

# REPORT OF THE 386<sup>th</sup> CELL EXCHANGE

## MAY 6, 2015

B-cell Lines	513-514
Cells	1541-1544
Serum	1169-1172

## B-cell Line Exchange #257

The results for B-cell Line Exchange #257 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8. We are grateful to the generosity of **Eric Mickelson and John Hansen, Fred Hutchinson Cancer Research Center**, for providing

**Ter-513.** The consensus type for this sample is DRB1\*04:05-DRB1\*08:07-DRB4\*01:03-DQA1\*03:DQA1\*04:01-DQB1\*03:02-DQB1\*04:02-DPA1\*01:03-DPB1\*04:01-DPB1\*04:02-A\*02:05-A\*31:01-B\*35:04-B\*49:01-C\*04:01-C\*07:01. One likely association in this cell may be A\*02:05-B\*49:01-C\*07:01-DRB1\*04:05-DQB1\*03:02, observed in Hispanics, with HF=0.00094. The other likely association may then be A\*31:01-B\*35:04-C\*04:01-DRB1\*08:07-DQB1\*04:02. The B\*35:04-C\*04:01 association in this cell is observed exclusively in Hispanics, with HF=0.00050.

This cell is FH41, a reference cell for DRB1\*08:07. It was studied in the workshops as IHW#9429. No ethnic information was provided for this cell in the workshop data, however the IMGT database does list its ethnic origin as "Caucasoid – Brazil, South America." This cell was typed previously in the Exchange as Ter 414 (2008) and Ter 323 (2003), as astutely noted by Rao and Tiercy. In this present typing, DRB1\*08:07 was well typed by 97%, an increase from a detection level of 75% in 2008. This is the only DRB1\*08:07 cell typed in the exchange. DRB1\*04:05 (94%) was reported as the second DRB1 allele, with 8 labs assigning DRB1\*04:05:01. DQB1\*03:02 (97%) and DQB1\*04:02 (94%) were well assigned, with 6 labs reporting DQB1\*03:02:01 and 5 labs reporting DQB1\*04:02:01. The DQA1 types were DQA1\*04:01, assigned in complete consensus, and DQA1\*03, which was not as well defined, as 15 labs assigned DQA1\*03:03, 6 labs assigned DQA1\*03:01, and 2 labs assigned DQA1\*03:01:01G.

This sample was also previously typed in the International HLA DNA Exchange as DNA#508 (2006). As in the 2006 study, the class I types for this sample were well assigned as A\*02:05 (100%), A\*31:01 (95%), B\*35:04 (100%), B\*49:01 (95%), C\*04:01 (95%), and C\*07:01 (94%). A\*02:05:01, A\*31:01:02, and B\*35:04:01 were each reported by 4 labs.

us with the many interesting workshop cells typed in our exchange studies over the years.

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

**Ter-514.** The consensus type for this sample from an Australian Aborigine donor is DRB1\*08:03-DRB1\*14:08-DRB3\*02:02-DQA1\*01:03-DQA1\*01:04-DQB1\*05:03-DPA1\*01:03-DPA1\*02:02-DPB1\*02:01-DPB1\*05:01-A\*34:01-B\*40:02-B\*56:01-C\*01:02-C\*15:02. The class II associations in this cell are likely DRB1\*14:08-DRB3\*02:02-DQA1\*01:04-DQB1\*05:03 and DRB1\*08:03-DQA1\*01:03-DQB1\*05:03 (1).

This cell is WON, 1, studied in the workshops as IHW9194. It was previously studied in the exchange as Ter 412 (2008) and Ter 238 (1999), as noted by Rao and Tiercy. In this present retyping, DRB1\*08:03 was assigned by 96%, with 8 labs assigning DRB1\*08:03:02. DRB1\*14:08 was reported in complete consensus as the second DRB1 type. A number of labs (Charlton, Gandhi, Hartzman and Hurley, Phelan, Reed, and Tilanus) commented on the possible presence of a new allele. Tilanus noted the new allele is most similar to DRB1\*14:08, differing by a single nucleotide substitution at position 566, (T → C), resulting in amino acid change from methionine to threonine at codon 160. Reed also observed the same nucleotide substitution (T → C) at position 566. DQA1\*01:03 (100%) and DQA1\*01:04 (70%) were the reported DQA1 types, while DQB1\*05:03 (97%) was reported as the sole DQB1 type. DQB1\*05:03:01 was reported by 6 labs.

The sample was also typed for class I as extract 126 (2000). In this present retyping, A\*34:01 was typed in complete consensus as the sole A-locus type, with 4 labs assigning A\*34:01:01. B\*40:02 (96%) and B\*56:01 (90%) were the reported B-locus types. B\*40:02:01 and B\*56:01:01 were each assigned by 3 labs. C\*01:02 and C\*15:02 were well typed by 100% and 95%, respectively.

### References:

1. Lester S, Cassidy S, Humphreys I, et al. Evolution in HLA-DRB1 and major histocompatibility complex Class II haplotypes in Australian Aborigines. Definition of a new DRB1 allele and distribution of DRB1 gene frequencies. Hum Immunol 1995;42:154-160.

**Table 1: Summary of the 257<sup>th</sup> B-cell Line Exchange**

**Ter-513**

DNA Typing - class II	<u>36 labs High; 37 labs Low-DRB1</u>		<u>20 labs High; 28 labs Low-DRB4</u>		<u>23 labs High; 21 labs Low-DQA1</u>		<u>35 High Labs; 35 labs Low-DQB1</u>		<u>13 High Labs; 13 labs Low-DPA1</u>		<u>31 High Labs; 14 labs Low-DPB1</u>	
DRB1*04:05:01	22(8)	DRB4*01:01:01G	5 (1)	DQA1*03:03:01	4 (1)	DQB1*03:02:01	17(6)	DPA1*01:03:01	8 (1)	DPB1*04:01:01:01	3 (1)	
DRB1*04:05	72(26)	DRB4*01:03	90(18)	DQA1*03:01:01G	9 (2)	DQB1*03:02	80(28)	DPA1*01:03	92(13)	DPB1*04:01:01	10(3)	
DRB1*04:83	3 (1)	DRB4*01:01	5 (1)	DQA1*03:03	61(14)	DQB1*03:05	3 (1)	DPA1*01	100(13)	DPB1*04:01:01G	19(6)	
DRB1*08:01	3 (1)	DRB4*01	71(20)	DQA1*03:01	26(6)	DQB1*03	100(35)			DPB1*04:01P	7 (2)	
DRB1*04	100(37)	DRB3*+	29(8)	DQA1*03(DQ8)	5 (21)					DPB1*04:01	61(19)	
				DQA1*03	95(20)					DPB1*04	100(14)	
<b>35 labs High; 37 labs Low-DRB1</b>	<b>% (n)</b>											
DRB1*08:07	97(34)											
DRB1*08:01	3 (1)											
DRB1*08	100(37)											
Serology - class II	<u>1 LAB - DR</u>		<u>24 labs High; 21 labs Low-DQA1</u>		<u>33 High Labs; 35 labs Low-DQB1</u>		<u>1 LABS - DQ</u>		<u>31 High Labs; 14 labs Low-DPB1</u>			
DR4	100(1)	DR53	100(1)	DQA1*04:01:01	8 (2)	DQB1*04:02:01	15(5)	DQ3	100(1)	DPB1*04:02:01:02	3 (1)	
DR8	100(1)			DQA1*04:01	92(22)	DQB1*04:02	79(26)	DQ4	100(1)	DPB1*04:02:01	7 (2)	
				DQA1*04	100(21)	DQB1*04:03	3 (1)			DPB1*04:02:01G	19(6)	
						DQB1*04:04	3 (1)			DPB1*04:02P	7 (2)	
						DQB1*04	100(35)			DPB1*04:02	61(19)	
										DPB1*04:01	3 (1)	
										DPB1*04	100(14)	
DNA Typing - class I	<u>21 labs High; 24 labs Low- A</u>		<u>19 labs High; 25 labs Low- C</u>		<u>22 labs High; 24 labs Low- B</u>		<u>20 labs High; 24 labs Low- B</u>		<u>19 labs High; 25 labs Low- C</u>			
A*02:05:01	19(4)	B*35:04:01	18(4)	C*04:01:01:01	5 (1)							
A*02:05	81(17)	B*35:04	82(18)	C*04:01:01	5 (1)							
A*02	100(24)	B*35	100(24)	C*04:01:01G	5 (1)							
				C*04:01P	5 (1)							
				C*04:01	74(14)							
				C*04:54	5 (1)							
				C*04	100(25)							
DNA Typing - class I	<u>20 labs High; 24 labs Low- A</u>		<u>19 labs High; 25 labs Low- C</u>		<u>20 labs High; 24 labs Low- B</u>		<u>19 labs High; 25 labs Low- C</u>					
A*31:01:02	20(4)	B*49:01:01	5 (1)	C*07:01:01:01	10(2)							
A*31:01	75(15)	B*49:01:01G	5 (1)	C*07:01:01G	10(2)							
A*31:02	5 (1)	B*49:01	85(17)	C*07:01	74(14)							
A*31	100(24)	B*49:21	5 (1)	C*04:58	5 (1)							
		B*49	100(24)	C*07	100(25)							

**Table 2: Summary of the 257<sup>th</sup> B-cell Line Exchange**

**Ter-514**

<b>DNA Typing - class II</b>	<b>34 labs High; 38 labs Low-DRB1</b>	%(n)	<b>20 labs High; 28 labs Low-DRB3</b>	%(n)	<b>23 labs High; 21 labs Low-DQA1</b>	%(n)	<b>33 High Labs; 34 labs Low-DQB1</b>	%(n)	<b>13 High Labs; 13 labs Low-DPA1</b>	%(n)	<b>30 High Labs; 14 labs Low-DPB1</b>	%(n)
	DRB1*08:03:02	23(8)	DRB3*02:02:01G	10(2)	DQA1*01:03:01	4 (1)	DQB1*05:03:01	18(6)	DPA1*01:03:01	8 (1)	DPB1*02:01:02	14(4)
	DRB1*08:03	73(25)	DRB3*02:02	90(2)	DQA1*01:03	96(22)	DQB1*05:03	79(26)	DPA1*01:03	84(11)	DPB1*02:01:02G	3 (1)
	DRB1*08:10	2 (1)	DRB3*02	78(21)	DQA1*01	100(21)	DQB1*05:09	3 (1)	DPA1*01:05	8 (1)	DPB1*02:01P	3 (1)
	DRB1*08	100(38)	DRB3+	25(7)			DQB1*05	97(34)	DPA1*01	100(13)	DPB1*02:01	80(24)
							DQB1*03	3 (1)			DPB1*02	100(14)
	<b>35 labs High; 38 labs Low-DRB1</b>	%(n)										
	DRB1*14:08	100(97)										
	DRB1*14	100(38)										
	DRB1*NEW	2 (1)										
<b>Serology - class II</b>	<b>1 LAB - DR</b>	%(n)										
	DR8	100(1)	DR52	100(1)								
	DR14	100(1)										
<b>DNA Typing - class I</b>	<b>21 labs High; 24 labs Low- A</b>	%(n)	<b>23 labs High; 24 labs Low- B</b>	%(n)	<b>19 labs High; 25 labs Low- C</b>	%(n)						
	A*34:01:01	19(4)	B*40:02:01	13(3)	C*01:02:01	11(2)						
	A*34:01	81(17)	B*40:02	83(19)	C*01:02:01G	11(2)						
	A*34	100(24)	B*40:206	4 (1)	C*01:02	78(15)						
			B*40	100(24)	C*01	100(25)						
<b>DNA Typing - class I</b>	<b>20 labs High; 25 labs Low- B</b>	%(n)	<b>19 labs High; 25 labs Low- C</b>	%(n)								
	B*56:01:01	15(3)	C*15:02:01	11(2)								
	B*56:01	75(15)	C*15:02:01G	11(2)								
	B*56:38N	10(2)	C*15:02	73(14)								
	B*56	100(25)	C*15:37	5 (1)								
			C*15	100(25)								

**Table 3: Individual laboratory results for B-cell #513-Class II**

Center	Investigator	Low resolution										METHOD		
		DRB1		DRB4	DRB4	DQA1		DQB1		DPA1				
5488	Adams , Sharon			4*01										
4691	Al Ajlan , Abdulaziz							*03	*04			SSO		
774	Cecka , J. Michael	*04	*08	4*01		*03	*04	*03	*04	*01		SSP SSO		
9916	Charlton , Ronald K	*04	*08	4*PRESENT				*03	*04			SSP SBT		
3224	Chen , Dong-Feng	*04	*08	4*01		*03	*04	*03	*04	*01		SSO SBT		
8021	Clark , Brendan	*04	*08	4*01		*03	*04	*03	*04			SSP SSO		
3632	Colombe , Beth W.	*04	*08	4*01		*03	*04	*03	*04	*01		SSP SSO		
779	Daniel , Claude	*04	*08	4*01		*03	*04	*03	*04	*01		SSP SSO		
5219	Daniel , Dolly	*04	*08					*03	*04			SSO		
1108	DeConinck , Martha	*04	*08	4*01		*03	*04	*03	*04	*01	*01	*04	*04	SSO
3766	Dunn , Paul	*04	*08	4*01		*03	*04	*03	*04	*01				
5214	Eckels/CPMC ,	*04	*08	4*01		*03	*04	*03	*04	*01		*04	*04	SSO
4079	Fort , Marylise	*04	*08					*03	*04					SSP
792	Gandhi , Manish	*04	*08	4*01		*03	*04	*03	*04			*04	*04	SSP SSO SBT
8087	Guerra , Q.F.B. Elb	*04	*08					*03	*04					SSO
910	Hahn , Amy B.	*04	*08	4*PRESENT	NP			*03	*04					SSP
810	Hamdi , Nuha			4*01	4*01									SSO
1694	Hesse , Nicole	*04	*08	4*PRESENT				*03	*04					SSP
8043	Hod , Reut	*04	*08					*03	*04					
771	Israel , Shoshana	*04	*08					*03	*04					SSP SSO
794	Jaatinen , Taina	*04	*08											SSP SSO SBT
2847	Kihara , Masaaki	*04	*08											SSO
87	Land , Geoffrey A.	*04	*08	4*01		*03	*04	*03	*04	*01	*01	*04	*04	SSP SSO SBT
725	Lardy , N.M.	*04	*08	4*PRESENT		*03	*04	*03	*04					SSP SSO
278	Lee , Jar-How	*04	*08	4*01		*03	*04	*03	*04	*01		*04	*04	SSP SSO
6649	Lim , Young Ae	*04	*08	4*PRESENT										
759	Lopez-Cepero , Ma	*04	*08	4*01		*03 (DQ8)	*04	*03	*04	*01		*04	*04	SSP SSO
8042	Muncher , Liora	*04	*08	4*01				*03	*04					
54	Pancoska , Carol	*04	*08	4*01		*03	*04	*03	*04	*01		*04		SSO
2400	Phelan , Donna L.	*04	*08	4*01		*03	*04	*03	*04			*04	*04	SSP SSO SBT
8001	Rao , Prakash					*03	*04							SSP SSO
3519	Renac , Virginie	*04	*08					*03	*04			*04		SSP SBT
1160	Rosen-Bronson , Sa	*04	*08	4*01		*03	*04	*03	*04	*01				SSO SBT
793	Rubocki , Ronald	*04	*08	4*PRESENT		*03	*04	*03	*04					SSP
4251	Schiller , Jennifer	*04	*08	4*01		*03	*04	*03	*04	*01	*01	*04	*04	SSO SBT
8068	Shanmugam , Hem	*04	*08	4*PRESENT				*03	*04					SSP SSO
8029	Tarigopula , Anil	*04	*08					*03	*04					SSO
747	Tiercy , Jean-Marie	*04	*08			*03	*04	*03	*04					SSP SSO SBT
5451	Tilanus , Marcel G.	*04	*08	4*PRESENT				*03	*04					SSP SBT
5642	Varnavidou-Nicolaid	*04	*08	4*01				*03	*04					SSP
8052	Yanina Marcos , Ci	*04	*08			*03	*04	*03	*04					SSO

  

CTR	DIRNAME	DR4	DR8	DR53				DQ3	DQ4	OTH1	OTH2	
4492	Charron,D.	+	+	+				+	+			

Table 4: Individual laboratory results for B-cell #513-Class II

Center	Investigator	High resolution										METHOD	Other Alleles		
		DRB1		DRB4		DQA1		DQB1		DPA1		DPB1			
5488	Adams , Sharon	*04:05:01	*08:07			*03:03	*04:01	*03:02:01	*04:02:01			*04:01:01	*04:02:01		DRB1*04:178N, DQB1*03:05:03, DQB1*04:03:02, DPB1*126:01, DPB1*105:01
4691	Al Ajlan , Abdulaziz	*04:05	*08:07											SSO	
5462	Arnold , Paula	*04:05	*08:07	4*01:03	NT	NT		*03:02	*04:02	NT	NT	*04:01P	*04:02P	SSP SSO SBT	DQB1*03:106
774	Cecka , J. Michael	*04:05	*08:07	4*01:03		*03:03	*04:01	*03:02	*04:04	*01:03		*04:01	*04:02	SSP SSO	DRB1*04:90/04:104/04:116/04:178N, DQB1*03:85
9916	Charlton , Ronald K	*04:05:01	*08:07	4*01:03				*03:02	*04:02					SSP SBT	DQB1*03:106/03:107/03:125/03:146, DQB1*04:19/04:21/04:22
4492	Charron , Dominique	*04:05	*08:07	4*01:03		*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO	DRB1*04:178N, DQA1*03:02/03:03/03:06, DQB1*04:18/04:19/04:20+, DPB1*105:01
3224	Chen , Dong-Feng	*04:05:01	*08:07	4*01:03		*03:01:01G	*04:01	*03:02:01	*04:02:01	*01:03		*04:01:01G	*04:02:01G	SSO SBT	
8021	Clark , Brendan	*04:05	*08:07	4*01:01		*03:01	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO	DRB4*01:03/01:06, DQA1*03:02/03:03, DPB1*105:01, DPB1*126:01
3632	Colombe , Beth W.	*04:05	*08:07	4*01:03		*03:03	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO	DPB1*126:01, DPB1*105:01
5130	Costeas , Paul A.	*04:05	*08:07	4*01:03		*03:03	*04:01	*03:02	*04:02					SSP SSO	
779	Daniel , Claude	*04:05				*03:03	*04:01	*03:02		*01:03		*04:01:01G	*04:02:01G	SSP SSO	
3766	Dunn , Paul											*04:01	*04:02		
5214	Eckels/CPMC ,							*03:02				*04:01	*04:02	SSO	DPB1*126:01, DPB1*105:01
3135	Enczmann , J	*04:05	*08:07	4*01:03				*03:02	*04:02			*04:01	*04:02		
762	Fischer , Gottfried	*04:05	*08:07	4*01:03		*03:03	*04:01	*03:02	*04:02			*04:01	*04:02	SSO SBT	DQB1*04:13, DPB1*126:01, DPB1*105:01
4079	Fort , Marylise											*04:01	*04:02	SSP	DPB1*185:01/*257:01/*177:01/*78:01+, DPB1*105:01
792	Gandhi , Manish	*04:05	*08:07			*03:03	*04:01	*03:02	*04:02			*04:01	*04:02	SSP SSO SBT	DPB1*126:01, DPB1*105:01
810	Hamdi , Nuha	*04:83	*08:07			*03:01	*04:01	*03:02	*04:02					SSO	DQA1*03:02/03:03, DQB1*03:05/03:62, DQB1*04:03/04:11
8043	Hod , Reut	*04:05	*08:07			*03:03	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02		
2344	Hurley , Hartzman&	*04:05:01	*08:07			*03:03:01	*04:01:01	*03:02:01	*04:02:01	*01:03:01	*01:03:01	*04:01:01:01	*04:02:01:02	SSO OTHER	DPB1*04:01:01:02/*126:01, DPB1*105:01
771	Israel , Shoshana	*04:05	*08:07					*03:02	*04:02					SSP SSO	
794	Jaatinen , Taina	*04:05	*08:07	4*01:03		*03:01	*04:01	*03:02	*04:02	*01:03		*04:01	*04:02	SSP SSO SBT	DQA1*03:02/03:03, DPB1*126:01, DPB1*105:01
8086	Jie , Pan	*04:05	*08:07			*03:03	*04:01	*03:02	*04:02					SBT	
4337	Kim , Tai-Gyu	*04:05	*08:07					*03:02	*04:02			*04:01	*04:02	SBT	
87	Land , Geoffrey A.	*04:05	*08:07	4*01:03		*03:03	*04:01	*03:02	*04:02	*01:03	*01:03	*04:01	*04:02	SSP SSO SBT	DPB1*126:01, DPB1*105:01
278	Lee , Jar-How	*04:05:01	*08:07	4*01:03		*03:03	*04:01:01	*03:02:01	*04:02	*01:03		*04:01:01	*04:02	SSP SSO	
274	Lo , Raymundo W.	*08:01	*08:01			*03:01	*04:01	*03:02	*04:02	*01:03	*01:03	*04:01	*04:01	OTHER	
731	Loewenthal , Ron	*04:05:01	*08:07					*03:02:01	*04:02:01						
759	Lopez-Cepero , Ma											*04:01P	*04:02P	SSP SSO	
8042	Muncher , Liora	*04:05	*08:07	4*01:03				*03:02	*04:02						

Table 4: Individual laboratory results for B-cell #513-Class II

Center	Investigator	High resolution												METHOD	Other Alleles
		DRB1		DRB4		DQA1		DQB1		DPA1		DPB1			
3966	Permpikul , Vejbaes	*04:05	*08:07	4*01:03				*03:02	*04:02					SSP	
2400	Phelan , Donna L.	*04:05	*08:07		*03:03	*04:01		*03:05	*04:03			*04:01:01G	*04:02:01G	SSP SSO SBT	
8001	Rao , Prakash	*04:05	*08:07	4*01:03				*03:02	*04:02			*04:01	*04:02	SSP SSO	
3753	Reed , Elaine F.	*04:05	*08:07	4*01:01:01G	*03:01:01G	*04:01		*03:02	*04:02	*01:03	*01:03	*04:01:01G	*04:02:01G	SSO SBT	DQB1*03:05, DQB1*04:03
3519	Renac , Virginie	*04:05	*08:07	4*01:03	*03:03	*04:01		*03:02	*04:02			*04:01	*04:02	SSP SBT	DPB1*126:01, DPB1*105:01
1160	Rosen-Bronson , Sa					*04:01				*01:03		*04:01:01G	*04:02:01G	SSO SBT	
793	Rubocki , Ronald											*04:01	*04:02	SSP	
4251	Schiller , Jennifer	*04:05	*08:07					*03:02	*04:02			*04:01:01G	*04:02:01G	SSO SBT	
747	Tiercy , Jean-Marie	*04:05:01	*08:07	4*01:03	*03:01	*04:01		*03:02:01	*04:02:01			*04:01:01	*04:02:01	SSP SSO SBT	DQA1*03:02/03:03
5451	Tilanus , Marcel G.	*04:05:01	*08:07											SSP SBT	
5642	Varnavidou-Nicolaïd	*04:05	*08:07					*03:02	*04:02					SSP	DRB1*04:80/04:83/04:89, DQB1*04:18, DQB1*03:106/03:107, DRB1*04:116/04:152/04:162
3511	Zeevi , Adriana	*04:05	*08:07	4*01:03	*03:03	*04:01		*03:02	*04:02			*04:01	*04:02	SSP SSO	

Table 5: Individual laboratory results for B-cell #513-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	*07	*02:05:01	*31:01:02	*35:04:01	*49:01					
4691	Al Ajlan , Abdulaziz	*02	*31	*35	*49	*04	*07								SSO	
5462	Arnold , Paula							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO SBT	
774	Cecka , J. Michael	*02	*31	*35	*49	*04	*07	*02:05		*35:04					SSP SSO	A*02:286/02:324/02:337/02:344+, B*35:09/35:12/35:83
8070	Chang , Uckjin															
9916	Charlton , Ronald K	*02	*31	*35	*49	*04	*07	*02:05:01	*31:01:02	*35:04:01	*49:01	*04:01:01	*07:01:01:01		SSP SBT	
4492	Charron , Dominique							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO	A*02:286/02:337/02:359/02:484+, A*31:20/31:36/31:47/31:49+, B*49 :29/49:27/49:30, C*04:106/04:136/04:149/04:156+, C*07:103/07:166/07:303/07:310+
3224	Chen , Dong-Feng	*02	*31	*35	*49	*04	*07	*02:05:01	*31:01:02	*35:04:01	*49:01:01G	*04:01:01G	*07:01:01G		SSO SBT	
8021	Clark , Brendan	*02	*31	*35	*49	*04	*07								SSP SSO	
5130	Costeas , Paul A.							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO	A*31:23
779	Daniel , Claude	*02	*31	*35	*49	*04	*07								SSP SSO	
5219	Daniel , Dolly	*02	*31	*35	*49	*04	*07								SSO	
1108	DeConinck , Martha	*02	*31	*35	*49	*04	*07								SSO	
3766	Dunn , Paul	*02	*31	*35	*49	*04	*07			*35:04						B*35:09/35:12/35:83
3135	Enczmann , J							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01			C*04:09N, C*07:06/07:18
792	Gandhi , Manish	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO SBT	
8087	Guerra , Q.F.B. Elb	*02	*31	*35	*49	*04	*07								SSO	
810	Hamdi , Nuha							*02:05	*31:01	*35:04	*49:01	*04:54	*04:58		SSO	A*02:08/02:14,A*31:09/31:11, B*35:09/35:12, B*49:05/49:06
1694	Hesse , Nicole	*02	*31	*35	*49	*04	*07								SSP	
2344	Hurley , Hartzman&							*02:05:01	*31:01:02	*35:04:01	*49:01:01	*04:01:01:01	*07:01:01:01		SSO OTHER	
794	Jaatinen , Taina	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO SBT	C*07:06/07:18
8086	Jie , Pan							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SBT	
2847	Kihara , Masaaki	*02	*31	*35	*49	*04	*07								SSO	
4337	Kim , Tai-Gyu							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SBT	
278	Lee , Jar-How	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO	
274	Lo , Raymundo W.							*02:05	*31:02	*35:04	*49:21	*04:01	*07:01		OTHER	
8042	Muncher , Liora	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01			
54	Pancoska , Carol	*02	*31	*35	*49	*04	*07								SSO	
3966	Permpikul , Veijbaes	*02	*31	*35	*49	*04	*07								SSP	
2400	Phelan , Donna L.	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SSO SBT	C*07:06/07:18/07:343
3753	Reed , Elaine F.							*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSO SBT	A*02:08/02:14/02:507, A*31:02/31:30/31:68, C*04:04/04:09N/04:15/04:29+, C*07:06/07:09/07:18/07:27+
3519	Renac , Virginie	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01	*07:01		SSP SBT	
4251	Schiller , Jennifer	*02	*31	*35	*49	*04	*07	*02:05	*31:01	*35:04	*49:01	*04:01P	*07:01:01G		SSO SBT	

**Table 5: Individual laboratory results for B-cell #513-Class I**

Center	Investigator	Low resolution					High resolution					METHOD	Other Alleles	
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		
8068	Shanmugam , Hem	*02	*31	*35	*49	*04	*07						SSP SSO	
8029	Tarigopula , Anil	*02	*31	*35	*49	*04	*07						SSO	
8052	Yanina Marcos , Ci	*02	*31	*35	*49	*04	*07						SSO	

**Table 6: Individual laboratory results for B-cell #514-Class II**

Center	Investigator	Low resolution										METHOD	Other Alleles
		DRB1	DRB3	DRB3	DQA*01	DQB1		DPA1		DPB1			
5488	Adams , Sharon	*08	*14	3*02									
4691	Al Ajlan , Abdulaziz					*05	*05					SSO	
774	Cecka , J. Michael	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSP SSO
9916	Charlton , Ronald K.	*08	*14	3*PRESENT				*05					SSP SBT
3224	Chen , Dong-Feng	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSO SBT
8021	Clark , Brendan	*08	*14	3*02		*01		*05					SSP SSO
3632	Colombe , Beth W.	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSP SSO
779	Daniel , Claude	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSP SSO
5219	Daniel , Dolly	*08	*14					*05	*05				SSO
1108	DeConinck , Martha	*08	*14	3*02		*01	*01	*05	*05	*01	*02	*02	SSO
3766	Dunn , Paul	*08	*14	3*02		*01		*05		*01	*02		
5214	Eckels/CPMC ,	*08	*14	3*02		*01	*01	*05	*05	*01	*02	*02	SSO
4079	Fort , Marylise	*08	*14					*05					SSP
792	Gandhi , Manish	*08	*14	3*02		*01	*01	*05				*02	SSP SSO SBT
8087	Guerra , Q.F.B. Elb	*08	*14					*05	*05				SSO
910	Hahn , Amy B.	*08	*14	3*PRESENT				*03	*05				SSP DRB1*04
810	Hamdi , Nuha			3*02	3*02								SSO
1694	Hesse , Nicole	*08	*14	3*PRESENT				*05					SSP
8043	Hod , Reut	*08	*14					*05					
771	Israel , Shoshana	*08	*14					*05					SSP SSO
794	Jaatinen , Taina	*08	*14										SSP SSO SBT
2847	Kihara , Masaaki	*08	*14										SSO
87	Land , Geoffrey A.	*08	*14	3*02		*01	*01	*05	*05	*01	*02	*02	SSP SSO SBT
725	Lardy , N.M.	*08	*14	3*PRESENT		*01		*05					SSP SSO
278	Lee , Jar-How	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSP SSO
6649	Lim , Young Ae	*08	*14	3*PRESENT									
759	Lopez-Cepero , May	*08	*14	3*02		*01	*01	*05		*01	*02	*02	SSP SSO
8042	Muncher , Liora	*08	*14	3*02				*05					
54	Pancoska , Carol	*08	*14	3*02		*01		*05		*01	*02	*02	SSO
2400	Phelan , Donna L.	*08	*14	3*02		*01	*01	*05				*02	SSP SSO SBT
8001	Rao , Prakash					*01							SSP SSO
3519	Renac , Virginie	*08	*14					*05				*02	*05 SSP SBT
1160	Rosen-Bronson , Sa	*08	*14	3*02		*01		*05		*01	*02		SSO SBT
793	Rubocki , Ronald	*08	*14	3*02		*01		*05					SSP
4251	Schiller , Jennifer	*08	*14	3*02		*01	*01	*05	*05	*01	*02	*02	SSO SBT
8068	Shamugam , Hem	*08	*14	3*PRESENT				*05					SSP SSO
8029	Tarigopula , Anil	*08	*14						*05	*05			SSO
747	Tiercy , Jean-Marie	*08	*14				*01	*01	*05				SSP SSO SBT
5451	Tilanus , Marcel G.	*08	*14	3*PRESENT					*05				SSP SBT
5642	Varnavidou-Nicolaïd	*08	*14	3*02					*05				SSP
8052	Yanina Marcos , Ci	*08	*14				*01	*01					SSO

  

CTR	DIRNAME	DR8	DR14	DR52				DQ1		OTH1	OTH2		
4492	Charron,D.	+	+	+					+	DQ4			

**Table 7: Individual laboratory results for B-cell #514-Class II**

High/Intermediate resolution															
Center	Investigator	DRB1		DRB3		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5488	Adams , Sharon					*01:03	*01:04	*05:03:01				*02:01:02	*05:01:01		DQA1*01:10
4691	Al Ajlan , Abdulaziz	*08:03	*14:08											SSO	
5462	Arnold , Paula	*08:03	*14:08	3*02:02	NT	NT	*05:03		NT	NT	*02:01	*05:01P	SSP SSO SBT	DRB3*02:28/02:29N	
774	Cecka , J. Michael	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03		*01:03	*02:02	*02:01	*05:01	SSP SSO	DRB3*02:26/02:28/02:29N, DQB1*05:06/05:08/05:09/ 05:10+, DPA1*02:05	
9916	Charlton , Ronald K	*08:03:02	*14:08	3*02:02			*05:03:01						SSP SBT		
4492	Charron , Dominique	*08:03	*14:08	3*02:02	*01:03	*01:01/04	*05:03		*01:03	*02:02	*02:01	*05:01	SSP SSO	DRB1*08:56/08:58, DQA1*01:04/01:05/01:12, DQA1*01:10, DQB1*05:56/05:58/05:60/05:6 4+, DPB1*135:01	
3224	Chen , Dong-Feng	*08:03:02	*14:08	3*02:02:01G	*01:03	*01:01:01G	*05:03:01		*01:03	*02:02	*02:01	*05:01:01G	SSO SBT	DQA1*01:10	
8021	Clark , Brendan	*08:03	*14:08	3*02:02	*01:03	*01:01/04	*05:03				*02:01	*05:01	SSP SSO	DQA1*01:04/01:05/12, DQA1*01:10, DQB1*06:57	
3632	Colombe , Beth W.	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03		*01:03	*02:02	*02:01	*05:01	SSP SSO		
5130	Costeas , Paul A.	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03	*05:03					SSP SSO	DRB1*14:54	
779	Daniel , Claude		*14:08		*01:03	*01:04			*01:03	*02:02	*02:01	*05:01	SSP SSO		
3766	Dunn , Paul										*02:01	*05:01			
5214	Eckels/CPMC ,										*02:01	*05:01	SSO	DPB1*135:01, DPB1*141:01	
3135	Enczmann , J	*08:03	*14:08	3*02:02			*05:03	*05:03			*02:01	*05:01			
762	Fischer , Gottfried	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03				*02:01	*05:01	SSO SBT	DPB1*135:01, DQB1*05:10, DRB3*02:12/02:28/02:29N	
4079	Fort , Marylise										*02:01	*05:01	SSP	DPB1*170:01/*186:01/ *191:01/ *211:01	
792	Gandhi , Manish	*08:03	*14:08		*01:03	*01:04	*05:03				*02:01	*05:01	SSP SSO SBT		
810	Hamdi , Nuha	*08:03	*14:08		*01:03	*01:01/04	*05:03	*06:57					SSO	DRB1*08:56/08:58, DQA1*01:04/01:05, DQA1*01:10, DQB1*05:08/05:10	
1694	Hesse , Nicole												SSP		
8043	Hod , Reut	*08:03	*14:08		*01:03	*01:04	*05:03		*01:03	*02:02	*02:01	*05:01			
2344	Hurley , Hartzman&	*08:03:02	*14:08		*01:03:01	*01:04:01	*05:03:01	*05:03:01:01	*01:03:01	*02:02:02	*02:01:02	*05:01:01	SSO OTHER	DQB1*05:03:01:02, DPB1*135:01	
771	Israel , Shoshana	*08:03	*14:08				*05:03						SSP SSO		
794	Jaatinen , Taina	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03		*01:03	*02:02	*02:01	*05:01	SSP SSO SBT	DQA1*01:10, DPB1*135:01	
8086	Jie , Pan	*08:03	*14:08		*01:03	*01:04	*05:03	*05:03					SBT		
4337	Kim , Tai-Gyu	*08:03	*14:08				*05:03	*05:03			*02:01	*05:01	SBT		
87	Land , Geoffrey A.	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03	*05:03	*01:03	*02:02	*02:01	*05:01	SSP SSO SBT		
278	Lee , Jar-How	*08:03:02	*14:08	3*02:02	*01:03	*01:04:01	*05:03:01		*01:03	*02:02	*02:01:02	*05:01	SSP SSO		
274	Lo , Raymundo W.	*08:10	*14:08		*01:03	*01:07	*05:09	*05:09	*01:05	*01:11	*02:01	*47:01	OTHER		
731	Loewenthal , Ron	*08:03:02	*14:08				*05:03							DQB1*05:10/05:15/05:16	
8042	Muncher , Liora	*08:03	*14:08	3*02:02			*05:03						SSP		
3966	Permpikul , Vejbaes	*08:03	*14:08	3*02:02			*05:03						SSP		
2400	Phelan , Donna L.	*08:03	*14:08		*01:03	*01:04	*05:03				*02:01P	*05:01P	SSP SSO SBT		

**Table 7: Individual laboratory results for B-cell #514-Class II**

Center	Investigator	High/Intermediate resolution												METHOD	Other Alleles
		DRB1		DRB3		DQA1		DQB1		DPA1		DPB1			
8001	Rao , Prakash	*08:03	*14:08	3*02:02				*05:03				*02:01	*05:01	SSP SSO	
3753	Reed , Elaine F.	NEW	NEW	3*02:02:01G	*01:03	*01:01:01G	*05:03	*05:03	*01:03	*02:02	*02:01	*05:01:01G	SSO SBT	DQA1*01:10	
3519	Renac , Virginie	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03				*02:01	*05:01	SSP SBT		
1160	Rosen-Bronson , Sa		*14:08							*01:03	*02:02	*02:01	*05:01	SSO SBT	
793	Rubocki , Ronald											*02:01	*135:01	SSP	
4251	Schiller , Jennifer	*08:03	*14:08					*05:03	*05:03			*02:01:02G	*05:01:01G	SSO SBT	
747	Tiercy , Jean-Marie	*08:03:02	*14:08	3*02:02	*01:03	*01:01/04	*05:03:01					*02:01:02	*05:01	SSP SSO SBT	DQA1*01:10
5451	Tilanus , Marcel G.	*08:03:02												SSP SBT	
5642	Varnavidou-Nicolaid	*08:03	*14:08					*05:03						SSP	DRB1*08:38/08:46/08:49/08:5 1,DQB1*05:50/05:56/05:60
3511	Zeevi , Adriana	*08:03	*14:08	3*02:02	*01:03	*01:04	*05:03					*02:01	*05:01	SSP SSO	

**Table 8: Individual laboratory results for B-cell #514-Class I**

Center	Investigator	Low Resolution				High resolution						METHOD	Other Alleles	
		HLA-A	HLA-B	HLA-C		HLA-A	HLA-B	HLA-C	HLA-A	HLA-B	HLA-C			
5488	Adams , Sharon			*40 *56 *01 *15		*34:01:01								
4691	Al Ajlan , Abdulaziz	*34 *34	*40 *56 *01 *15									SSO		
5462	Arnold , Paula					*34:01			*40:02	*56:01	*01:02	*15:02	SSP SSO SBT	
774	Cecka , J. Michael	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01			SSP SSO	A*34:05/34:11, B*40:35/40:56/40:57/40:58+, B*56:20/56:24/56:26/56:27+
9916	Charlton , Ronald K	*34	*40 *56 *01 *15			*34:01:01			*40:02:01	*56:01:01	*01:02:01	*15:02:01	SSP SBT	
4492	Charron , Dominique													A*34:11, B*40:255, B*56:40, C*01:89N/01:93/01:94/01:96+, C*15:73/15:81/15:82/15:83+
3224	Chen , Dong-Feng	*34	*40 *56 *01 *15			*34:01:01			*40:02:01	*56:01:01	*01:02:01G	*15:02:01G	SSO SBT	
8021	Clark , Brendan	*34	*40 *56 *01 *15						*40:02				SSP SSO	
5130	Costeas , Paul A.												SSP SSO	C*01:19
779	Daniel , Claude	*34	*40 *56 *01 *15						*40:02				SSP SSO	
5219	Daniel , Dolly	*34 *34	*40 *56 *01 *15										SSO	
1108	DeConinck , Martha	*34	*40 *56 *01 *15										SSO	
3766	Dunn , Paul	*34	*40 *56 *01 *15											
3135	Enczmann , J													
792	Gandhi , Manish	*34	*40 *56 *01 *15			*34:01			*40:02				SSP SSO SBT	
8087	Guerra , Q.F.B. Elb	*34 *34	*40 *56 *01 *15										SSO	
810	Hamdi , Nuha													A*34:05/34:11, C*01:07/01:11, C*15:41/15:68
1694	Hesse , Nicole	*34	*40 *56 *01 *15										SSP	
2344	Hurley , Hartzman&												SSO OTHER	
771	Israel , Shoshana												SSP SSO	
794	Jaatinen , Taina	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02	SSP SSO SBT	
8086	Jie , Pan												SBT	
2847	Kihara , Masaaki	*34	*40 *56 *01 *15										SSO	
4337	Kim , Tai-Gyu												SBT	
278	Lee , Jar-How	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02	SSP SSO	
274	Lo , Raymundo W.												OTHER	
8042	Muncher , Liora	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02		
54	Pancoska , Carol	*34	*40 *56 *01 *15										SSO	
3966	Permpikul , Veijbaes	*34											SSP	
2400	Phelan , Donna L.	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02	SSP SSO SBT	C*01:85
3753	Reed , Elaine F.													B*40:35/40:219, B*56:20/56:35, C*01:14/01:22/01:48/01:59/01:85, C*15:07/15:08/15:10/15:21/15:87
3519	Renac , Virginie	*34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02	SSP SBT	
4251	Schiller , Jennifer	*34 *34	*40 *56 *01 *15			*34:01			*40:02	*56:01	*01:02	*15:02	SSO SBT	
8068	Shanmugam , Hem	*34	*40 *56 *01 *15										SSP SSO	
8029	Tarigopula , Anil	*34	*40 *56 *01 *15										SSO	
8052	Yanina Marcos , Ci	*34 *34	*40 *56 *01 *15										SSO	

## Cell Exchange #386

The results for Cell Exchange #386 are summarized in Table 9 and Table 10. Molecular typing results for individual laboratories are listed in Ta-

bles 11 - 14 for each sample and individual serology results for each sample are listed in Table 15.

**Cell 1541.** The consensus type for this sample from a Hispanic donor is A\*01:01(A1)-A\*68:03(A68)-B\*15:17(B63)-B\*35:43(B35)-C\*01:02(Cw1)-C\*07:01(Cw7). The likely associations in this cell are A\*68:03-B\*35:43-C\*01:02 and A\*01:01-B\*15:17-C\*07:01, observed in Hispanics, with respective frequencies of HF=0.00089 and HF=0.00126.

This cell is the HLA identical sibling of cell 1459 (same as cell 1419). It was previously studied as cell 1510 (2013). In this present retyping, B63 and B62 were reported by 100% and 95%, respectively. B\*15:17 (100%) and B\*35:43 (100%) were assigned by DNA, with 5 labs reporting B\*15:17:01 and 7 labs reporting B\*35:43:01. A1 and A28 were each detected in complete consensus. A68 was assigned as the A28 split by 70%. A\*01:01 (100%) and A\*68:03 (100%) were reported by DNA, with 5 labs assigning A\*01:01:01 and 9 labs assigning A\*68:03:01.

**Cell 1542.** The consensus type for this sample from a Hispanic donor is A\*01:01(A1)-A\*30:02(A30)-B\*15:04(B62)-B\*57:03(B57)-C\*01:02(Cw1)-C\*18:02. One likely association in this cell is B\*15:04-C\*01:02, observed in Hispanics, with HF=0.00100. The other likely association may then be B\*57:03-C\*18:02, observed in 2 other exchange samples, cell 1083 and cell 1144.

This cell was previously typed as cells 1431 (2011), 1318 (2007), and extract 429 (2008), as correctly identified by Askar, Claas, and Tiercy. In this present typing, B62 was reported by 78%. Askar noted that the reaction pattern of B62 in this sample was short compared to that of the B62 in cell 1544. The presence of B62 was confirmed by DNA as B\*15:04 (100%), with 6 labs assigning B\*15:04:01. Arnold observed that a new B\*15:04:01 allele may be present in this sample, noting the "base pair difference is in intron 2, genomic position 710. B\*51:04:01 has a 'T' at this position. The sequence of this DNA sample has a 'G' at this position." B\*57:03 (88%) was reported as the second B-locus allele, with 44% assigning B\*57:03:01. A1 (100%) and A30 (94%) were the assigned A-locus types, confirmed as A\*01:01 (92%) and A\*30:02 (100%). A\*01:01:01 and A\*30:02:01 were each assigned by 4 labs.

**Cell 1543.** The consensus type for this sample from a donor of mixed Asian and Native American descent is A\*02:06(A2)-A\*33:01(A33)-B\*14:02(B65)-B\*15:02(B75)-C\*08:01(Cw8)-C\*08:02. The probable associations in this cell are A\*33:01-B\*14:02-C\*08:02 and A\*02:06-B\*15:02-C\*08:02, with respective frequencies of 0.00057 and 0.00074, in Asians. The association of A\*33:01-B\*14:02-C\*08:02 is also listed in the NMDP Bioinformatics website as the 5<sup>th</sup> most common haplotype in Hispanics, with HF=0.01439.

B14 and B15 were each reported in complete consensus, with the splits assigned as B65 (59%) and B75 (88%), respectively. B\*14:02 (100%) and B\*15:02 (100%) were reported by DNA. B\*14:02:01 and B\*15:02:01 were each assigned by 5 labs. A2 (100%) and A3 (100%) were the reported A-locus types and confirmed as A\*02:06 (100%) and A\*33:01 (100%). Two different subtypes of C\*08 were present in this cell, C\*08:01 (100%) and C\*08:02 (100%). C\*08:01:01 was reported by 3 labs and 4 labs reported C\*08:02:01.

**Cell 1544.** The consensus type for this sample from a Filipino donor is A\*11:01(A11)-A\*34:05(A34)-B\*15:35(B62)-B\*35:01(B35)-C\*07:02(Cw7)-C\*08:01(Cw8). The probable associations in this cell may be B\*15:35-C\*07:02 and B\*35:01-C\*08:01, with respective frequencies of 0.00545 and 0.00350 in Asians. The B\*15:35-C\*07:02 association in this cell was observed in a number of previous exchange cells, cell 1319 (same as 1261), cell 1256 (same as 1197, 1145, 1132), cell 1232 (same as 1174), cell 1177, and cell 1049, all from Filipino donors.

This sample was previously studied as cells 1432 (2011), 1372 (2009), 1347 (2008) and as extracts 416 (2008) and 413 (2008), as astutely noted by Askar and Claas. In this present retyping, A34 was detected by 89% and confirmed as A\*34:05 (93%). A11 (100%) was reported as the second A-locus type, with 1 lab reporting A11.1. A\*11:01 (100%) was assigned by DNA, with 5 labs assigning A\*11:01:01. The B-locus types were B62 (89%) and B35 (100%), confirmed as B\*15:35 (85%), and B\*35:01 (100%). Four labs assigned B\*35:01:01.

**Table 9. Summary of the 386th Cell Exchange (Cell #1541-1544)**

DNA typing							
<b>Cell 1541</b>		<b>Cell 1542</b>		<b>Cell 1543</b>		<b>Cell 1544</b>	
<u>24 labs Low/15 labs High Res</u>	% (n)	<u>25 labs Low/14 labs High Res</u>	% (n)	<u>20 labs Low/16 labs High Res</u>	% (n)	<u>22 labs Low/14 labs High Res</u>	% (n)
A*01:01:01:01	20(3)	A*01:01:01:01	14 (2)	A*02:06:01	19(3)	A*11:01:01	36(5)
A*01:01:01	13(2)	A*01:01:01	14 (2)	A*02:06	81(13)	A*11:01	64(9)
A*01:01:01G	13(2)	A*01:01:01G	14 (2)	A*02	100(20)	A*11	100(22)
A*01:01	54(8)	A*01:01	50(7)				
A*01	100(24)	A*01:100	7 (1)				
<u>24 labs Low/15 labs High Res</u>	% (n)	<u>24 labs Low/15 labs High Res</u>	% (n)	<u>21 labs Low/15 labs High Res</u>	% (n)	<u>21 labs Low/15 labs High Res</u>	% (n)
A*68:03:01	60(9)	A*30:02:01:01	7 (1)	A*33:01:01	20(3)	A*34:05	93(14)
A*68:03	40(6)	A*30:02:01	20(3)	A*33:01	80(12)	A*34:01	7 (1)
A*68	100(24)	A*30:02:01G	7 (1)	A*33	100(21)	A*34	100(21)
		A*30:02	66(10)				
		A*30	100(24)				
<u>23 labs Low/22 labs High Res</u>	% (n)	<u>21 labs Low/25 labs High Res</u>	% (n)	<u>21 labs Low/20 labs High Res</u>	% (n)	<u>21 labs Low/20 labs High Res</u>	% (n)
B*15:17:01	23(5)	B*15:04:01	24(6)	B*14:02:01	25(5)	B*15:35	85(17)
B*15:17:01G	5 (1)	B*15:04	76(19)	B*14:02	75(15)	B*15:20	10(2)
B*15:17	72(16)	B*15(B62)	4 (1)	B*14(B65)	5 (1)	B*15:01	5 (1)
B*15(B63)	4 (1)	B*15	95(20)	B*14	95(20)	B*15(B62)	5 (1)
B*15	96(22)					B*15	95(20)
<u>23 labs Low/19 labs High Res</u>	% (n)	<u>23 labs Low/16 labs High Res</u>	% (n)	<u>20 labs Low/21 labs High Res</u>	% (n)	<u>21 labs Low/15 labs High Res</u>	% (n)
B*35:43:01	37(7)	B*57:03:01	44(7)	B*15:02:01	24(5)	B*35:01:01	27(4)
B*35:43:01G	5 (1)	B*57:03	44(7)	B*15:02P	5 (1)	B*35:01:01G	7 (1)
B*35:43	58(11)	B*57:01	6 (1)	B*15:02	71(15)	B*35:01	66(10)
B*35	100(23)	B*57:02	6 (1)	B*15(B75)	5 (1)	B*35	100(21)
		B*57	100(23)	B*15	95(19)		
<u>23 labs Low/14 labs High Res</u>	% (n)	<u>23 labs Low/15 labs High Res</u>	% (n)	<u>20 labs Low/15 labs High Res</u>	% (n)	<u>19 labs Low/15 labs High Res</u>	% (n)
C*01:02:01	29(4)	C*01:02:01	26(4)	C*08:01:01	20(3)	C*07:02:01	13(2)
C*01:02:01G	7 (1)	C*01:02:01G	7 (1)	C*08:01:01G	7 (1)	C*07:02:01G	7 (1)
C*01:02P	7 (1)	C*01:02P	7 (1)	C*08:01P	7 (1)	C*07:02P	13(2)
C*01:02	57(8)	C*01:02	53(8)	C*08:01	66(10)	C*07:02	67(10)
C*01	100(23)	C*01:23	7 (1)	C*08	100(20)	C*07	100(19)
		C*01	100(23)				
<u>23 labs Low/15 labs High Res</u>	% (n)	<u>23 labs Low/15 labs High Res</u>	% (n)	<u>15 labs High Res</u>	% (n)	<u>19 labs Low/14 labs High Res</u>	% (n)
C*07:01:01	7 (1)	C*18:01:01G	13(2)	C*08:02:01	27(4)	C*08:01:01	14(2)
C*07:01:02	13 (2)	C*18:01P	7 (1)	C*08:02	73(11)	C*08:01:01G	7 (1)
C*07:01:01G	7 (1)	C*18:02	60(9)			C*08:01P	7 (1)
C*07:01P	13 (2)	C*18:01	7 (1)			C*08:01	72(10)
C*07:01	60(9)	C*18:01+	7 (1)			C*08	100(19)
C*07	100(23)	C*01:156N	7 (1)				
		C*18	100(23)				

**Table 10. Summary of the 386th Cell Exchange (Cell #1541-1544)**

**Serological typing**

(Hispanic) <b>Cell 1541</b>	
(20 Samples Typed)	
A1	100.0%
A68	70.0%
A28	30.0%
	[100.0%]
B35	95.0%
B63	100.0%
	[100.0%]
Cw1	40.0%
Cw7	35.0%
Bw4	85.0%
Bw6	85.0%
Others Found	
B75	5.0%
B5	5.0%
B62	5.0%
Cw4	5.0%
B53	5.0%

(Hispanic) <b>Cell 1542</b>	
(18 Samples Typed)	
A1	100.0%
A30	94.4%
A19	5.6%
	[100.0%]
B57	94.4%
B17	5.6%
	[100.0%]
B62	77.8%
B15	16.7%
	[94.4%]
Cw1	33.3%
	[0.0%]
Bw4	83.3%
Bw6	77.8%
Others Found	
B58	5.6%
Cw6	5.6%
B63	5.6%
Cw5	5.6%

(Mixed) <b>Cell 1543</b>	
(17 Samples Typed)	
A2	100.0%
	[100.0%]
A33	100.0%
	[100.0%]
B14	41.2%
B65	58.8%
	[100.0%]
B75	88.2%
B15	11.8%
	[100.0%]
Cw8	41.2%
Bw6	76.5%
Others Found	
B70	5.9%
Bw4	5.9%

(Filipino) <b>Cell 1544</b>	
(18 Samples Typed)	
A11	94.4%
A11.1	5.6%
	[100.0%]
A34	88.9%
A10	11.1%
	[100.0%]
B35	100.0%
B62	88.9%
B15	11.1%
	[100.0%]
Cw7	44.4%
Cw8	33.3%
Bw6	83.3%
Others Found	
B70	5.6%

**Table 11. Individual laboratory results for Cell #1541**

Center	Investigator	Low Resolution					High Resolution						Method	Other Alleles
		HLA-A	HLA-B	HLA-C	HLA-A		HLA-B		HLA-C					
5462	Arnold , Paula				*01:01	*68:03	*15:17	*35:43	*01:02	*07:01	SSP SSO SBT			
16	Askar , Medhat Z.	*01	*68	*15 *35	*01 *07	*01:01:01:01	*68:03:01	*15:17	*35:43:01	*01:02	*07:01	SSO SBT	C*01:17/01:54/01:58/01:60, C*07:16/07:40/07:103/07:141:02+	
8038	Cao , Kai					*01:01:01G	*68:03:01	*15:17	*35:43:01	*01:02P	*07:01P			
774	Cecka , J. Michael	*01	*68		*01 *07			*15:17	*35:43			SSP	B*15:162/15:168/15:177/15:196+, B*35:67/35:79/35:102/35:117	
4492	Charron , Dominique	*01	*68	*15 *35	*01 *07			*15:17				SSP	B*15:162/15:168/15:177/15:196+	
798	Claas , F.H.J.					*01:01:01:01	*68:03:01	*15:17:01	*35:43:01	*01:02:01	*07:01:02	SBT		
3632	Colombe , Beth W.	*01	*68	*15 *35	*01 *07	*01:01	*68:03	*15:17	*35:43	*01:02	*07:01	SSP SSO		
779	Daniel , Claude	*01	*68	*15 *35	*01 *07			*15:17	*35:43			SSP SSO		
3766	Dunn , Paul	*01	*68	*15 *35	*01 *07							SSO		
5214	Eckels/CPMC ,	*01	*68	*15 *35	*01 *07			*15:17						
762	Fischer , Gottfried	*01	*68	*15 *35	*01 *07									
4079	Fort , Marylise	*01	*68	*15 *35	*01 *07			*15:17	*35:43			SSP		
3545	Goldstein , Steven					*01:01	*68:03	*15:17	*35:43	*01:02	*07:01	SSO SBT	C*01:85, C*07:06/07:18/07:343	
810	Hamdi , Nuha					*01:01	*68:03	*15:17	*35:43			SSO	A*01:04N/01:09, A*68:57/68:85, B*15:162/15:177, B*35:67/35:79	
8043	Hod , Reut	*01	*68	*15 *35	*01 *07	*01:01	*68:03:01	*15:17	*35:43	*01:02	*07:01	SSP SSO		
771	Israel , Shoshana	*01	*68	*15 *35	*01 *07	*01:01	*68:03	*15:17	*35:43	*01:02	*07:01	SSP SSO		
725	Lardy , N.M.	*01	*68	*15 *35	*01 *07							SSP SSO		
745	Latham , Katy					*01:01:01:01	*68:03:01	*15:17:01	*35:43:01	*01:02:01	*07:01:01	SSP SSO SBT		
278	Lee , Jar-How	*01	*68	*15 *35	*01 *07	*01:01:01	*68:03:01	*15:17:01	*35:43:01	*01:02:01	*07:01:02	SSP SSO		
6649	Lim , Young Ae	*01	*68	(B63) *35										
731	Loewenthal , Ron					*01:01:01	*68:03:01	*15:17	*35:43:01	*01:02	*07:01	SSO SBT		
759	Lopez-Cepero , Ma	*01	*68	*15 *35	*01 *07							SSO		
54	Pancoska , Carol	*01	*68	*15 *35	*01 *07							SSO		
8001	Rao , Prakash	*01	*68	*15 *35	*01 *07			*15:17				SSP SSO		
3625	Rees , Tracey	*01	*68	*15 *35	*01 *07	*01:01	*68:03	*15:17	*35:43	*01:02	*07:01			
1160	Rosen-Bronson , S	*01	*68	*15 *35	*01 *07							SSO		
793	Rubocki , Ronald	*01	*68	*15 *35	*01 *07							SSP		
4251	Schiller , Jennifer	*01	*68	*15 *35	*01 *07	*01:01	*68:03:01	*15:17	*35:43	*01:02:01G	*07:01:01G	SSO SBT		
3808	Thornton , Alycia	*01	*68	*15 *35	*01 *07				*15:17:01G	*35:43:01G		*07:01P		
747	Tiercy , Jean-Marie	*01	*68	*15 *35	*01 *07	*01:01:01G	*68:03:01	*15:17:01	*35:43:01	*01:02	*07:01	SSP SSO SBT		
3186	Watson , Narelle	*01	*68	*15 *35	*01 *07									

**Table 12. Individual laboratory results for Cell #1542**

Center	Investigator	Low Resolution				High/Intermediate Resolution							Method	Other Alleles	
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold, Paula							*01:01	*30:02	*15:04	*57:03	*01:02	*18:02	SSP SSO SBT	
16	Askar, Medhat Z.	*01	*30	*15	*57	*01	*18	*01:01:01:01	*30:02:01	*15:04:01	*57:03:01	*01:02:01	*18:02	SSO SBT	
8038	Cao, Kai							*01:01:01G	*30:02:01	*15:04:01	*57:03:01	*01:02P	*18:01P		
774	Cecka, J. Michael	*01	*30			*01	*18			*15:04	*57:02			SSP	B*57:17/57:28N/57:42/57:46/57:70
4492	Charron, Dominique	*01	*30	*15	*57	*01	*18			*15:04				SSP	
798	Claas, F.H.J.							*01:01:01:01	*30:02:01:01	*15:04:01	*57:03:01	*01:02:01	*18:02	SBT	
3632	Colombe, Beth W.	*01	*30	*15	*57	*01	*18	*01:01	*30:02	*15:04	*57:03	*01:02	*18:02	SSP SSO	
779	Daniel, Claude	*01	*30	*15	*57	*01	*18			*15:04				SSP SSO	
3766	Dunn, Paul	*01	*30		*57	*01	*18			*15:04				SSO	
5214	Eckels/CPMC,	*01	*30	*15	*57	*01	*18			*15:04					
762	Fischer, Gottfried	*01	*30	*15	*57	*01	*18								
4079	Fort, Marylise	*01	*30	*15	*57	*01	*18			*15:04				SSP	
3545	Goldstein, Steven							*01:01	*30:02	*15:04	*57:03	*01:02	*18:01/02	SSO SBT	C*01:85
810	Hamdi, Nuha							*01:100	*30:02	*15:04	*57:01	*01:23	*01:56N	SSO	B*57:06/57:15, C*01:56N/01:58
8043	Hod, Reut	*01	*30	*15	*57	*01	*18	*01:01	*30:02	*15:04	*57:03	*01:02	*18:02	SSP SSO	
771	Israel, Shoshana	*01	*30	*15	*57	*01	*18	*01:01	*30:02	*15:04	*57:03	*01:02	*18:02	SSP SSO	
725	Lardy, N.M.	*01	*30	*15	*57	*01	*18							SSP SSO	
745	Latham, Katy	*01							*30:02	*15:04:01	*57:03:01	*01:02:01	*18:02	SSP SSO SBT	
278	Lee, Jar-How	*01	*30	*15	*57	*01	*18	*01:01:01	*30:02:01	*15:04	*57:03:01	*01:02:01	*18:02	SSP SSO	
6649	Lim, Young Ae	*01	*30	*15(B62)	*57										
731	Loewenthal , Ron							*01:01:01	*30:02	*15:04:01	*57:03:01	*01:02	*18:01	SSO SBT	
759	Lopez-Cepero, May	*01	*30	*15	*57	*01	*18							SSO	
54	Pancoska, Carol	*01	*30	*15	*57	*01	*18							SSO	
8001	Rao, Prakash	*01	*30	*15	*57	*01	*18			*15:04				SSP SSO	
3625	Rees, Tracey	*01	*30	*15	*57	*01	*18	*01:01	*30:02	*15:04	*57:03	*01:02	*18:02		
1160	Rosen-Bronson, Sa	*01	*30	*15	*57	*01	*18			*15:04				SSO	
793	Rubocki, Ronald	*01	*30	*15	*57	*01	*18							SSP	
4251	Schiller, Jennifer	*01	*30	*15	*57	*01	*18	*01:01	*30:02	*15:04	*57:03	*01:02:01G	*18:01:01G	SSO SBT	
3808	Thornton, Alycia	*01	*30	*15	*57	*01	*18			*15:04					
747	Tiercy, Jean-Marie	*01	*30	*15	*57	*01	*18	*01:01:01G	*30:02:01G	*15:04:01	*57:03:01	*01:02	*18:01:01G	SSP SSO SBT	
3186	Watson, Narelle	*01	*30		*57	*01	*18			*15:04					

**Table 13. Individual laboratory results for Cell #1543**

Center	Investigator	Low Resolution					High Resolution						Method	Other Alleles	
		HLA-A		HLA-B		HLA-C	HLA-A		HLA-B		HLA-C				
5462	Arnold, Paula						*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSP SSO SBT		
16	Askar, Medhat Z.	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02:01	*15:02:01	*08:01:01	*08:02:01	SSO SBT	B*14:27 , B*15:121
8038	Cao, Kai						*02:06:01	*33:01:01	*14:02:01	*15:02:01	*08:01P	*08:02:01		A*02:126/02:278/02:290/02:328/02 :330+, B*15:88/15:121/15:139/15:214/15: 291+	
774	Cecka, J. Michael		*33	*14		*08		*02:06			*15:02		SSP		
4492	Charron, Dominique	*02	*33	*14	*15	*08			*14:02	*15:02			SSP	B*14:03/14:04/14:09/14:11/14:15, B*15:88/15:112/15:139/15:170	
798	Claas, F.H.J.						*02:06:01	*33:01:01	*14:02:01	*15:02:01	*08:01:01	*08:02:01	SBT		
3632	Colombe, Beth W.	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSP SSO	
779	Daniel, Claude	*02	*33	*14	*15	*08	*08			*14:02	*15:02			SSP SSO	
3766	Dunn, Paul	*02	*33	*14	*15	*08	*08							SSO	
5214	Eckels/CPMC,	*02	*33	*14	*15	*08	*08			*14:02	*15:02				
762	Fischer, Gottfried						*02:06	*33:01	*14:02	*15:02	*08:01	*08:02		C*08:22, C*08:99, C*08:102	
4079	Fort, Marylise	NT											SSP		
3545	Goldstein, Steven						*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSO SBT	C*08:22, C*08:99, C*08:102	
810	Hamdi, Nuha						*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSO	A*02:10/02:21, A*33:03/33:04, B*14:09/14:16, B*15:88/15:112, C*08:05, C*08:08, C*08:15, C*08:16	
8043	Hod, Reut	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSP SSO	
771	Israel, Shoshana	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSP SSO	
725	Lardy, N.M.	*02	*33	*14	*15	*08								SSP SSO	
745	Latham, Katy						*02:06	*33:01	*14:02:01	*15:02:01	*08:01:01	*08:02:01	SSP SSO SBT		
278	Lee, Jar-How	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01	*08:02	SSP SSO	B*14:39
6649	Lim, Young Ae	*02	*33	*14(B65)	*15(B75)										
731	Loewenthal , Ron						*02:06:01	*33:01:01	*14:02:01	*15:02:01	*08:01	*08:02	SSO SBT		
759	Lopez-Cepero, May	*02	*33	*14	*15	*08	*08							SSO	
54	Pancoska, Carol	*02	*33	*14	*15	*08								SSO	
8001	Rao, Prakash	*02	*33	*14	*15	*08				*14:02	*15:02			SSP SSO	
3625	Rees, Tracey	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01	*08:02		
1160	Rosen-Bronson, Sa	*02	*33	*14	*15	*08								SSO	
793	Rubocki, Ronald	*02	*33	*14	*15	*08								SSP	
4251	Schiller, Jennifer	*02	*33	*14	*15	*08	*08	*02:06	*33:01	*14:02	*15:02	*08:01:01G	*08:02	SSO SBT	
3808	Thornton, Alycia	*02	*33	*14	*15	*08				*14:02	*15:02P				
747	Tiercy, Jean-Marie	NT												SSP SSO SBT	
3186	Watson, Narelle	*02	*33	*14	*15	*08	*08								

**Table 14. Individual laboratory results for Cell #1544**

Center	Investigator	Low Resolution				High Resolution							Method	Other Alleles	
		HLA-A	HLA-B	HLA-C		HLA-A		HLA-B			HLA-C				
5462	Arnold, Paula					*11:01	*34:05	*15:35	*35:01		*07:02	*08:01	SSP SSO SBT		
16	Askar, Medhat Z.	*11	*34	*15	*35	*07	*08	*11:01:01	*34:05	*15:35	*35:01:01	*07:02	*08:01	SSO SBT	C*07:39/07:161/07:260, C*08:16:01/08:21/08:72:01
8038	Cao, Kai							*11:01:01	*34:05	*15:35	*35:01:01	*07:02P	*08:01P		
774	Cecka, J. Michael	*11	*34		*35	*07	*08			*15:35				SSP	
4492	Charron, Dominique	*11	*34	*15	*35					*15:01				SSP	B*15:04/15:27/15:32/15:34/15:35+
798	Claas, F.H.J.							*11:01:01	*34:05	*15:35	*35:01:01	*07:02:01	*08:01:01	SBT	
3632	Colombe, Beth W.	*11	*34	*15	*35	*07	*08	*11:01	*34:05	*15:35	*35:01	*07:02	*08:01	SSP SSO	
779	Daniel, Claude	*11	*34	*15	*35	*07	*08			*15:20				SSP SSO	
3766	Dunn, Paul	*11	*34	*15	*35	*07	*08							SSO	
5214	Eckels/CPMC,	*11	*34	*15	*35	*07	*08			*15:20					
762	Fischer, Gottfried							*11:01	*34:05	*15:35	*35:01	*07:02	*08:01		C*08:22/08:99/08:102, C*07:50
4079	Fort, Marylise	NT													
3545	Goldstein, Steven							*11:01	*34:05	*15:35	*35:01	*07:02	*08:01	SSO SBT	B*35:42, C*07:50/07:349, C*08:22/08:99/08:102
810	Hamdi, Nuha							*11:01	*34:01	*15:35	*35:01			SSO	A*11:02/11:03, A*34:05, B*15:118/15:129, B*35:17/35:113
8043	Hod, Reut	*11	*34	*15	*35	*07	*08	*11:01	*34:05	*15:35	*35:01	*07:02	*08:01	SSP SSO	
771	Israel, Shoshana	*11	*34	*15	*35	*07	*08	*11:01	*34:05	*15:35	*35:01	*07:02	*08:01	SSP SSO	
725	Lardy, N.M.	*11	*34	*15	*35	*07	*08							SSP SSO	
745	Latham, Katy							*11:01:01	*34:05	*15:35	*35:01	*07:02	*08:01	SSP SSO SBT	B*35:42
278	Lee, Jar-How	*11	*34	*15	*35	*07	*08	*11:01:01	*34:05	*15:35	*35:01:01	*07:02:01	*08:01:01	SSP SSO	
6649	Lim, Young Ae	*11	*34	*15(B62)	*35										
731	Loewenthal, Ron	*11		*15					*34:05		*35:01	*07:02	*08:01	SSO SBT	
759	Lopez-Cepero, May	*11	*34	*15	*35	*07	*08							SSO	
54	Pancoska, Carol	*11	*34	*15	*35	*07	*08							SSO	
8001	Rao, Prakash	*11	*34	*15	*35	*07	*08			*15:35				SSP SSO	
3625	Rees, Tracey	*11	*34	*15	*35	*07	*08	*11:01	*34:05	*15:35	*35:01	*07:02	*08:01		
1160	Rosen-Bronson, Sa	*11	*34	*15	*35	*07	*08							SSO	
793	Rubocki, Ronald	*11	*34	*15	*35	*07	*08							SSP	
4251	Schiller, Jennifer	*11	*34	*15	*35	*07	*08	*11:01	*34:05	*15:35	*35:01:01G	*07:02:01G	*08:01:01G	SSO SBT	
3808	Thornton, Alycia	*11	*34	*15	*35	*07	*08			*15:35		*07:02P			
747	Tiercy, Jean-Marie	NT												SSP SSO SBT	
3186	Watson, Narelle	*11	*34	*15	*35	*07	*08								

**Table 15. Individual laboratory results for Cell #1541-1544 by serology**

Investigator	Days Old	Cell No 1541 (Hispanic)							Cell No 1542 (Hispanic)							Cell No 1543 (Mixed)					Cell No 1544 (Filipino)																		
		Viab %	A1	A68	B35	B63	Cw1	Cw7	Bw4	Bw6	OTHERS	Viab %	A1	A30	B57	B62	Cw1	Cw18	Bw4	Bw6	OTHERS	Viab %	A2	A33	B14	B75	Cw8	Bw6	OTHERS	Viab %	A11	A34	B35	B62	Cw7	Cw8	OTHERS		
Askar, Medhat	3	90	+	+								90	+	+								90	+	+						90	+	+	+	+					
Bengochea, Ca	50	+	A28	+	+							50	+	+								0								50	+	A10	+	+					
Cecka, J. Mic	95	+	+	+	+	+						95	+	+								95	+	+						95	+	+	+	+					
Charron, Domi	6	98	+	+	+	+						99	+	+	+	+						99	+	+	+	+				99	+	+	+	+					
Claas, F.H.J.	7	60	+	+	+	+	+					60	+	+	B17	+	+					60	+	+	+	B15	+			60	+	+	+	+			+		
Dunn, Paul	7	95	+	+	+	+						95	+	+	+	+						95	+	+	B65	+				95	+	+	+	+					
Enczmann, J	90	+	+	+	+	+						85	+	+	+	+						80	+	+	B65	+				80	+	+	+	+					
Fort, Marylis	6																																						
Kvam, Vonnott	80	+	A28	+	+																																		
Latham, Katy	6	80	+	+	+	+						80	+	+	+	+						80	+	+	+	+				80	+	+	+	+			+		
McCoy, Heath	3	98	+	+	+	+	+	+	+	+		98	+	+	+	+	+					98	+	+	B65	+	+	+		98	+	+	+	+	+	+	+		
Pancoska, Car	7	98	+	+	+	+	+	+	+	+		97	+	+	+	+	+					97	+	+	B65	+	+	+		98	+	+	+	+	+	+	+		
Permpikul, Ve	7	85	+	+	+	+						85	+	+	+	+						85	+	+	+	+				85	A11.1	+	+	+					
Pule, Ziningi																																							
Rees, Tracey	6	40	+	+	+	+	+					10										60	+	+	B65	+	+	+		50	+	+	+	+	+	+	+		
Renac, Virgin	7	99	+	A28	+	+						99	+	+	+	+						99	+	+	+	B15	+			99	+	A10	+	B15	+				
Rosen-Bronson																					90	+	+	B65	+	+	+		90	+	+	+	+	+	+	+			
Rubocki, Rona	3	NT																																					
Shai, Isaac	8	92	+	A28	B62	+	+	+	+	B53>	90	+	+	+	B63	w6	+	+	B58>	92	+	+	+	+	+	B70>	90	+	+	+	+	+	+	B70					
Thornton, Aly												90	+	+	+	+						90	+	+	B65	+	+	+		90	+	+	+	+	+	+	+		
Tiercy, Jean-	7	80	+	A28	+	+						80	+	+	+	+																							
Vidan-Jeras,	8		+	+	+	+	+	+	+	+																													
Watson, Narel	10	99	+	A28	+	+						95	+	A19	+	B15						99	+	+	B65	+	+	+		98	+	+	+	B15	+	+			





**Table 16 . Summary of the 544<sup>th</sup> Serum Exchange (Serum #1169-1172) by NIH-Standard and NIH-Extended - class I**

Method: NIH-Standard											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
6 typing Labs			6 typing Labs			6 typing Labs			6 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B27	67%	100%	B7	100%	100%	B7	83%	100%	B7	83%	93%
B13	50%	100%	B27	50%	67%	B55	50%	100%	B27	50%	50%
B7	33%	100%	B13	17%	100%	B42	33%	100%	B42	33%	100%
B47	17%	100%	B48	17%	100%	B56	33%	100%	B81	17%	100%
B60	17%	100%	B60	17%	100%	B57	33%	100%			
B61	17%	100%	B61	17%	100%	B22	17%	100%			
						B49	17%	100%			
						B54	17%	100%			
						B58	17%	100%			

  

Method: NIH-Extended											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B13	100%	24%	B7	100%	83%	B57	100%	100%	B27	100%	100%
B27	100%	11%	B48	50%	100%	B7	100%	100%	B7	100%	100%
B58	50%	100%				A66	50%	100%	B42	50%	100%
B44	50%	88%				B27	50%	100%	B54	50%	100%
B57	50%	75%				B42	50%	100%	B55	50%	100%
B47	50%	5%				B54	50%	100%	B61	50%	100%
						B55	50%	100%	B57	50%	50%
						B56	50%	100%			
						A26	50%	75%			
						B8	50%	50%			

**Table 17. Summary of the 544<sup>th</sup> Serum Exchange (Serum #1169-1172) by Antiglobulin and Other - class I**

Method: Antoglobulin											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B13	100%	100%	B27	100%	100%	B42	100%	100%	B27	100%	100%
B27	100%	100%	B7	100%	100%	B7	100%	100%	B7	100%	100%
B7	100%	100%	B13	67%	100%	B81	100%	100%	B42	67%	100%
B37	67%	100%	B42	67%	100%	B27	67%	100%	B55	67%	100%
B41	67%	100%	B48	67%	100%	B56	67%	100%	B56	67%	100%
B42	67%	100%	B81	67%	100%	B63	67%	100%	B8	67%	100%
B47	67%	100%	B22	33%	100%	B17	33%	100%	B81	67%	100%
B60	67%	100%	B40	33%	100%	B22	33%	100%	A29	33%	100%
A23	33%	100%	B47	33%	100%	B35	33%	100%	A31	33%	100%
A24	33%	100%	B55	33%	100%	B41	33%	100%	A32	33%	100%
A25	33%	100%	B56	33%	100%	B57	33%	100%	A34	33%	100%
A66	33%	100%	B60	33%	100%	B58	33%	100%	A66	33%	100%
A68	33%	100%	B61	33%	100%				B18	33%	100%

Method: Other											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion									
A1	50%	100%	B58	100%	100%	A25	50%	100%	B67	100%	100%
A10C	50%	100%	B67	100%	100%	A26	50%	100%	B8	100%	100%
A29	50%	100%	B82	100%	100%	A2C	50%	100%	A1	50%	100%
A2C	50%	100%	B37	50%	100%	A30	50%	100%	A10C	50%	100%
A31	50%	100%	B42	50%	100%	A31	50%	100%	A2C	50%	100%
A80	50%	100%	B54	50%	100%	A33	50%	100%	B27	50%	100%
B13	50%	100%	B55	50%	100%	A66	50%	100%	B42	50%	100%
B27	50%	100%	B56	50%	100%	A74	50%	100%	B48	50%	100%
B55	50%	100%	B57	50%	100%	B42	50%	100%	B55	50%	100%
B60	50%	100%	B60	50%	100%	B54	50%	100%	B56	50%	100%
B61	50%	100%	B61	50%	100%	B55	50%	100%	B59	50%	100%
B7	50%	100%	B7	50%	100%	B56	50%	100%	B60	50%	100%
B7C	50%	100%	B7C	50%	100%	B57	50%	100%	B61	50%	100%
B81	50%	100%	B81	50%	100%	B58	50%	100%	B64	50%	100%
B82	50%	100%	CW7	50%	100%	B63	50%	100%	B65	50%	100%
B8C	50%	100%				B67	50%	100%	B7	50%	100%
						B7	50%	100%	B7C	50%	100%





**Table 20. Summary of the 544<sup>th</sup> Serum Exchange (Serum #1169-1172) by Luminex and Other - class II**

Method: Luminex											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
12 typing Labs			12 typing Labs			12 typing Labs			11 typing Labs		
Antigen	Consensus	Inclusion									
no antigens assigned			no antigens assigned			no antigens assigned			no antigens assigned		
DP14	36%	100%	DP10	9%	100%	DP17	9%	100%	DP9	9%	100%
DPW1	9%	100%	DR7	9%	100%	DP11	9%	50%	DPW6	9%	50%
DR1	9%	50%	DR12	9%	50%	DR4	9%	50%			

Method: Other											
*** Serum 1169 ***			*** Serum 1170 ***			*** Serum 1171 ***			*** Serum 1172 ***		
4 typing Lab			4 typing Lab			4 typing Lab			4 typing Lab		
Antigen	Consensus	Inclusion									
no antigens assigned			no antigens assigned			no antigens assigned			no antigens assigned		

Other = NIH-Standard, Antiglobulin, Flow cytometry, Luminex PRA

**Table 21. Individual laboratory results for Serum #1169-#1172 by NIH-Standard and NIH-Extended**

Investigator	**** Serum 1169 ****				**** Serum 1170 ****				**** Serum 1171 ****				**** Serum 1172 ****				Method							
	% POS	B13	B27	B7	% POS	B7	B27	Other	% POS	B7	B55	B42	B56	B57	Other	% POS	B7	B27	B42	Other				
Claas, F.H.J.	9	+	+					B47	15	+	+				30	+	+		B49,B58	25	+	+		STD
Fort, Marylise	52	+	+	+				B60,B61		+	+	B60,B61,B48											STD	
Reed, Elaine F. PhD	15	+	+						15	+					31	+	+	+	B54	28	+	+		STD
Thornton, Alycia	0								15	+					20	+	+			14	+	+		STD
Vasilescu, Rodica	35	+	+						42	+	+	B13			40	+			B22	42	+	+	B81	STD
Watson, Narelle	4								20	+					30	+				22	+			STD

Investigator	**** Serum 1169 ****				**** Serum 1170 ****				**** Serum 1171 ****				**** Serum 1172 ****				Method						
	% POS	B13	B27	B58	B44	B57	B47	Other	% POS	B7	B48	Other	% POS	B57	B7	A66	B27	B42	B54	Other			
Dunn, Paul	35	+	+	+	+	+	+		20	+	+		46	+	+	+	A26,B8	25	+	+	B57	EXT	
Lardy, N.M.	26	+	+				+		9	+			30	+	+		B55,B56	30	+	+	+	B61	EXT













**Table 28. Individual laboratory results for Serum #1169-#1172 by Luminex, Other, and NIH-Std - class II**

	**** Serum 1169 ****			**** Serum 1170 ****			**** Serum 1171****			**** Serum 1172 ****										
Investigator	% POS	no antigens assigned	% POS	no antigens assigned	% POS	no antigens assigned	% POS	DP14	DP10	DP17	DP9	DPW1	DR7	DP11	DPW6	DR1	DR12	DR4	Other	Method
Arnold, Paula	0		0		0		0													
Cecka, J. Michael P	0		0		0		0													LMX
Dunn, Paul																				LMX
Hamdi, Nuha	0		0		0		0													LMX
Holdsworth, Rhonda	0		0		0		0													LMX
Libyh/Roulin, Tabary	0		0		0		0													LMX
Pancoska, Carol Ph	0		0		0		0													LMX
Permpikul, Vejbaesj	0		0		0		0													LMX
Rosen-Bronson, Sa	0		0		0		0													LMX
Thornton, Alycia	0		0		0		0													LMX
Vather, Kuben	0		0		0		0													LMX
Vather, Nelson/																				LMX

	**** Serum 1169 ****			**** Serum 1170 ****			**** Serum 1171****			**** Serum 1172 ****										
Investigator	% POS	no antigens assigned	% POS	no antigens assigned	% POS	no antigens assigned	% POS	no antigens assigned	no antigens assigned										Other	Method
Reed, Elaine F. PhD	43		32		38		32													STD
Cecka, J. Michael P	0		0		0		0													AHG
Reed, Elaine F. PhD	0		0		0		0													LMX-PRA
Eckels/CPMC,	0		0		0		0													FC

STD = NIH-Standard

AHG=Antiglobulin

LMX-PRA=Luminex PRA ID's

FC = Flow Cytometry

**NEXT MAILING DATE: August 5, 2015**  
**Arlene Locke, David Gjertson, Qiuheheng Zhang, and Elaine F. Reed**