consensus as the DRB1 types, with 8 labs assigning DRB1*01:01:01 and DRB1*12:01:01. DQA1*01:01, DQA1*05:05, DQB1*03:01, and DQB1*05:01 were all reported by 100% of labs reporting at high resolution. DPA1*01:03 and DPA1*02:01 were also reported in complete consensus, with 4 NGS labs assigning DPA1*01:03:01:02 and DPA1*02:01:01:02.

Ter-542. The consensus type for this sample from a Caucasian donor is DRB1*01:01-DRB1*13:01-DRB3*01:01-DQA1*01:01-DQA1*01:03-DQB1*05:01-DQB1*06:03-DPA1*01:03-DPB1*03:01-DPB1*04:01/A*02:230-A*03:01-B*35:01-B*38:01-C*04:01-C*12:03. One likely association present in this cell is A*02:30-B*38:01-C*12:03-DRB1*13:01, observed in NM332, one of the reference cells for A*02:30:01. The other likely association present is A*03:01-B*35:01-C*04:01-DRB1*01:01, observed commonly in Caucasians, with HF = 0.01255.

This cell is FH21, a reference cell for A*02:30:01, B*35:01:01:05 and C*04:01:01:11. It was previously examined in the workshops as IHW9403 and in the exchange as extract 408 (2007) and extract 225 (2002). In this present retyping, A*02:30 was assigned by 100% of labs reporting at high resolution, with 5 labs (4 NGS and 1 SBT) assigning A*02:30:01. A*02:01 was assigned by 2 labs. A*02:30 differs from A*02:01 by a single nucleotide substitution in exon 2 at codon 3 (CAC → CAG), which results in an amino acid change from histidine to glutamine. A*03:01 was reported as the second A-locus type, with 4 NGS labs assigning A*03:01:01:01. B*35:01, B*38:01, C*04:01, and C*12:03 were all assigned in complete consensus by labs reporting at high resolution.

DRB1*01:01, DRB1*13:01, DQA1*01:01, DQA1*01:03, DQB1*05:01 and DQB1*06:03 were all reported in complete consensus, with 5 NGS labs assigning DQA1*01:03:01:02 and 3 NGS labs assigning DQB1*05:01:01:03. DPA1*01:03 was reported as the sole DPA1 type, with NGS assigning DPA1*01:03:01:03 along with DPA1*01:03:01:04.



NEXT MAILING DATE: November 8, 2017

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



Table 1: Summary of the 271st B-cell Line Exchange

Ter-541

DNA Typing - class II		<u>32 labs High; 36 labs low-DRB1</u>		<u>19 labs High; 27 labs Low-DRB3/4/5</u>		<u>21 labs High; 28 labs Low-DQA1</u>		<u>31 High Labs; 34 labs Low-QQB1</u>		<u>14 High Labs; 14 labs Low-DPA1</u>		<u>29 High Labs; 19 labs Low-DPB1</u>	
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
DNA Typing - class II	DRB1*01:01:01	25(8)		DRB3*02:02:01	26(5)	DQA1*01:01:01:01	5 (1)	DQB1*03:01:01	23(7)	DPA1*01:03:01:02	29(4)	DPB1*02:01:02	21(6)
	DRB1*01:01:01G	6 (2)		DRB3*02:02:01G	5 (1)	DQA1*01:01:01	24(5)	DQB1*03:01:01G	6 (2)	DPA1*01:03:01	7 (1)	DPB1*02:01:02G	3 (1)
	DRB1*01:01	69(22)		DRB3*02:02	68(13)	DQA1*01:01	71(15)	DQB1*03:01	71(22)	DPA1*01:03	64(9)	DPB1*02:01	76(22)
	DRB1*01	100(36)		DRB3*02	74(20)	DQA1*01	100(28)	DQB1*03(DQ7)	3 (1)	DPA1*01	100(14)	DPB1*02(DP201)	42(8)
				DRB3*Present	26(7)			DQB1*03	97(33)			DPB1*02	58(11)
DNA Typing - class I	<u>20 labs High; 27 labs low- A</u>	%(n)		<u>20 labs High; 28 labs low- B</u>	%(n)	<u>19 labs High; 28 labs low- C</u>	%(n)	<u>31 High Labs; 34 labs Low-QQB1</u>	%(n)	<u>15 High Labs; 14 labs Low-DPA1</u>	%(n)	<u>29 High Labs; 19 labs Low-DPB1</u>	%(n)
	A*02:01:01:01	10(2)		B*35:03:01	25(5)	C*04:01:01:01	16(3)	DQB1*05:01:01:03	10(3)	DPA1*02:01:01:02	27(4)	DPB1*04:01:01:01	7 (2)
	A*02:01:01	20(4)		B*35:03:01G	5 (1)	C*04:01:01	11(2)	DQB1*05:01:01	13(4)	DPA1*02:01:01	7 (1)	DPB1*04:01:01	17(5)
	A*02:01:01G	10(2)		B*35:03	70(14)	C*04:01P	5 (1)	DQB1*05:01:01G	6 (2)	DPA1*02:01	66(10)	DPB1*04:01:01G	10(3)
	A*02:01P	5 (1)		B*35	100(28)	C*04:01	68(13)	DQB1*05:01	71(22)	DPA1*02	100(14)	DPB1*04:01	66(19)
	A*02:01	55(11)				C*04	100(28)	DQB1*05	100(34)			DPB1*04(DP401)	53(10)
	A*02	100(27)										DPB1*04	47(9)
DNA Typing - class I	<u>18 labs High- A</u>	%(n)		<u>22 labs High; 27 labs low- B</u>	%(n)	<u>19 labs High; 28 labs low- C</u>	%(n)						
	A*02:291	78(14)		B*44:12	100(22)	C*05:01:01:02	16(3)						
	A*02:01:01G	5 (1)		B*44	100(27)	C*05:01:01	11(2)						
	A*02:01/291	5 (1)				C*05:01P	5 (1)						
	A*02:01	11(2)				C*05:01	68(13)						
							C*05	100(28)					

Table 3a: Individual laboratory results for B-cell #541-Class II

Center	Investigator	Low resolution												METHOD	Other Alleles
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5488	Adams, Sharon			3*02		*01								SSP SSO SBT	
5462	Arnold, Paula	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO RT-PCR	
4492	Caillat-Zucman, S	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04(DP401)	SSP SSO NGS	
774	Cecka, J. Michael	*01	*12	3*02		*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP SSO	
9916	Charlton, Ronald	*01	*12	3*PRESENT				*03	*05					SSP	
3224	Chen, Dong-Feng	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO	
3632	Colombe, Beth W	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO	
5130	Costeas, Paul A.	*01	*12	3*02		*01	*05	*03	*05			*02	*04	SSP NGS	
779	Daniel, Claude	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)		
5219	Daniel, Dolly	*01	*12			*01	*05	*03	*05					SSO	
87	Di Paola, Nichola	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04(DP401)	RT-PCR	
5214	Eckels/CPMC,	*01	*12	3*02		*01	*05	*03 (DQ7)	*05	*01	*02	*02(DP201)	*04(DP401)	SSO	
747	Ferrari-Lacruz, S	*01	*12	3*PRESENT		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO NGS	
4079	Fort, Marylise	*01	*12					*03	*05					SSP	
792	Gandhi, Manish	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO SBT	
8043	Gideoni, Osnat	*01	*12			*01	*05	*03	*05						
810	Hamdi, Nuha	*01	*12			*01	*05	*03	*05					SSO	
8087	Hernandez Rosale	*01	*12			*01	*05	*03	*05						
771	Israel, Shoshana	*01	*12			*01	*05	*03	*05					SSP SSO	
794	Jaatinen, Taina	*01	*12	3*02	NP	*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO SBT RT-PCR	
725	Lardy, N.M.	*01	*12	3*PRESENT		*01	*05	*03	*05					SSO	
278	Lee, Jar-How	*01	*12	3*02	NT	*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO	
6649	Lim, Young Ae	*01	*12	3*PRESENT										SSP	
2400	Liu, Chang	*01	*12	3*02		*01	*05	*03	*05			*02	*04	SSP SSO SBT	
731	Loewenthal, Ror	*01	*12			*01	*05	*03	*05					SSP SSO SBT	
206	McAlack, Robert	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSO	
735	Moussa, Omar	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04		
8042	Muncher, Liora	*01	*12	3*02	NP	NT	NT	*03	*05	NT	NT	NT	NT	SSP SSO	
8001	Rao, Prakash	*01	*12	3*PRESENT		*01	*05	*03	*05					SSP SSO	
3519	Renac, Virginie	*01	*12					*03	*05			*02(DP201)	*04(DP401)	SSP NGS	
793	Rubocki, Ronald	*01	*12	3*02		*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP	
4251	Schiller, Jennifer	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO NGS	
8068	Shanmugam, He	*01	*12	3*02	3*02			*03	*05					SSO	
8029	Tarigopula, Anil	*01	*12			*01	*05	*03	*05					SSO	
5451	Tilanus, Marcel G	*01	*12	3*PRESENT				*03	*05					SSP SBT	
5642	Varnavidou-Nicola	*01	*12	3*PRESENT				*03	*05						
2847	Wakita, Atsushi	*01	*12											SSO	

Table 3b: Individual laboratory results for B-cell #541-Class II

Center	Investigator	High resolution										METHOD	Other Alleles	
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1			
5488	Adams, Sharon	*01:01:01	*12:01:01			*05:05	*03:01:01	*05:01:01			*02:01	*04:01:01	SSP SSO SBT	DRB1*12:10 DPB1*433:01 DPB1*444:01 DPB1*452:01 DPB1*457:01 DPB1*469:01 DPB1*502:01 DPB1*510:01 DPB1*464:01 DPB1*468:01 DPB1*475:01 DPB1*476:01 DPB1*479:01 DPB1*485:01 DPB1*486:01 DPB1*497:01 DPB1*500:01 DPB1*592:01 DPB1*593:01 DPB1*607:01 DPB1*614:01 DPB1*615:01 DPB1*618:01 DPB1*625:01 DPB1*467:01 DPB1*511:01 DPB1*513:01 DPB1*528:01 DPB1*537:01 DPB1*557:01 DPB1*602:01 DPB1*617:01 DPB1*622:01 DPB1*628:01 DPB1*418:01 DPB1*426:01 DPB1*428:01 DPB1*434:01 DPB1*453:01 DPB1*454:01 DPB1*455:01N DPB1*459:01 DPB1*520:01 DPB1*523:01 DPB1*524:01 DPB1*529:01 DPB1*534:01 DPB1*553:01 DPB1*554:01 DPB1*569:01 DPB1*591:01
5462	Arnold , Paula	NT	NT	NT	NT	NT	NT	NT	NT	NT	*02:01	*04:01	SSO RT-PCR	
5133	Askar , Medhat	*01:01:01	*12:01:01	3*02:02:01	*01:01:01:01	*05:05:01:06	*03:01:01	*05:01:01	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01	NGS	
4492	Caillat-Zucman ,	*01:01:01	*12:01:01	3*02:02	*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03	*02:01	*02:01:02	*04:01:01	SSP SSO NGS	DRB1*12:10 DPA1*01:13
774	Cecka , J. Micha	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP SSO	DRB1*01:64 DRB1*01:67 DRB3*02:28 DQB1*03:92 DRB3*02:29N DQB1*03:73 DQB1*03:93 DRB1*01:50 DRB1*01:62N
8070	Chang , Uckjin	*01:01	*12:01										SBT	
8021	Clark , Brendan	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO NGS	
3632	Colombe , Beth V	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO	
5130	Costeas , Paul A	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP NGS	
779	Daniel , Claude				*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01		
8086	Du , Keming	*01:01	*12:01		*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO SBT	
5214	Eckels/CPMC ,									*02:01	*02:01	*04:01:01G	SSO	
3135	Enczmann , J	*01:01	*12:01	3*02:02			*03:01	*05:01			*02:01	*04:01		DRB1*12:10
747	Ferrari-Lacraz , S	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01:01	SSP SSO NGS	DRB1*12:10
762	Fischer , Gottfrie	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01	NGS	DRB1*12:10
4079	Fort , Marylise										*02:01	*04:01	SSP	
792	Gandhi , Manish	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SSP SSO SBT	
8043	Gideoni , Osnat	*01:01	*12:01		*01:01	*05:05	*03:01	*05:01						
810	Hamdi , Nuha												SSO	
2344	Hurley & Hartzma	*01:01:01	*12:01:01		*01:01:01	*05:05:01:03	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01:01	NGS	DPB1*04:01:01:02 DQA1*05:05:01:06

Table 3b: Individual laboratory results for B-cell #541-Class II														
Center	Investigator	High resolution											METHOD	Other Alleles
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1			
771	Israel , Shoshana	*01:01	*12:01				*03:01	*05:01					SSP SSO	
794	Jaatinen , Taina	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO SBT RT-PCR	DRB1*12:17 DQA1*05:09 DQA1*05:11 DRB1*01:50 DRB1*01:67 DQA1*01:04 DQA1*01:05 DPA1*01:13 DPB1*459:01 DPB1*464:01
4337	Kim , Tai-Gyu	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SBT	
278	Lee , Jar-How	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO	
2400	Liu , Chang	*01:01	*12:01:01G		*01:01	*05:05	*03:01	*05:01			*02:01:02G	*04:01:01G	SSP SSO SBT	
731	Loewenthal , Ro	*01:01:01G	*12:01:01G				*03:01:01G	*05:01:01G					SSP SSO SBT	
735	Moussa , Omar	*01:01	*12:01P	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01		DQA1*05:09 DQA1*05:11 DRB3*02:29N DRB3*02:33 DQA1*01:05 DPA1*01:13 DRB3*02:28 DQA1*01:04
8042	Muncher , Liora	*01:01	*12:01	3*02:02:01	NT	NT	*03:01	*05:01	NT	NT	NT	NT	SSP SSO	
3966	Permpikul , Vejba	*01:01	*12:01	3*02:02			*03:01	*05:01					SSP	
8001	Rao , Prakash	*01:01:01G	*12:01:01G	3*02:02:01G			*03:01:01G	*05:01:01G			*02:01	*04:01	SSP SSO	
3753	Reed , Elaine F.	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03:01	*02:01:01	*02:01:02	*04:01:01	NGS	DRB1*12:10
3519	Renac , Virginie	*01:01	*12:01P	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP NGS	DRB1*12:10
793	Rubocki , Ronald				*01:01	*05:05					*02:01	*04:01:01G	SSP	
4251	Schiller , Jennifer	*01:01	*12:01:01G	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO NGS	
230	Thoni , Deborah	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SSO SBT	
5451	Tilanus , Marcel	*01:01:01	*12:01:01										SSP SBT	
5642	Varnavidou-Nico	*01:01	*12:01				*03:01	*05:01						
3511	Zeevi , Adriana	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP SSO	

Table 4: Individual laboratory results for B-cell #541-Class II

Serology										
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1		Others		
910	Hahn,Amy B.	DR1	DR12	DR52		DQ7	DQ1	DR14	DR10	

Table 5: Individual laboratory results for B-cell #541-Class I

Center	Investigator	Low resolution						High/Intermediate						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams, Sharon			*35		*04	*05	*02:01:01	*02:291		*44:12			SSP SSO SBT	
5462	Arnold , Paula	*02		*35	*44	*04	*05	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5133	Askar , Medhat							*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01	NGS	
4492	Caillat-Zucman , S	*02		*35	*44	*04	*05	*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01	*05:01:01:02	SSP SSO NGS	
774	Cecka , J. Michael	*02		*35	*44	*04	*05			*35:03	*44:12			SSP SSO	B*35:70 B*35:195
9916	Charlton , Ronald	*02		*35	*44	*04	*05							SSP	
3224	Chen , Dong-Feng	*02	*02	*35	*44	*04	*05							SSO	
8021	Clark , Brendan							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO NGS	
5130	Costeas , Paul A.	*02	*02	*35	*44	*04	*05	*02:01	*02:01/291	*35:03	*44:12	*04:01	*05:01	SSP NGS	
779	Daniel , Claude	*02		*35	*44	*04	*05								
5219	Daniel , Dolly	*02	*02	*35	*44	*04	*05							SSO	
87	Di Paola , Nicholas	*02	*02	*35	*44	*04	*05							RT-PCR	
8086	Du , Keming							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO SBT	
5214	Eckels/CPMC ,	*02	*02	*35	*44	*04	*05				*44:12			SSO	
3135	Enczmann , J							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01		C*04:09N
747	Ferrari-Lacraz , S	*02	*02	*35	*44	*04	*05	*02:01:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01:02	SSP SSO NGS	
792	Gandhi , Manish	*02	*02	*35	*44	*04	*05	*02:01:01G	*02:01:01G	*35:03	*44:12	*04:01	*05:01	SSP SSO SBT	A*02:291
810	Hamdi , Nuha	*02	*02	*35	*44	*04	*05							SSO	
8087	Hernandez Rosale	*02	*02	*35	*44	*04	*05								
2344	Hurley & Hartzma							*02:01:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01:02	NGS	
794	Jaatinen , Taina	*02	*02	*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSP SSO SBT	
4337	Kim , Tai-Gyu							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	RT-PCR	C*04:82 C*04:30
278	Lee , Jar-How	*02	*02	*35	*44	*04	*05	*02:01	*02:01	*35:03	*44:12	*04:01	*05:01	SBT	
2400	Liu , Chang	*02		*35	*44	*04	*05	*02:01:01G		*35:03:01G	*44:12	*04:01	*05:01	SSP SSO	
206	McAlack , Robert	*02	*02	*35	*44	*04	*05							SSP SSO SBT	
735	Moussa , Omar	*02	*02	*35	*44	*04	*05							SSO	
735	Moussa , Omar	*02	*02	*35	*44	*04	*05	*02:01P	*02:291	*35:03	*44:12	*04:01P	*05:01P		
8042	Muncher , Liora	*02	*02	*35	*44	*04	*05	*02:01	*02:01	*35:03	*44:12	*04:01	*05:01	SSP SSO	
3966	Permpikul , Vejba	*02	*02	*35	*44	*04	*05							SSP	
3753	Reed , Elaine F.							*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01	*05:01:01	NGS	
3519	Renac , Virginie	*02		*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSP NGS	A*02:01L
793	Rubocki , Ronald	*02		*35	*44	*04	*05							SSP	
4251	Schiller , Jennifer	*02	*02	*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO NGS	
8068	Shanmugam , He	*02	*02	*35	*44	*04	*05							SSO	
8029	Tarigopula , Anil	*02	*02	*35	*44	*04	*05							SSO	
230	Thoni , Deborah							*02:01		*35:03	*44:12	*04:01	*05:01	SSO SBT	
2847	Wakita , Atsushi	*02		*35	*44	*04	*05							SSO	

Table 6a: Individual laboratory results for B-cell #542-Class II

Center	Investigator	Low resolution										METHOD	Other Alleles		
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1				DPB1	
5488	Adams, Sharon			3*01			*01	*06						SSP SSO SBT	
5462	Arnold , Paula	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04(DP401)	SSO RT-PCR	
4492	Caillat-Zucman , S	*01	*13		3*01		*01	*06	*05	*06	*01		*03 *04(DP401)	SSP SSO NGS	
774	Cecka , J. Michael	*01	*13	3*01			*01	*06	*05	*06			*03 *04(DP401)	SSP SSO	
9916	Charlton , Ronald	*01	*13	3*PRESENT				*06	*05	*06				SSP	
3224	Chen , Dong-Feng	*01	*13	3*01			*01	*06	*05	*06	*02		*11 *11	SSO	
3632	Colombe , Beth W	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04	SSP SSO	
5130	Costeas , Paul A.	*01	*13	3*01			*01	*06	*05	*06			*03 *04	SSP NGS	
779	Daniel , Claude	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04(DP401)		
5219	Daniel , Dolly	*01	*13				*01	*06	*05	*06				SSO	
87	Di Paola , Nichola	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	RT-PCR	
5214	Eckels/CPMC ,	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	SSO	
747	Ferrari-Lacraz , Sy	*01	*13	3*PRESENT			*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO NGS	
4079	Fort , Marylise	*01	*13					*06	*05	*06				SSP	
792	Gandhi , Manish	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO SBT	
8043	Gideoni , Osnat	*01	*13				*01	*06	*05	*06					
810	Hamdi , Nuha	*01	*13				*01	*06	*05	*06				SSO	
8087	Hernandez Rosale	*01	*13				*01	*06	*05	*06					
771	Israel , Shoshana	*01	*13				*01	*06	*05	*06				SSP SSO	
794	Jaatinen , Taina	*01	*13	3*01	NP		*01	*06	*05	*06	*01		*03 *04	SSP SSO SBT RT-PCR	
725	Lardy , N.M.	*01	*13	3*PRESENT			*01	*06	*05	*06				SSO	
278	Lee , Jar-How	*01	*13	3*01	NT		*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO	
6649	Lim , Young Ae	*01	*13	3*PRESENT										SSP	
2400	Liu , Chang	*01	*13	3*01			*01	*06	*05	*06			*03 *04	SSP SSO SBT	
731	Loewenthal , Ron	*01	*13				*01	*06	*05	*06				SSP SSO SBT	
206	McAlack , Robert	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04	SSO	
735	Moussa , Omar	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03		
8042	Muncher , Liora	*01	*13	3*01	NP		NT	NT	*05	*06	NT	NT	NT	SSP SSO	
8001	Rao , Prakash	*01	*13	3*PRESENT			*01	*06	*05	*06				SSP SSO	
3519	Renac , Virginie	*01	*13					*06	*05	*06			*03 *04(DP401)	SSP NGS	
793	Rubocki , Ronald	*01	*13	3*01			*01	*06	*05	*06			*03 *04(DP401)	SSP	
4251	Schiller , Jennifer	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	SSO NGS	
8068	Shanmugam , He	*01	*13	3*01	3*01			*06	*05	*06				SSO	
8029	Tarigopula , Anil	*01	*13				*01	*06	*05	*06				SSO	
5451	Tilanus , Marcel G	*01	*13	3*PRESENT				*06	*05	*06				SSP SBT	
5642	Varnavidou-Nicola	*01	*13	3*PRESENT				*06	*05	*06					
2847	Wakita , Atsushi	*01	*13											SSO	

Table 6b: Individual laboratory results for B-cell #542-Class II

Center	Investigator	High resolution										METHOD	Other Alleles		
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1				
5488	Adams, Sharon	*01:01:01	*13:01:01		*01:01		*05:01:01					*03:01	*04:01	SSP SSO SBT	DQB1*05:01:14 DQB1*05:73 DPB1*124:01 DPB1*350:01
5462	Arnold , Paula	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*03:01P	*04:01P	SSO RT-PCR	DPB1*615:01 DPB1*618:01 DPB1*104:01 DPB1*124:01 DPB1*350:01 DPB1*459:01 DPB1*464:01 DPB1*534:01
5133	Askar , Medhat	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01	*06:03:01	*01:03:01			*03:01:01	*04:01:01:01	NGS	DPB1*124:01 DPB1*350:01
4492	Caillat-Zucman ,	*01:01:01	*13:01:01	3*01:01	*01:01:01	*01:03:01:02	*05:01:01	*06:03:01	*01:03			*03:01:01	*04:01:01:01	SSP SSO NGS	DPB1*124:01 DPB1*350:01
774	Cecka , J. Micha	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03				*03:01	*04:01	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:67 DRB3*01:16 DRB*3*01:17 DQA1*01:12 DQB1*05:68 DQB1*05:74 DQB1*05:76 DRB1*13:166 DRB1*13:173 DRB1*13:186 DRB3*01:19 DQB1*05:48 DQB1*05:55 DQB1*05:61
8070	Chang , Uckjin	*01:01	*13:01											SBT	
8021	Clark , Brendan	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03	*01:03			*03:01	*04:01	SSO NGS	
3632	Colombe , Beth	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03	*01:03			*03:01	*04:01	SSP SSO	
5130	Costeas , Paul A	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03				*03:01	*04:01	SSP NGS	
779	Daniel , Claude				*01:01	*01:03			*01:03			*03:01	*04:01		
8086	Du , Keming	*01:01	*13:01		*01:01	*01:03	*05:01	*06:03	*01:03	*01:03		*03:01	*04:01	SSO SBT	
5214	Eckels/CPMC ,								*01:03			*03:01:01G	*04:01:01G	SSO	
3135	Enczmann , J	*01:01	*13:01	3*01:01			*05:01	*06:03				*03:01	*04:01		
747	Ferrari-Lacraz , S	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04		*03:01:01	*04:01:01:01	SSP SSO NGS	DPB1*124:01 DPB1*350:01
762	Fischer , Gottfrie	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04		*03:01:01	*04:01:01:01	NGS	DPB1*124:01
4079	Fort , Marylise											*03:01	*04:01	SSP	

Table 6b: Individual laboratory results for B-cell #542-Class II

Center	Investigator	High resolution										METHOD	Other Alleles		
		DRB1	DRB3/4/5	DQA1		DQB1		DPA1		DPB1					
792	Gandhi , Manish	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SSP SSO SBT	DPB1*124:01 DPB1*350:01
8043	Gideoni , Osnat	*01:01	*13:01		*01:01	*01:03		*05:01	*06:03						
810	Hamdi , Nuha													SSO	
2344	Hurley & Hartzm	*01:01:01	*13:01:01		*01:01:01	*01:03:01:02		*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04	*03:01:01	*04:01:01:01	NGS	DPB1*350:01 DPB1*124:01 DPB1*04:01:01:02
771	Israel , Shoshana	*01:01	*13:01					*05:01	*06:03					SSP SSO	
794	Jaatinen , Taina	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03	*01:03		*03:01	*04:01	SSP SSO SBT RT-PCR	DRB1*01:50 DRB1*01:67 DRB1*13:105 DRB1*13:117 DRB1*13:166 DRB3*01:16 DQA1*01:04 DQA1*01:05 DQA1*01:12 DQA1*01:10 DPB1*104:01 DPA1*01:13 DPB1*124:01 DPB1*350:01 DPB1*459:01 DPB1*464:01
4337	Kim , Tai-Gyu	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SBT	
278	Lee , Jar-How	*01:01	*13:01	3*01:01:01	*01:01	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01	SSP SSO	
2400	Liu , Chang	*01:01	*13:01		*01:01	*01:03		*05:01	*06:03			*03:01:01G	*04:01:01G	SSP SSO SBT	
731	Loewenthal , Ro	*01:01:01G	*13:01:01G					*05:01	*06:03					SSP SSO SBT	
735	Moussa , Omar	*01:01	*13:01	3*01:01	*01:01P	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01		DRB3*01:16 DRB3*01:04 DRB3*01:17 DQA1*01:10 DPA1*01:13 DPB1*124:01 DPB1*350:01 DPA1*01:13
8042	Muncher , Liora	*01:01	*13:01	3*01:01	NT	NT		*05:01	*06:03	NT	NT	NT	NT	SSP SSO	
3966	Permpikul , Vej	*01:01	*13:01	3*01:01				*05:01	*06:03					SSP	
8001	Rao , Prakash	*01:01:01G	*13:01	3*01:01:01G				*05:01	*06:03:01G			*03:01:01G	*04:01:01G	SSP SSO	
3753	Reed , Elaine F.	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01		*05:01:01	*06:03:01	*01:03:01	*01:03:01	*03:01:01	*04:01:01	NGS	DPB1*124:01 DPB1*350:01
3519	Renac , Virginie	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03			*03:01P	*04:01P	SSP NGS	DPB1*350:01 DPB1*124:01
793	Rubocki , Ronald				*01:01	*01:03						*03:01	*04:01:01G	SSP	
4251	Schiller , Jennife	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01	SSO NGS	
230	Thoni , Deborah	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SSO SBT	

Table 6b: Individual laboratory results for B-cell #542-Class II

		High resolution												
Center	Investigator	DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5451	Tilanus , Marcel	*01:01:01	*13:01:01										SSP SBT	
5642	Varnavidou-Nico	*01:01	*13:01				*05:01	*06:03						
3511	Zeevi , Adriana	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03			*03:01	*04:01	SSP SSO	

Table 7: Individual laboratory results for B-cell #542-Class II

Serology										
CTR	DIRNAME	DRB1		DRB3/4/5			DQB1		Others	
910	Hahn,Amy B.	DR1	DR13	DR52			DQ1		DR14,DR103	DR17

Table 8: Individual laboratory results for B-cell #542-Class I

Center	Investigator	Low resolution						High/Intermediate						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams, Sharon				*38	*04		*02:30:01	*03:01:01	*35:01:01			*12:03:01	SSP SSO SBT	B*35:68:01 B*35:93 B*35:124 B*35:197 B*35:259 C*12:194 C*12:167 C*12:03:25 C*12:04:02 C*12:24
5462	Arnold , Paula	*02	*03	*35	*38	*04	*12	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5133	Askar , Medhat							*02:30	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01:01	*12:03:01	NGS	
4492	Caillat-Zucman , S	*02	*03	*35	*38	*04	*12	*02:30:01	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01	*12:03:01:01	SSP SSO NGS	
774	Cecka , J. Michael	*02	*03	*35	*38	*04	*12							SSP SSO	
8021	Clark , Brendan							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO NGS	
9916	Charlton , Ronald	*02	*03	*35	*38	*04	*12							SSP	
3224	Chen , Dong-Feng	*02	*03	*35	*38	*04	*12							SSO	
5130	Costeas , Paul A.	*02	*03	*35	*38	*04	*12	*02:01/30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP NGS	
779	Daniel , Claude	*02	*03	*35	*38	*04	*12								
5219	Daniel , Dolly	*02	*03	*35	*38	*04	*12							SSO	
87	Di Paola , Nichola	*02	*03	*35	*38	*04	*12							RT-PCR	
8086	Du , Keming							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO SBT	
5214	Eckels/CPMC ,	*02	*03	*35	*38	*04	*12							SSO	
3135	Enczm ann , J							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03		C*04:09N
747	Ferrari-Lacruz , S	*02	*03	*35	*38	*04	*12	*02:30:01	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01:01	*12:03:01:01	SSP SSO NGS	
792	Gandhi , Manish	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT	
810	Hamdi , Nuha	*02	*03	*35	*38	*04	*12							SSO	
8087	Hernandez Rosal	*02	*03	*35	*38	*04	*12								
2344	Hurley & Hartzma							*02:30:01	*03:01:01:01	*35:01:01:01	*38:01:01	*04:01:01:01	*12:03:01:01	NGS	B*35:01:01:02
794	Jaatinen , Taina	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT RT-PCR	B*35:42 C*04:30 C*04:82 C*12:143
4337	Kim , Tai-Gyu							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SBT	
278	Lee , Jar-How	*02	*03	*35	*38	*04	*12	*02:01	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO	
2400	Liu , Chang	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT	A*03:01:01:02N
206	McAlack , Robert	*02	*03	*35	*38	*04	*12							SSO	
735	Moussa , Omar	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01P	*38:01	*04:01P	*12:03P		
8042	Muncher , Liora	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO	
3966	Permpikul , Vejba	*02	*03	*35	*38	*04	*12							SSP	
3753	Reed , Elaine F.							*02:30:01	*03:01:01	*35:01:01	*38:01:01	*04:01:01	*12:03:01	NGS	
3519	Renac , Virginie	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP NGS	
793	Rubocki , Ronald	*02	*03	*35	*38	*04	*12							SSP	
4251	Schiller , Jennifer	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO NGS	
8068	Shanmugam , He	*02	*03	*35	*38	*04	*12							SSO	
8029	Tarigopula , Anil	*02	*03	*35	*38	*04	*12							SSO	
230	Thoni , Deborah							*02:01	*03:01	*35:01	*38:01	*04:01	*12:03	SSO SBT	
2847	Wakita , Atsushi	*02	*03	*35	*38	*04	*12							SSO	