

# REPORT OF THE 406<sup>th</sup> CELL EXCHANGE

## OCTOBER 1, 2018

B-cell Lines	553-554
Cells	1621-1624
Sera	1249-1252

### B-cell Line Exchange #277

The results for B-cell Line Exchange #277 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 **Welsh Blood Service, Pontyclun Wales and Badger-Hawkeye Red Cross, Madison WI** for providing us with the valuable reference cells examined in this study.

We would also like to acknowledge and thank the labs performing NGS 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-553.** The consensus type for this sample from a donor of unknown ethnicity is DRB1\*01:01-DRB1\*15:01-DRB5\*01:01-DQA1\*01:01-DQA1\*01:02-DQB1\*05:01-DQB1\*06:02-DPA1\*01:03-DPA1\*02:01-DPB1\*11:01-DPB1\*16:01-A\*02:13-A\*03:01-B\*07:02-B\*44:02-C\*05:01-C\*07:02. One likely association present in this cell is A\*02:13-B\*44:02-C\*05:01-DPB1\*11:01:01, observed in SLUGEO, a reference cell for A\*02:13. The other likely association present may then be A\*03:01-B\*07:02-C\*07:02-DPB1\*16:01. The association of A\*03:01-B\*07:02-C\*07:02 in this cell is common across all populations, with HF = 0.05993 in Caucasians.

This cell was previously examined in the class I DNA Extract Exchange as extract 423 (2008) and extract 237 (2003). In this present retyping, A\*02:13 was assigned by 100% of labs reporting at high resolution. A\*03:01, B\*07:02, B\*44:02, C\*05:01, and C\*07:02 were all reported in complete consensus, with 7 labs assigning A\*03:01:01, B\*07:02:01, B\*44:02:01, C\*05:01:01, and C\*07:02:01.

DRB1\*01:01 and DRB1\*15:01 were each assigned in complete consensus, with 9 labs assigning DRB1\*01:01:01 and 10 labs assigning DRB1\*15:01:01. Good agreement was also achieved among labs in the reporting of DQA1\*01:01 (\*01:01:01), DQA1\*01:02 (\*01:02:01), DQB1\*05:01 (\*05:01:01), and DQB1\*06:02 (\*06:02:01), as each were reported by 100% of labs reporting at high resolution. DPA1\*01:03 (\*01:03:01), DPA1\*02:01 (\*02:01:01), DPB1\*11:01 (\*11:01:01), and DPB1\*16:01 (\*16:01:01) were assigned in complete consensus as the DP types.

**Ter-554.** The consensus type for this sample from a Hispanic donor is DRB1\*08:02-DRB1\*14:02-DRB3\*01:01-DQA1\*04:01-DQA1\*05:03-DQB1\*03:01-DQB1\*04:02-DPA1\*01:03-DPB1\*04:02-A\*02:11-A\*24:53-B\*40:04-C\*03:04. This cell is the sibling of a previous Exchange cell, extract 194. From family studies, the class I haplotypes for this cell are determined to

be A\*02:11-B\*40:04-C\*03:04 and A\*24:53-B\*40:04-C\*03:04. The A\*02:11-B\*40:04-C\*03:04 haplotype in this cell is observed exclusively in Hispanics, with HF = 0.00051.

This cell was examined for class I in the Extract Exchange as extracts 412 (2008), 265 (2003), and 193 (2002). In this present study, A\*24:53 was assigned by 100% of labs. The following table documents the standardization of A\*24:53 over the years:

	Extract 193 (2002)	Extract 265 (2003)	Extract 412 (2008)	Ter 554 (2018)
A*24var/new	22%	38%		
A*24:02	27%	6%	4%	-
A*24:02V	6%	6%	-	-
A*24:14	6%	-	-	-
A*24:15	39%	50%	-	-
A*24:53	-	-	96%	100%

A\*02:11 (\*02:11:01) was assigned in complete consensus as the second A-locus type. B\*40:04 (100%) and C\*03:04 (100%) were reported as the sole B- and C-locus types.

DRB1\*08:02 and DRB1\*14:02 were each assigned by 100%, with 8 labs assigning DRB1\*08:02:01 and DRB1\*14:02:01. The DQ types were reported as DQA1\*04:01 (\*04:01:01) (100%), DQA1\*05:03 (\*05:03:01) (100%), DQB1\*03:01 (\*03:01:01) (100%), and DQB1\*04:02 (\*04:02:01) (100%). DPA1\*01:03 and DPB1\*04:02 were also reported in complete consensus, with 6 labs reporting DPA1\*01:03:01 and 8 labs reporting DPB1\*04:02:01.





**Table 3a: Individual laboratory results for B-cell #553-Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
87	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	RT-PCR	
206	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16		
278	*01	*15	5*01	NT	*01	*01	*05	*06	*01	*02	*11	*16		
725	*01	*15	5*PRESENT		*01		*05	*06					SSP SSO	
731	*01	*15			*01		*05	*06					SSP SSO SBT	
735	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSP SSO SBT	
747	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSP SSO SBT	
771	*01	*15			*01	*01	*05	*06					SSP SSO	
774	*01	*15	5*01		*01	*01	*05	*06			*11	*16	SSP SSO	
779	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSP SSO	
792	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSO SBT	
793	*01	*15	5*PRESENT		*01	*01	*05	*06			*11	*16	SSP	
794	*01	*15	5*01		*01		*05	*06	*01	*02	*11	*16	SSP SSO NGS	
2400	*01	*15	5*01		*01	*01	*05	*06			*11	*16	RT-PCR	
2847	*01	*15											SSP SSO SBT	
3224	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSO	
3511	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSO	
3519	*01	*15			*01		*05	*06	*01	*02	*11	*16	SSP SSO	
3632	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSP NGS	
3966													SSP SSO	
4079	*01	*15					*05	*06					SSP	
4251	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSP SSO NGS	
4492	*01	*15	5*PRESENT		*01		*05	*06	*01	*02	*11	*16	SSO NGS	
5130	*01	*15	5*01		*01	*01	*05	*06			*11	*16	SSP SSO NGS	
5214	*01	*15	5*01		*01	*01	*05	*06	*01	*02	*11	*16	SSO	
5219	*01	*15			*01	*01	*05	*06					SSO	
5451	*01	*15	5*01		*01	*01	*05	*06					SSP SSO SBT	
5462	*01	*15	5*01	NP	*01		*05	*06	*01	*02	NT	NT	SSO RT-PCR	
5642	*01	*15	5*PRESENT				*05	*06					SSP	
6649	*01	*15	5*PRESENT										SSO	
8001	*01	*15	5*PRESENT		*01		*05	*06					SSP SSO	
8029	*01	*15			*01	*01	*05	*06					SSO NGS	
8043	*01	*15			*01	*01	*05	*06					SSP SSO	
8068	*01	*15					*05	*06					SSO	
9916	*01	*15	5*PRESENT				*05	*06					SSP	

**Table 3b: Individual laboratory results for B-cell #553-Class II**

High resolution													
Center	DRB1	DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
230	*01:01	*15:01				*05:01	*06:02			*11:01	*16:01	SSO SBT	
278	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01		
731	*01:01:01G	*15:01:01				*05:01	*06:02					SSP SSO SBT	DQB1*05:62 DQB1*06:11
735	*01:01	*15:01	5*01:01P	*01:01P	*01:02	*05:01	*06:02	*01:03P	*02:01	*11:01	*16:01	SSP SSO SBT	DPA1*01:13
747	*01:01:01	*15:01:01:01	5*01:01:01	*01:01:01	*01:02:01:01	*05:01:01	*06:02:01	*01:03:01:01	*02:01:01:01	*11:01:01	*16:01:01	SSP SSO SBT	DQB1*05:01:01:03
762	*01:01:01	*15:01:01:01	5*01:01:01	*01:01	*01:02:01	*05:01:01:03	*06:02:01	*01:03:01	*02:01:01:01	*11:01:01	*16:01	NGS	
771	*01:01	*15:01				*05:01	*06:02					SSP SSO	
774	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02			*11:01	*16:01	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:67 DRB1*15:85 DRB1*15:86 DRB1*15:106 DRB1*15:107 DRB1*15:108 DRB1*15:111 DRB1*15:112 DRB1*15:114 DRB5*01:16 DRB5*01:17
779				*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSP SSO	
792	*01:01	*15:01				*05:01	*06:02			*11:01	*16:01	SSO SBT	
793				*01:01	*01:02					*11:01	*16:01	SSP	
794	*01:01:01	*15:01:01	5*01:01:01	*01:01	*01:02	*05:01:01	*06:02:01	*01:03	*02:01	*11:01:01	*16:01:01	SSP SSO NGS RT-PCR	
2344	*01:01:01	*15:01:01:01	5*01:01:01	*01:01	*01:02:01	*05:01:01:01	*06:02:01	*01:03:01:01	*02:01:01:01	*11:01:01	*16:01:01	NGS	DQB1*05:01:01:03 DQB1*05:01:01:02 DRB1*15:01:01:02 DRB1*15:01:01:03
2400	*01:01	*15:01		*01:01	*01:02	*05:01	*06:02			*11:01	*16:01	SSP SSO SBT	
3135	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01		DQA1*01:04 DQA1*01:05
3511	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSP SSO	
3519	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSP NGS	
3632	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSP SSO	
3753	*01:01:01	*15:01:01	5*01:01:01	*01:01:01	*01:02:01	*05:01	*06:02:01	*01:03:01	*02:01:01	*11:01:01	*16:01:01	NGS	
3966	*01:01	*15:01	5*01:01			*05:01	*06:02					SSP	
4079	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSP SSO NGS	
4251	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSO NGS	
4337	*01:01	*15:01				*05:01	*06:02			*11:01	*16:01	SBT NGS	
4492	*01:01:01	*15:01:01	5*01:01	*01:01:01	*01:02:01	*05:01:01	*06:02:01	*01:03	*02:01	*11:01:01	*16:01:01	SSP SSO NGS	DPA1*01:13
5130	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02			*11:01	*16:01	SSP SSO NGS	
5133	*01:01:01	*15:01:01	5*01:01:01	*01:01:01	*01:02:01	*05:01:01	*06:02:01	*01:03:01	*02:01:01	*11:01:01	*16:01:01	NGS	
5451	*01:01:01	*15:01:01										SSP SSO SBT	
5488	*01:01:01	*15:01:01	5*01:01:01	*01:01:01	*01:02:01	*05:01:01	*06:02:01	*01:03:01	*02:01:01	*11:01:01	*16:01:01	SSO NGS	
5642	*01:01	*15:01				*05:01	*06:02					SSP	DRB1*01:11:02
8001	*01:01	*15:01	5*01:01			*05:01	*06:02			*11:01	*16:01	SSP SSO	
8021	*01:01	*15:01	5*01:01	*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSO NGS	
8029	*01:01	*15:01				*05:01	*06:02					SSO NGS	
8042	*01:01	*15:01				*05:01	*06:02						
8043	*01:01	*15:01		*01:01	*01:02	*05:01	*06:02					SSP SSO	

**Table 3b: Individual laboratory results for B-cell #553-Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
8070	*01:01	*15:01					*05:01	*06:02					SBT	
8086	*01:01	*15:01			*01:01	*01:02	*05:01	*06:02	*01:03	*02:01	*11:01	*16:01	SSO SBT	

**Table 4: Individual laboratory results for B-cell #553-Class II**

Serology										
CTR	DRB1		DRB3/4/5			DQB1		Others		
910	DR1	DR15	DR51			DQ1				

**Table 5: Individual laboratory results for B-cell #553-Class I**

Table 5: Individual laboratory results for B-cell #553-Class I														
Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
87	*02	*03	*07	*44	*05	*07							RT-PCR	
206	*02	*03	*07	*44	*05	*07								
230							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO SBT	
278	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02		
725	*02	*03	*07	*44	*05	*07							SSP SSO	
731													SSP SSO SBT	
735	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02P	*44:02P	*05:01P	*07:02P	SSP SSO SBT	
747	*02	*03	*07	*44	*05	*07	*02:13	*03:01:01:01	*07:02:01:01	*44:02:01:01	*05:01:01:02	*07:02:01:03	SSP SSO SBT	
774	*02	*03	*07	*44	*05	*07	*02:13						SSP SSO	A*02:27
779	*02	*03	*07	*44	*05	*07	*02:13						SSP SSO	
792	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO SBT	A*03:01:01:02N B*44:02:01:02S
793	*02	*03	*07	*44	*05	*07							SSP	
794	*02	*03	*07	*44	*05	*07	*02:13	*03:01:01	*07:02:01	*44:02:01	*05:01:01	*07:02:01	SSP SSO NGS RT-PCR	
2344							*02:13	*03:01:01:01	*07:02:01	*44:02:01:01	*05:01:01:02	*07:02:01:03	NGS	
2400	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSP SSO SBT	
2847	*02	*03	*07	*44	*05	*07							SSO	
3135							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02		
3224	*02	*03	*07	*44	*05	*07							SSO	
3511	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSP SSO	
3519	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSP NGS	
3753							*02:13	*03:01:01	*07:02:01	*44:02:01	*05:01:01	*07:02:01	NGS	
3966	*02	*03	*07	*44	*05	*07							SSP	
4251	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO NGS	
4337							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SBT NGS	
4492	*02	*03	*07	*44	*05	*07	*02:13	*03:01:01:01	*07:02:01:01	*44:02:01:01	*05:01:01:02	*07:02:01	SSP SSO NGS	
5130	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSP SSO NGS	
5133							*02:13	*03:01:01:01	*07:02:01	*44:02:01	*05:01:01:02	*07:02:01:03	NGS	
5214	*02	*03	*07	*44	*05	*07							SSO	
5219	*02	*03	*07	*44	*05	*07							SSO	
5462	*02	*03	*07	*44	*05	*07							SSO RT-PCR	
5488							*02:13	*03:01:01	*07:02:01	*44:02:01	*05:01:01	*07:02:01	SSO NGS	
8021							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO NGS	
8029	*02	*03	*07	*44	*05	*07	*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO NGS	
8042							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02		
8068	*02	*03	*07	*44	*05	*07							SSO	
8086							*02:13	*03:01	*07:02	*44:02	*05:01	*07:02	SSO SBT	
9916	*02	*03	*07	*44	*05	*07							SSP	

**Table 6a: Individual laboratory results for B-cell #554-Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
87	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04(DP402)	*04(DP402)	RT-PCR	
206	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04			
278	*08	*14	3*01	NT	*04	*05	*03	*04	*01	*01	*04	*04		
725	*08	*14	3*PRESENT		*04	*05	*03	*04					SSP SSO	
731	*08	*14			*04	*05	*03	*04					SSP SSO SBT	
735	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04(DP402)	*04(DP402)	SSP SSO SBT	
747	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04	*04	SSP SSO SBT	
771	*08	*14			*04	*05	*03	*04					SSP SSO	
774	*08	*14	3*01		*04	*05	*03	*04			*04		SSP SSO	
779	*08	*14	3*01		*04	*05	*03	*04	*01		*04(DP402)		SSP SSO	
792	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04	*04	SSO SBT	
793	*08	*14	3*01		*04	*05	*03	*04			*04(DP402)		SSP	
794	*08	*14	3*01		*04	*05	*03	*04	*01		*04		SSP SSO NGS	
2400	*08	*14	3*01		*04	*05	*03	*04			*04		RT-PCR	
2847	*08	*14											SSP SSO SBT	
3224	*08	*14	3*01										SSO	
3511	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04(DP402)	*04(DP402)	SSO	
3519	*08	*14			*04	*05	*03	*04	*01		*04(DP402)		SSP SSO	
3632	*08	*14	3*01		*04	*05	*03	*04	*01		*04		SSP NGS	
3966													SSP SSO	
4079	*08	*14					*03	*04					SSP	
4251	*08	*14	3*01		*04	*05	*03	*04	*01	*01	*04(DP402)	*04(DP402)	SSP SSO NGS	
4492	*08	*14	3*PRESENT		*04	*05	*03	*04	*01		*04(DP402)		SSO NGS	
5130	*08	*14	3*01		*04	*05	*03	*04			*04	*04	SSP SSO NGS	
5214	*08	*14	3*01		*04	*05	*03 (DQ7)	*04	*01		*04(DP402)		SSO	
5219	*08	*14			*04	*05	*03	*04					SSO	
5451	*08	*14	3*01		*04	*05	*03	*04					SSP SSO SBT	
5462	*08	*14	3*01	NP	*04	*05	*03	*04	*01		NT	NT	SSO RT-PCR	
5642	*08	*14	3*PRESENT				*03	*04					SSP	
6649	*08	*14	3*PRESENT										SSO	
8001	*08	*14	3*PRESENT		*04	*05	*03	*04					SSP SSO	
8029	*08	*14			*04	*05	*03	*04					SSO NGS	
8043	*08	*14			*04	*05	*03	*04					SSP SSO	
8068	*08	*14					*03	*04					SSO	
9916	*08	*14	3*PRESENT				*03	*04					SSP	



**Table 6b: Individual laboratory results for B-cell #554-Class II**

High resolution														
Center	DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles	
230	*08:02	*14:02				*03:01	*04:02			*04:02		SSO SBT		
278	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03	*01:03	*04:02	*04:02			
731	*08:02	*14:02				*03:01	*04:02					SSP SSO SBT		
735	*08:02	*14:02	3*01:01P	*04:01	*05:03	*03:01	*04:02	*01:03P	*01:03P	*04:02	*04:02	SSP SSO SBT		
747	*08:02:01	*14:02:01	3*01:01:02:01	*04:01:01	*05:03	*03:01:01:01	*04:02:01	*01:03:01:05	*01:03:01:05	*04:02:01:02	*04:02:01:02	SSP SSO SBT	DQB1*03:01:01:03 DQA1*04:01:02:02 DQA1*05:07 DQA1*04:01:02:01	
762	*08:02	*14:02	3*01:01:02:01	*04:01	*05:03:01:01	*03:01:01:01	*04:02	*01:03:01:05		*04:02:01:02		NGS		
771	*08:02	*14:02				*03:01	*04:02					SSP SSO		
774	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02			*04:02		SSP SSO	DQB1*03:73 DQB1*04:11 DQB1*04:13 DQB1*03:92 DQB1*03:93 DQB1*04:23	
779				*04:01	*05:03	*03:01	*04:02	*01:03		*04:02		SSP SSO		
792	*08:02	*14:02				*03:01	*04:02			*04:02	*04:02	SSO SBT		
793				*04:01	*05:03					*04:02		SSP		
794	*08:02:01	*14:02:01	3*01:01:02	*04:01	*05:03	*03:01:01	*04:02	*01:03		*04:02:01		SSP SSO NGS RT-PCR		
2344	*08:02:01	*14:02:01	3*01:01:02	*04:01:01	*05:03	*03:01:01	*04:02:01	*01:03:01:05	*01:03:01:05	*04:02:01:01	*04:02:01:01	NGS	DPB1*04:02:01:02 DPB1*04:02:01:02	
2400	*08:02	*14:02		*04:01	*05:03	*03:01	*04:02			*04:02P		SSP SSO SBT		
3135	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03		*04:02				
3511	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03	*01:03	*04:02	*04:02	SSP SSO		
3519	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03	*01:03	*04:02		SSP NGS		
3632	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03		*04:02		SSP SSO		
3753	*08:02:01	*14:02:01	3*01:01:02	*04:01:01	*05:03:01	*03:01:01	*04:02:01	*01:03:01	*01:03:01	*04:02:01	*04:02:01	NGS		
3966	*08:02	*14:02	3*01:01			*03:01	*04:02					SSP		
4079	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03		*04:02		SSP SSO NGS		
4251	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03:01G	*01:03:01G	*04:02	*04:02	SSO NGS		
4337	*08:02	*14:02				*03:01	*04:02			*04:02	*04:02	SBT NGS		
4492	*08:02:01	*14:02:01	3*01:01	*04:01:01	*05:03:01	*03:01:01	*04:02:01	*01:03	*01:03	*04:02:01		SSP SSO NGS	DPA1*01:13	
5130	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02			*04:02	*04:02	SSP SSO NGS		
5133	*08:02:01	*14:02:01	3*01:01:02	*04:01:01	*05:03:01	*03:01:01	*04:02:01	*01:03:01		*04:02:01		NGS		
5451	*08:02:01	*14:02:01										SSP SSO SBT		
5488	*08:02:01	*14:02:01	3*01:01	*04:01:01	*05:03:01	*03:01:01	*04:02:01	*01:03:01		*04:02:01		SSO NGS		
5642	*08:02	*14:02				*03:01	*04:02					SSP		
8001	*08:02	*14:02	3*01:01			*03:01	*04:02			*04:02		SSP SSO		
8021	*08:02	*14:02	3*01:01	*04:01	*05:03	*03:01	*04:02	*01:03		*04:02		SSO NGS		
8029						*03:01	*04:02					SSO NGS		
8042	*08:02	*14:02				*03:01	*04:02							
8043	*08:02	*14:02		*04:01	*05:03	*03:01	*04:02					SSP SSO		
8070	*08:02	*14:02				*03:01	*04:02					SBT		
8086	*08:02	*14:02		*04:01	*05:03	*03:01	*04:02	*01:03	*01:03	*04:02	*04:02	SSO SBT		

**Table 7: Individual laboratory results for B-cell #554-Class II**

<b>Serology</b>									
<b>CTR</b>	<b>DRB1</b>		<b>DRB3/4/5</b>			<b>DQB1</b>		<b>Others</b>	
910	DR8	DR17	DR52			DQ7	DQ4	DR18	

**Table 8: Individual laboratory results for B-cell #554-Class I**

Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
87	*02	*24	*40	*40	*03	*03							RT-PCR	
206	*02	*24	*40		*03	*03								
230							*02:11	*24:53	*40:04			*03:04		SSO SBT
278	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		
725	*02	*24	*40		*03									SSP SSO
735	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04P	*03:04P		SSP SSO SBT
747	*02	*24	*40	*40	*03	*03	*02:11:01	*24:53	*40:04	*40:04	*03:04:01:02	*03:04:01:02		SSP SSO SBT
774	*02	*24	*40		*03		*02:11		*40:04					SSP SSO
779	*02	*24	*40		*03		*02:11		*40:04		*03:04			SSP SSO
792	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSO SBT
793	*02	*24	*40		*03									SSP
794	*02	*24	*40		*03		*02:11:01	*24:53	*40:04		*03:04:01			SSP SSO NGS RT-PCR
2344							*02:11:01	*24:53	*40:04	*40:04	*03:04:01:02	*03:04:01:02		NGS
2400	*02	*24	*40		*03		*02:11	*24:53	*40:04		*03:04			SSP SSO SBT
2847	*02	*24	*40		*03									SSO
3135							*02:11	*24:53	*40:04		*03:04			
3224	*02	*24	*40		*03									SSO
3511	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSP SSO
3519	*02	*24	*40		*03		*02:11	*24:53	*40:04		*03:04			SSP NGS
3753							*02:11:01	*24:53	*40:04	*40:04	*03:04:01	*03:04:01		NGS
3966	*02	*24	*40	*40	*03	*03								SSP
4251	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSO NGS
4337							*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SBT NGS
4492	*02	*24	*40		*03		*02:11:01	*24:53	*40:04		*03:04:01:02			SSP SSO NGS
5130	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSP SSO NGS
5133							*02:11:01	*24:53	*40:04		*03:04:01:02			NGS
5214	*02	*24	*40 (B61)		*03 (Cw10)									SSO
5219	*02	*24	*40	*40	*03	*03								SSO
5462	*02	*24	*40		*03									SSO RT-PCR
5488							*02:11:01	*24:53	*40:04		*03:04:01			SSO NGS
8021							*02:11	*24:53	*40:04		*03:04			SSO NGS
8029	*02	*24	*40	*40	*03	*03	*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSO NGS
8042							*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		
8068	*02	*24	*40	*40	*03	*03								SSO
8086							*02:11	*24:53	*40:04	*40:04	*03:04	*03:04		SSO SBT
9916	*02	*24	*40		*03									SSP

## CELL EXCHANGE #406

The results for Cell Exchange #406 are summarized in Table 9 and Table 10. Molecular typing results for individual laboratories are listed in Tables 11 - 14 for each sample and individual serological results for each sample are

listed in Table 15. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Cell 1621.** The reported consensus type for this sample from a Filipino donor is A\*11:01(A11)-B\*13:01(B13)-B\*56:04(B56)-C\*01:02(Cw1)-C\*04:06(Cw4). Likely associations present in this cell are A\*11:01-B\*56:04-C\*01:02 and A\*11:01-B\*13:01-C\*04:06, with respective HF=0.00059 and 0.00075.

This sample was previously examined as cell 1532 (2014) and cell 1475 (2012). In this present retyping, A\*11:01, B\*13:01, B\*56:04, C\*01:02, and C\*04:06 were all assigned in complete consensus. A\*11:01:01:01, B\*13:01:01, and C\*01:02:01 were each assigned by 4 labs. A11 (93%), B13 (100%), and B56 (79%) were assigned by serology.

**Cell 1622.** The reported consensus type for this sample from Chinese donor is A\*30:01(A30)-A\*68:01(A68)-B\*13:02(B13)-B\*35:01(B35)-C\*06:02(Cw6)-C\*15:09. One likely associations present in this cell is B\*13:02-C\*06:02, observed in Asians, with HF=0.02274. Interestingly, the other likely association present in this cell, B\*35:01-C\*15:09, is observed exclusively in Hispanics, with HF=0.00051. C\*15:09 was examined one other time in the Cell Exchange, in cell 1205, from a Hispanic donor.

A\*30:01, A\*68:01, B\*13:02, B\*35:01, and C\*06:02 were each assigned in complete consensus, with 5 labs assigning A\*30:01:01 and A\*68:01:02 and 4 labs assigning B\*13:02:01, B\*35:01:01, and C\*06:02:01:01. C\*15:09 was assigned by 92%. Good agreement was also achieved among serology labs, as A30 (100%), A68 (86%), B13 (100%), and B35 (93%) were reported.

**Cell 1623.** The reported consensus type for this sample from an Asian donor is A\*24:02(A24)-A\*24:07-B\*38:02(B38)-B\*51:01(B51)-C\*07:02(Cw7)-C\*14:02. The likely associations present in this cell are A\*24:07-B\*38:02-C\*07:02 and A\*24:02-B\*51:01, and C\*14:02, with respective HF=0.00085 and 0.01180, in Asians.

Two subtypes of A\*24 were reported in this cell, A\*24:02 (100%) and A\*24:07 (100%). A\*24:07:01 was assigned by 5 labs. B\*38:02 and B\*51:01 were reported as the B-locus types, with 4 labs assigning B\*38:02:01 and 4 labs assigning B\*51:01:01. C\*07:02 (100%) and C\*14:02 (100%) were the reported C-locus types, with 3 labs assigning C\*07:02:01 and C\*14:02:01. A24 (100%), B38 (92%), and B51 (100%) were well assigned by serology.

**Cell 1624.** The reported consensus type for this sample from a Chinese donor is A\*11:01(A11)-A\*24:02(A24)-B\*46:01(B46)-B\*54:01(B54)-C\*01:02(Cw1). Likely associations present in this cell may be A\*11:01-B\*54:01-C\*01:02 and A\*24:02-B\*46:01-C\*01:02, with respective HF= 0.00646 and 0.01009, in Asians.

A\*11:01, A\*24:02, B\*46:01, B\*54:01, and C\*01:02 were each assigned by 100% of labs reporting at high resolution. A\*11:01:01:01, A\*24:02:01:01, and C\*01:02:01 were each reported by 3 labs. B\*46:01:01 and B\*54:01:01 were reported by 4 labs. A11 (100%), A24 (100%), B46 (92%), and B54 (75%), were the assigned serological types.



**Table 10. Summary of the 406<sup>th</sup> Cell Exchange (Cell #1621 - 1624)**

Serological typing							
(Filipino) <b>Cell 1621</b>		(Chinese) <b>Cell 1622</b>		(Asian) <b>Cell 1623</b>		(Chinese) <b>Cell 1624</b>	
(14 Samples Typed)		(14 Samples Typed)		(12 Samples Typed)		(12 Samples Typed)	
A11	92.9%	A30	100.0%	A24	100.0%	A11	91.7%
A11.1	7.1%		[100.0%]		[100.0%]	A11.1	8.3%
	[100.0%]						[100.0%]
B13	100.0%	A68	85.7%	B38	91.7%	A24	100.0%
		A28	14.3%		[91.7%]		[100.0%]
			[100.0%]				
B56	78.6%	B13	100.0%	B51	100.0%	B46	91.7%
B22	7.1%				[100.0%]		
	[85.7%]	B35	92.9%	Cw7	33.3%	B54	75.0%
Cw1	35.7%					B22	25.0%
		Cw6	42.9%				[100.0%]
Cw4	35.7%		[42.9%]	Bw4	83.3%		
	[35.7%]	Cw15	7.1%			Cw1	41.7%
Bw4	85.7%						
		Bw4	85.7%			Bw6	83.3%
Bw6	85.7%						
		Bw6	85.7%				
Others Found		Others Found		Others Found		Others Found	
B70	7.1%	B62	7.1%	B44	8.3%	Cw3	16.7%
A1	7.1%			Cw1	8.3%	B5	8.3%
B81	7.1%						
Cw6	7.1%						
A36	7.1%						

**Table 11. Individual laboratory results for Cell #1621**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*11	*11	*13	*56	*01	*04	*11:01	*11:01	*13:01	*56:04	*01:02	*04:06		
725	*11		*13	*56									SSO	
731	*11		*13	*56	*01	*04	*11:01:01G		*13:01:01G	*56:04	*01:02:01G	*04:06	SSP SSO SBT	
745							*11:01:01:01		*13:01:01	*56:04	*01:02:01	*04:06	SBT NGS	
747	*11	*11	*13	*56	*01	*04	*11:01:01:01	*11:01:01:01	*13:01:01	*56:04	*01:02:01	*04:06	SSP SSO SBT	
762							*11:01:01:01		*13:01:01	*56:04	*01:02:01	*04:06	NGS	
771	*11		*13	*56	*01	*04	*11:01		*13:01	*56:04	*01:02	*04:06	SSO SBT	
774	*11		*13	*56	*01	*04								
779	*11	*11	*13	*56	*01	*04			*13:01	*56:04			SSP SSO	
3186	*11	*11	*13	*56	*01	*04							SSO	
3545	*11		*13	*56	*01	*04	*11:01		*13:01	*56:04	*01:02	*04:06	SSO SBT	C*01:142 A*11:263
3632	*11		*13	*56	*01	*04	*11:01		*13:01	*56:04	*01:02	*04:06	SSP SSO	
3766	*11	*11	*13	*56	NT	NT							SSO	
3808	*11		*13	*56	*01	*04	*11:01	*11:01	*13:01	*56:04			SSP	
4079	*11		*13	*56	*01	*04	*11:01		*13:01	*56:04	*01:02	*04:06	SSP SSO NGS	
4251	*11	*11	*13	*56	*01	*04	*11:01:01G	*11:01:01G	*13:01	*56:04	*01:02:01G	*04:06	SSO SBT	
5133							*11:01:01:01		*13:01:01	*56:04	*01:02:01	*04:06	NGS	
5214	*11		*13	*56	*01	*04							RT-PCR	
5462	*11		*13	*56	*01	*04	*11:01		*13:01	*56:04	*01:02	*04:06	SSO NGS	
6649	*11		*13	*56									SSO	
8001	*11		*13	*56	*01	*04							SSO	
8043	*11		*13	*56	*01	*04							SSP SSO	
8070							*11:01		*13:01	*56:04	*01:02	*04:06	SBT	

**Table 12. Individual laboratory results for Cell #1622**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:04		
725	*30	*68	*13	*35	*06	*15							SSO	
731	*30	*68	*13	*35	*06	*15	*30:01:01	*68:01:02	*13:02	*35:01	*06:02:01G	*15:09	SSP SSO SBT	
745							*30:01:01	*68:01:02	*13:02:01:01	*35:01:01	*06:02:01:01	*15:09	SBT NGS	
747	*30	*68	*13	*35	*06	*15	*30:01:01	*68:01:02:01	*13:02:01	*35:01:01	*06:02:01:01	*15:09	SSP SSO SBT	
762							*30:01:01	*68:01:02:01	*13:02:01:01	*35:01:01	*06:02:01:01	*15:09	NGS	
771	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SSO SBT	
774	*30	*68	*13	*35	*06	*15								
779	*30	*68	*13	*35	*06	*15							SSP SSO	
3186	*30	*68	*13	*35	*06	*15							SSO	
3545	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SSO SBT	A*68:152 B*35:42 C*06:83 B*35:332 B*35:347
3632	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SSP SSO	
3766	*30	*68	*13	*35	NT	NT							SSO	
3808	*30	*68	*13	*35	*06	*15							SSP	
4079	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SSP SSO NGS	
4251	*30	*68	*13	*35	*06	*15	*30:01	*68:01P	*13:02	*35:01:01G	*06:02:01G	*15:09	SSO SBT	
5133							*30:01:01	*68:01:02:01	*13:02:01:01	*35:01:01	*06:02:01:01	*15:09	NGS	
5214	*30	*68	*13	*35	*06	*15							RT-PCR	
5462	*30	*68	*13	*35	*06	*15	*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SSO NGS	
6649	*30	*68	*13	*35									SSO	
8001	*30	*68	*13	*35	*06	*15							SSO	
8043	*30	*68	*13	*35	*06	*15							SSP SSO	
8070							*30:01	*68:01	*13:02	*35:01	*06:02	*15:09	SBT	



**Table 13. Individual laboratory results for Cell #1623**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*24	*24	*38	*51	*07	*14	*24:02	*24:07	*38:02	*51:01	*07:02	*14:02		
725	*24		*38	*51	*07	*14							SSO	
731	*24	*24	*38	*51	*07	*14	*24:02:01G	*24:07:01	*38:02:01	*51:01:01	*07:02	*14:02	SSP SSO SBT	
745							*24:02:01:01	*24:07:01	*38:02:01	*51:01:01	*07:02:01	*14:02:01	SBT NGS	
747	NT						NT							
762							*24:02:01:01	*24:07:01	*38:02:01	*51:01:01:01	*07:02:01	*14:02:01	NGS	
771	*24	*24	*38	*51	*07	*14							SSO SBT	
771							*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SSO SBT	
774	*24	*24	*38	*51	*07	*14								
779	*24	*24	*38	*51	*07	*14	*24:02	*24:07				*14:02	SSP SSO	
3186	*24	*24	*38	*51	*07	*14							SSO	
														A*24:352 A*24:353 B*51:193 C*07:50 C*07:349 C*07:566 C*07:592 C*07:594 C*07:595 C*07:596 B*51:224
3545	*24	*24	*38	*51	*07	*14	*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SSO SBT	
3632	*24	*24	*38	*51	*07	*14	*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SSP SSO	
3766	*24	*24	*38	*51	NT	NT						NT	SSO	
3808	*24	*24	*38	*51	*07	*14	*24:02:01G	*24:07:01					SSP	
4079	*24		*38	*51	*07	*14	*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SSP SSO NGS	
4251	*24	*24	*38	*51	*07	*14	*24:02P	*24:07	*38:02	*51:01P	*07:02:01G	*14:02	SSO SBT	
5133							*24:02:01	*24:07:01	*38:02:01	*51:01:01	*07:02:01	*14:02:01	NGS	
5214	*24		*38	*51	*07	*14							RT-PCR	
5462	*24	*24	*38	*51	*07	*14	*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SSO NGS	
6649	*24		*38	*51									SSO	
8001	*24		*38	*51	*07	*14							SSO	
8043	*24		*38	*51	*07	*14							SSP SSO	
8070							*24:02	*24:07	*38:02	*51:01	*07:02	*14:02	SBT	

**Table 14. Individual laboratory results for Cell #1624**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*11	*24	*46	*54	*01	*01	*11:01	*24:02	*46:01	*54:01	*01:02	*01:02		
725	*11	*24	*46	*54	*01								SSO	
731	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01:01	*54:01:01	*01:02:01G		SSP SSO SBT	
745							*11:01:01:01	*24:02:01:01	*46:01:01	*54:01:01	*01:02:01		SBT NGS	
747	NT						NT							
762							*11:01:01:01	*24:02:01:01	*46:01:01	*54:01:01	*01:02:01		NGS	
771	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01	*54:01	*01:02		SSO SBT	
774	*11	*24	*46	*54	*01									
779	*11	*24	*46	*54	*01								SSP SSO	
3186	*11	*24	*46	*54	*01	*01							SSO	
3545	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01	*54:01	*01:02		SSO SBT	A*24:352 A*24:353 C*01:85 C*01:127 C*01:142 A*11:263
3632	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01	*54:01	*01:02		SSP SSO	
3766	*11	*24	*46	*54	NT	NT							SSO	
3808	*11	*24	*46	*54	*01								SSP	
4079	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01	*54:01	*01:02		SSP SSO NGS	
4251	*11	*24	*46	*54	*01	*01	*11:01:01G	*24:02P	*46:01	*54:01	*01:02:01G	*01:02:01G	SSO SBT	
5133							*11:01:01:01	*24:02:01:01	*46:01:01	*54:01:01	*01:02:01		NGS	
5214	*11	*24	*46	*54	*01								RT-PCR	
5462	*11	*24	*46	*54	*01		*11:01	*24:02	*46:01	*54:01	*01:02		SSO NGS	
6649	*11	*24	*46	*54									SSO	
8001	*11	*24	*46	*54	*01								SSO	
8043	*11	*24	*46	*54	*01								SSP SSO	
8070							*11:01	*24:02	*46:01	*54:01	*01:02		SBT	

**Table 15. Individual laboratory results for Cell #1621-1624 by serology**

Investigator	Days Old	Cell No 1621 (Filipino)					Cell No 1622 (Chinese)					Cell No 1623 (Asian)					Cell No 1624 (Chinese)																			
		Viab %	A11	B13	B56	Cw1	Cw4	Bw4	Bw6	OTHERS	Viab %	A30	A68	B13	B35	Cw6	Cw15	Bw4	Bw6	OTHERS	Viab %	A24	B38	B51	Cw7	Cw14	Bw4	OTHERS	Viab %	A11	A24	B46	B54	Cw1	Bw6	OTHERS
Cecka, J. Mic	3	>95	+	+	+			+	+		>95	+	+	+	+			+	+		>95	+	+	+			+		>95	+	+	+	+		+	
Enczmann, J		95	+	+	+						95	+	+	+	+						95	+	+	+					95	+	+	+	+			
Fort, Marylis	3	97	+	+	+			+	+		97	+	+	+	+			+	+		NT								NT							
Hahn, Amy B.		100	+	+	B81			+	+		100	+	+	+	+			+	+		100	+	+	+			+		100	+	+	+	+		+	
Hogan, Patric		50	+	+	+	+	+	+	+		80	+	+	+	+	+			+	+		80	+	+	+	+		+		80	+	+	+	+	+	+
Hubbell, Char		95	+	+	+			+	+	A36	95	+	+	+	+			+	+		95	+	+	+			+		95	+	+	+	+		+	
Latham, Katy	3	100	+	+	+			+	+		100	+	+	+	+			+	+		100	+	+	+			+		100	+	+	+	+		+	
Loewenthal ,		85	+	+	+	+		+	+		90	+	+	+	+	+			+	+		80	+	+	+	+		+		90	+	+	+	+	+	+
Permpikul, Ve	7	90	A11.1	+	+			+	+		90	+	+	+	+			+	+		90	+	+	+			+		90	A11.1	+	+	+		+	
Pule, Ziningi		60	+	+	B70		+			Cw6	65	+	+	+	B62	+					70	+	B44	+	+				65	+	+	B5	B22	+		Cw3
Renac, Virgin	3	95	+	+	B22			+	+		95	+	A28	+	+			+	+		95	+	+	+			+		95	+	+	+	B22		+	
Shai, Isaac	8	94	+	+	+	+	+	+	+	A1	92	+	A28	+	+	+			+	+		94	+	+	+		+	Cw1	92	+	+	+	B22	+	+	Cw3
Vidan-Jeras,	6	100	+	+	+	+	+	+	+		100	+	+	+	+	+			+	+		100	+	+	+	+		+		100	+	+	+	+	+	+
Villard, Jean	6	90	+	+	+	+	+	+	+		90	+	+	+	+	+	+																			

## SERUM EXCHANGE #564

The results for **Serum Exchange 564 (sera 1249 - 1252)**, are summarized in Tables 16 - 23 and individual laboratory results by method are listed

in Tables 24 - 36. Sera positive to A23, A24, A33, A34, and B13 were examined in this study.

1249	method	#labs	B13	A30	A31	B49	B61	B41	B45	B44	Cw6	Cw18	B50	B47	B60	B51	B52	B59	B77	B40
class I	NIH-Std	1	no consensus																	
	NIH-Ext	2	100%																	
	AHG	3	100%	67%	67%	33%	33%	33%	33%	33%										
	Luminex	23	100%	100%	100%	100%	100%	97%	100%	96%	83%	52%	100%	96%	96%	83%	78%	70%	26%	13%
	Flow	3	no specificities assigned																	
	C1q	2	100%	100%							50%	100%								
	Other	2	100%	100%	100%	100%	100%	50%	100%	100%			100%	100%	100%					
1249	method	#labs	Cw7	Cw12	Cw17	Cw4	Cw1	Cw14	Cw15	Cw16	Cw2	A80	B37	B38	B48	B53	B63	B73	Cw5	
	C1q	2	100%	50%	50%	50%	50%	50%		50%	50%									
	Other	2	33%	33%	33%	33%			33%			33%	33%	33%	33%	33%	33%	33%	33%	

1249	method	#labs	DQ2	DR12	DR7	DR9	DR52	DQA1*02	DR18	DQA1*05	DQ9	DQ7	DR17	DQ4	DPA1*02	DPw6	DQ8	DR11	DR13	DR14	DR8
class II	NIH-Ext	1	no consensus																		
	Luminex	22	100%	100%	100%	100%	100%	38%	29%	14%	14%	14%	10%	10%	5%	5%	5%	5%	5%	5%	
	Flow	3	no specificities assigned																		
	C1q	1	no consensus																		
	Other	2	100%	100%	100%	100%	50%														

**Serum 1249** was strongly positive to B13 by all methods. Additional reactivity to A30, A31, B49, B61, B41, B44, and B45 was also reported by various methods. Reactivity to a number of 5C, 7C, and C-locus specificities was reported by labs reporting by Luminex single antigen and PRA. Class II

reactivity was detected in this sample, with Luminex, PRA, and C1q all reporting anti-DQ2 and -DR7 reactivity. Additional reactivity to DR12, DR9, and DR52 was reported by Luminex and PRA, while additional reactivity to DQ4, DQ6, and DQ8 was reported by 1 lab reporting by C1q.

1250	method	#labs	A33	A34	A25	B39	A26	A68	A69	A28	A31	A29	A66	A6601	A10	A3	A30	A32	A74	A80	B8	B18	B38	B64	B65	B67	B54	B55	
class I	NIH-Std	1	no consensus																										
	NIH-Ext	2	100%	100%	50%	50%				50%																			
	AHG	3	100%	67%	33%	33%	67%	67%	33%	67%	67%	33%	33%	33%	33%														
	Luminex	23	100%	100%	100%	87%	100%	100%	100%	4%	100%	100%	87%	30%	4%	100%	96%	48%	83%	26%	100%	100%	100%	96%	96%	83%	91%	22%	
	Flow	3	no specificities assigned																										
	C1q	2	100%	100%	100%		100%	100%	100%		100%	50%	50%	50%															
	Other	2	100%	100%	100%	50%	100%	100%	100%		100%	100%	100%			100%	100%	####	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	

1250	method	#labs	B49	B50	B42	B59	Cw7	Cw16	Cw8	A11	A36	A43	A6602	B41	B44	B45	B47	B60	B61	B63	B76	Cw5	B13	Cw10	B37	Cw12	B73	B82
	AHG	3																										
	Luminex	23	74%	65%	57%	70%	100%	61%	65%	9%	78%	17%		96%	96%	96%	57%	61%	65%	91%	70%	70%	48%	48%	39%	39%	35%	30%
	C1q	2					100%	50%					50%															
	Other	2	50%	50%	50%	50%																						

1250	method	#labs	DQ4	DR103	DR11	DR12	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR8	DR52	DP11	DP13	DP15	DP19	
class II	NIH-Ext	1	no consensus																	
	Luminex	27	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	95%	95%	
	Flow	3	no specificities assigned																	
	C1q	1	no consensus																	
	Other	2	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%						

  

1250	method	#labs	DPw1	DPw5	DR51	DP23	DQA1*04	DQA1*05	DQ7	DQA1*06	DPw4	DP401	DQA1*03	DQ9	DQ6	DQ8	DQ2	DPA1*04
	Luminex	27	95%	95%	90%	81%	62%	62%	62%	57%	57%	52%	52%	43%	38%	29%	24%	14%

For **serum 1250**, reactivity to A10 (A25, A26, A34, A66) and A33, as well as reactivity to B39, A28 (A68, A69), A29, and A31 was reported by various methods. Additional reactivity to a number of 1C, 5C, and 8C specificities was also reported by Luminex and PRA. Positivity to DQ4 and a number of DR

antigens including DR103, DR4, DR8, DR11, DR12, DR13, DR14, DR15, DR16, DR17, and DR18, was reported by Luminex, PRA, and C1q. Additional reactivity to DR52, allele specific DRB5\*01:01 reactivity, and reactivity to a number of DP specificities was reported by Luminex,

1251	method	#labs	A23	A24	A25	B49	B51	B53	B57	B58	A32	B27	B38	B63	B52	B37	B13	B44	B47	B59	Bw4	A2	A80	A69	A68	Cw4
class I	NIH-Std	1	no consensus																							
	NIH-Ext	2	100%	100%	50%	100%	50%	50%	50%	50%	100%	50%	100%													
	AHG	3	100%	100%	33%	67%	67%	33%	33%	33%	67%	67%	67%	67%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
	Luminex	22	91%	95%	95%	100%	100%	100%	100%	95%	95%	95%	95%	100%	100%	95%	95%	95%	95%	95%	45%	100%	95%	100%	100%	82%
	Flow	3	no specificities assigned																							
	C1q	2	100%	100%	50%	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%	50%	50%	50%	50%	100%						50%
	Other	2	100%	100%	100%	50%	50%	50%	50%	50%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%	100%	50%	50%

  

1251	method	#labs	B77	A1	Cw2	Cw18	A2403	B76	B17	Cw15	Cw17	Cw5	A28	A34	A43	B45	Cw6	A203	B54	Cw14	A29	A66	B2708	B82	Cw1	Cw7
	AHG	3							33%																	
	Luminex	29	95%	95%	86%	59%	36%	100%		68%	68%	64%	67%	59%	45%	45%	45%	27%	27%	27%	27%	23%	23%	23%	18%	18%
	C1q	2	100%		50%	50%	50%																			
	Other	2		100%																						

1251	method	#labs	DR4	DR53	DQ7	DQ8	DQ9	DR10	DR9	DR1	DR7	DR103	DR15	DR51	DR16	DQ5	DQ2	DQ6	DQA1*05	DQA1*06
class II	NIH-Ext	1	no consensus																	
	Luminex	26	95%	84%	74%	74%	74%	68%	68%	47%	47%	33%	32%	32%	26%	38%	33%	21%	16%	16%
	Flow	3	no specificities assigned																	
	C1q	1	no consensus																	
	Other	2	100%	50%	100%	100%	100%	100%	100%	100%	100%	50%	50%	50%	50%					

**Serum 1251** was reported as positive to A23 by all methods. In addition, reactivity to A24, A25, A32, B38, B37, B44, B47, Bw4, A2, A80, and A28 was reported by various methods, along with reactivity to a number of 5C, 7C, and C-locus antigens. Strong anti-A1 reactivity was also reported by Lu-

minex and PRA. For class II, anti-DQ7, -DQ8, and -DQ9 reactivity, as well as reactivity to a number of DR specificities, was reported by Luminex, and PRA. One lab reporting by C1q detected no class II reactivity in this sample.

1252	method	#labs	NEG	A23	B45	B44	B58	B57	A2	A68	A69	A28	B35	B53	B76	B71	B82	B63	A1	A24	B49	B50	B51	B56	B75	B77	B52	B62	B72	A203	B46
class I	NIH-Std	1	no consensus																												
	NIH-Ext	2		50%																											
	AHG	3			67%	33%	33%						33%			33%															
	Luminex	23			96%	96%	96%	96%	96%	96%	96%		57%	57%	96%	48%	83%	83%	61%	39%	48%	43%	43%	43%	43%	43%	35%	35%	26%	22%	22%
	Flow	3	no specificities assigned																												
	C1q	1	no consensus																												
	Other	2			100%	100%	100%	100%	100%	100%	50%		50%	50%	50%																

1252	method	#labs	NEG	DP10	DP14	DR7	DP17	DP9	DR1
class II	NIH-Ext	1	no consensus						
	Luminex	24	24%	76%	71%	60%	35%	29%	18%
	Flow	3	67%						
	C1q	1	no consensus						
	Other	1	100%						

For **Serum 1252**, anti-B44, -B45, and -B58 reactivity was reported by antiglobulin, Luminex, and PRA. Additional reactivity to A2, A68, A69, B35, B53, and B76 was reported by Luminex and PRA. NIH reported anti-A23 reactivity, while C1q reported this sample as negative for class I. The reporting

of class II reactivity was mixed among labs, as PRA, C1q, and Flow reported the sample as negative for class II, while 13 out of 17 Luminex labs reported reactivity to a number of DP (DP10, DP14, DP17, DP9) and DR (DR7, DR1) specificities.

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

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**Table 16. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by NIH-Standard and NIH-Extended - class I**

Method: NIH-Standard											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		

Method: NIH-Extended											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
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%	100%	A33	100%	100%	A23	100%	100%	A23	50%	100%
			A34	100%	100%	B38	100%	100%			
			A25	50%	67%	B49	100%	100%			
			B39	50%	67%	A24	100%	92%			
			A28	50%	43%	A32	100%	67%			
						A25	50%	100%			
						B27	50%	100%			
						B51	50%	100%			
						B53	50%	100%			
						B57	50%	100%			
						B58	50%	100%			



**Table 17. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by Antiglobulin and Flow Cytometry- class I**

Method: Antiglobulin												
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***			
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%	A33	100%	100%	A23	100%	100%	B45	67%	100%	
A30	67%	100%	A26	67%	100%	A24	100%	100%	A28	33%	100%	
A31	67%	100%	A34	67%	100%	A28	67%	100%	B58	33%	100%	
B49	33%	100%	A68	67%	100%	A32	67%	100%	B71	33%	100%	
B44	33%	89%	A28	67%	88%	A68	67%	100%	B44	33%	89%	
B45	33%	67%	A31	67%	80%	B27	67%	100%				
B61	33%	67%	A10	33%	100%	B38	67%	100%				
B41	33%	50%	A25	33%	100%	B49	67%	100%				
			A29	33%	100%	B51	67%	100%				
			A66	33%	100%	B63	67%	100%				
			A6601	33%	100%	A2	33%	100%				
			A69	33%	100%	A25	33%	100%				
			B39	33%	67%	A69	33%	100%				
						A80	33%	100%				
						B13	33%	100%				
						B17	33%	100%				
						B37	33%	100%				
						B44	33%	100%				
						B47	33%	100%				
						B52	33%	100%				
						B53	33%	100%				
						B57	33%	100%				
						B58	33%	100%				
						Bw4	33%	100%				

Method: Flow Cytometry											
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		

**Table 18. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by Other - class I**

Method: Other											
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A30	100%	100%	A25	100%	100%	A1	100%	100%	A2	100%	100%
A31	100%	100%	A26	100%	100%	A23	100%	100%	A68	100%	100%
B13	100%	100%	A29	100%	100%	A24	100%	100%	B44	100%	100%
B44	100%	100%	A3	100%	100%	A25	100%	100%	B45	100%	100%
B45	100%	100%	A30	100%	100%	A32	100%	100%	B57	100%	100%
B47	100%	100%	A31	100%	100%	A69	100%	100%	B58	100%	100%
B49	100%	100%	A32	100%	100%	A80	100%	100%	A69	50%	100%
B50	100%	100%	A33	100%	100%	A2	50%	100%	B35	50%	100%
B60	100%	100%	A34	100%	100%	A68	50%	100%	B53	50%	100%
B61	100%	100%	A66	100%	100%	B13	50%	100%	B76	50%	100%
B41	50%	100%	A68	100%	100%	B27	50%	100%			
			A69	100%	100%	B37	50%	100%			
			A74	50%	100%	B38	50%	100%			
			A80	50%	100%	B44	50%	100%			
			B18	50%	100%	B47	50%	100%			
			B38	50%	100%	B49	50%	100%			
			B39	50%	100%	B51	50%	100%			
			B42	50%	100%	B52	50%	100%			
			B49	50%	100%	B53	50%	100%			
			B50	50%	100%	B57	50%	100%			
			B54	50%	100%	B58	50%	100%			
			B55	50%	100%	B59	50%	100%			
			B59	50%	100%	B63	50%	100%			
			B64	50%	100%	Bw4	50%	100%			
			B65	50%	100%	Cw4	50%	100%			
			B67	50%	100%						
			B8	50%	100%						
			B56	50%	100%						

**Table 19. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by Luminex - class I**

Method: Luminex												
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***			
23 typing Labs			23 typing Labs			22 typing Labs			23 typing Labs			
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	
A30	100%	100%	A25	100%	100%	A2	100%	100%	A2	96%	100%	
A31	100%	100%	A26	100%	100%	A68	100%	100%	A68	96%	100%	
B13	100%	100%	A29	100%	100%	A69	100%	100%	B44	96%	100%	
B45	100%	100%	A3	100%	100%	B49	100%	100%	B45	96%	100%	
B49	100%	100%	A31	100%	100%	B51	100%	100%	B57	96%	100%	
B50	100%	100%	A33	100%	100%	B52	100%	100%	B58	96%	100%	
B61	100%	100%	A34	100%	100%	B53	100%	100%	B76	96%	100%	
B41	96%	100%	A68	100%	100%	B57	100%	100%	A69	96%	33%	
B47	96%	100%	A69	100%	100%	B63	100%	100%	B82	83%	100%	
B60	96%	100%	B38	100%	100%	B76	100%	100%	B63	83%	50%	
B44	96%	83%	B8	100%	100%	A24	95%	100%	A1	61%	100%	
Cw6	83%	100%	Cw7	100%	82%	A25	95%	100%	B35	57%	100%	
B51	83%	80%	B18	100%	80%	A32	95%	100%	B53	57%	100%	
B52	78%	100%	A30	96%	100%	A80	95%	100%	B49	48%	100%	
B59	70%	100%	B41	96%	100%	B13	95%	100%	B71	48%	100%	
Cw18	52%	100%	B45	96%	100%	B27	95%	100%	B50	43%	100%	
B77	26%	100%	B64	96%	100%	B37	95%	100%	B51	43%	100%	
B40	13%	100%	B44	96%	83%	B38	95%	100%	B56	43%	100%	
			B65	96%	57%	B44	95%	100%	B75	43%	100%	
			B54	91%	100%	B47	95%	100%	B77	43%	100%	
			B63	91%	100%	B58	95%	100%	A24	39%	100%	
			A66	87%	100%	B59	95%	100%	B52	35%	100%	
			B39	87%	100%	B77	95%	100%	B62	35%	100%	
			A74	83%	100%	A1	95%	80%	B72	26%	100%	
			B67	83%	100%	A23	91%	100%	A203	22%	100%	
			A36	78%	100%	Cw2	86%	100%	B46	22%	100%	
			B49	74%	100%	Cw4	82%	100%	B78	17%	100%	
			B59	70%	100%	Cw15	68%	100%	B8201	17%	100%	
			B76	70%	100%	Cw17	68%	100%				
			Cw5	70%	100%	Cw5	64%	100%				
			B50	65%	100%	Cw18	59%	100%				
			B61	65%	100%	A34	59%	50%				
			Cw8	65%	100%	A43	45%	100%				
			B60	61%	100%	B45	45%	100%				
			Cw16	61%	100%	Bw4	45%	100%				
			B42	57%	100%	Cw6	45%	100%				
			B47	57%	100%	A2403	36%	100%				

**Table 20. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by C1q - class I**

Method: C1q											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A30	100%	100%	A25	100%	100%	A23	100%	100%	no consensus		
B13	100%	100%	A26	100%	100%	A24	100%	100%			
Cw18	100%	100%	A31	100%	100%	A32	100%	100%			
Cw7	100%	100%	A33	100%	100%	B38	100%	100%			
Cw1	50%	100%	A34	100%	100%	B49	100%	100%			
Cw12	50%	100%	A68	100%	100%	B51	100%	100%			
Cw14	50%	100%	A69	100%	100%	B52	100%	100%			
Cw16	50%	100%	Cw7	100%	100%	B53	100%	100%			
Cw17	50%	100%	A29	50%	100%	B57	100%	100%			
Cw2	50%	100%	A66	50%	100%	B58	100%	100%			
Cw4	50%	100%	A6601	50%	100%	B59	100%	100%			
Cw6	50%	100%	A6602	50%	100%	B63	100%	100%			
			Cw16	50%	100%	B77	100%	100%			
						A2403	50%	100%			
						A25	50%	100%			
						B13	50%	100%			
						B27	50%	100%			
						B37	50%	100%			
						B44	50%	100%			
						B47	50%	100%			
						Cw18	50%	100%			
						Cw2	50%	100%			
						Cw4	50%	100%			

**Table 21. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by NIH-Extended, Flow cytometry, and C1q - class II**

Method: NIH-Extended											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		
Method: Flow Cytometry											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			NEG	67%	100%
Method: C1q											
<b>*** Serum 1249 ***</b>			<b>*** Serum 1250 ***</b>			<b>*** Serum 1251 ***</b>			<b>*** Serum 1252 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		

**Table 22. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by Other - class II**

Method: Other											
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ2	100%	100%	DQ4	50%	100%	DQ7	100%	100%	NEG	100%	100%
DR12	100%	100%	DR103	50%	100%	DQ8	100%	100%			
DR7	100%	100%	DR11	50%	100%	DQ9	100%	100%			
DR9	100%	100%	DR12	50%	100%	DR1	100%	100%			
DR52	50%	100%	DR13	50%	100%	DR10	100%	100%			
			DR14	50%	100%	DR4	100%	100%			
			DR15	50%	100%	DR7	100%	100%			
			DR16	50%	100%	DR9	100%	100%			
			DR17	50%	100%	DR103	50%	100%			
			DR18	50%	100%	DR15	50%	100%			
			DR4	50%	100%	DR16	50%	100%			
			DR8	50%	100%	DR51	50%	100%			
						DR53	50%	100%			

**Table 23. Summary of the 564<sup>th</sup> Serum Exchange (Serum #1249-1252) by Luminex - class II**

Method: Luminex											
*** Serum 1249 ***			*** Serum 1250 ***			*** Serum 1251 ***			*** Serum 1252 ***		
21 typing Labs			21 typing Labs			19 typing Labs			17 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ2	100%	100%	DQ4	100%	100%	DR4	95%	100%	DP10	76%	100%
DR12	100%	100%	DR103	100%	100%	DR53	84%	47%	DP14	71%	100%
DR7	100%	100%	DR11	100%	100%	DQ7	74%	100%	DR7	60%	100%
DR9	100%	100%	DR12	100%	100%	DQ8	74%	100%	DP17	35%	100%
DR52	100%	75%	DR13	100%	100%	DQ9	74%	100%	DP9	29%	100%
DQA1*02	38%	100%	DR14	100%	100%	DR10	68%	100%	NEG	24%	100%
DR18	29%	100%	DR15	100%	100%	DR9	68%	100%	DR1	18%	100%
DQA1*05	14%	100%	DR16	100%	100%	DR1	47%	100%			
DQ9	14%	33%	DR17	100%	100%	DR7	47%	100%			
DQ7	14%	20%	DR18	100%	100%	DQ5	38%	50%			
DR17	10%	100%	DR4	100%	100%	DR103	33%	100%			
DQ4	10%	25%	DR52	100%	100%	DQ2	33%	40%			
DPA1*02	5%	100%	DR8	100%	100%	DR15	32%	100%			
DPw6	5%	100%	DP11	95%	100%	DR51	32%	100%			
DQ8	5%	100%	DP13	95%	100%	DR16	26%	100%			
DR11	5%	100%	DP15	95%	100%	DQ6	21%	17%			
DR13	5%	100%	DP19	95%	100%	DQA1*05	16%	100%			
DR14	5%	100%	DPw1	95%	100%	DQA1*06	16%	100%			
DR8	5%	100%	DPw5	95%	100%						
			DR51	90%	89%						
			DP23	81%	100%						
			DQA1*04	62%	100%						
			DQA1*05	62%	100%						
			DQ7	62%	80%						
			DQA1*06	57%	100%						
			DPw4	57%	93%						
			DP401	52%	100%						
			DQA1*03	52%	100%						
			DQ9	43%	67%						
			DQ6	38%	100%						
			DQ8	29%	67%						
			DQ2	24%	60%						
			DPA1*04	14%	100%						

**Table 24. Individual laboratory results for Serum #1249-1252 by NIH-Standard and NIH-Extended - class I**

**** Serum 1249 ****				**** Serum 1250 ****				**** Serum 1251 ****					**** Serum 1252 ****					
Ctr	% POS	B13	Other	% POS	A10	A31	A33	Other	% POS	A23				Other	% POS	A23	Other	Method
786	5	+		25	+	+	+		33	+					33	+		STD

STD = NIH-Standard

**** Serum 1249 ****				**** Serum 1250 ****				**** Serum 1251 ****						**** Serum 1252 ****					
Ctr	% POS	B13	Other	% POS	A33	A34		Other	% POS	A23	B38	B49	A24	A32	Other	% POS	A23	Other	Method
725	6	+		28	+	+		A25,A28,B39	53	+	+	+	+	+	B27,A25,B58	11	+		EXT
3753	7	+		28	+	+			56	+	+	+	+	+	B51,B53,B57	11			EXT

STD = NIH-Extended



**Table 25. Individual laboratory results for Serum #1249-1252 by Antiglobulin and Flow Cytometry - class I**

		**** Serum 1249 ****					**** Serum 1250 ****							**** Serum 1251 ****										**** Serum 1252 ****					
Ctr	% POS	B13	A30	A31	Other	% POS	A33	A26	A34	A68	A28	A31	Other	% POS	A23	A24	A28	A32	A68	B27	B38	B49	B51	B63	Other	% POS	B45	Other	Method
774	42	+	+	+	B61,B49,B44,B45 >	53	+	+	+	+	+	+	A66,A25,A29,B39	87	+	+	+	+	+	+	+	+	+	+	A2,B13,B47,B44 >	23	+	B44	Antiglobulin
786	8	+				18	+					+	A10	46	+	+									B17	4			Antiglobulin
910		+	+	+			+	+	+	+	+		A69,A6601		+	+	+	+	+	+	+	+	+	+	A25,A69		+	A28,B58,B71	Antiglobulin

		**** Serum 1249 ****					**** Serum 1250 ****							**** Serum 1251 ****										**** Serum 1252 ****					
Ctr	% POS				Other	% POS							Other	% POS											Other	% POS		Other	Method
3224	57					92								89												85			FC
5214	58					92								89												89			FC
8067	63					96								97												88			FC

FC = Flow Cytometry



**Table 27. Individual laboratory results for Serum #1249 by Luminex - class I**

		**** Serum 1249 ****																		
Ctr	% POS	A30	A31	B13	B45	B49	B50	B61	B41	B47	B60	B44	Cw6	B51	B52	B59	Cw18	B77	Other	Method
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
774	45	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B42	LMX
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66	LMX
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
3582		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,A80	LMX
3632	67	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
3766	63	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
3966	23	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
5219	13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B21,A19,B12 >	LMX
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
6649	14	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8048	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40	LMX
8058	22	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40	LMX

**Table 28. Individual laboratory results for Serum #1250 by Luminex - class I**

		**** Serum 1250 ****																																											
Ctr	% POS	A25	A26	A29	A3	A31	A33	A34	A68	A69	B38	B8	Cw7	B18	A30	B41	B45	B64	B44	B65	B54	B63	A66	B39	A74	B67	A36	B49	B59	B76	Cw5	B50	B61	Cw8	B60	Cw16	B42	B47	Other						
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A11,B13,B82,B75,C*03:02 >			
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
774	67	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B55,A32,A43 >		
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,A32,B37,Cw10		
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A32,A80,Cw10			
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B55,A32,A80 >		
3582		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B82,A32,A43 >		
3632	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B55,A32,A80 >		
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,A32		
3766	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A11,B13,B55,A32 >		
3966	49	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw10		
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B55,A32,A43 >	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A6601,A6602	
5219	27	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,A10,B21,B82 >		
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A6601,A6602,B3901	
6649	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B82,Cw12		
8048	60	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw3,A6601,A6602,B3901		
8058	48	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,A32	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B82,B37,B73 >	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B13,B82,A32,B37 >	
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8C,A10C
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B15,B82,B14 >

**Table 29. Individual laboratory results for Serum #1251 by Luminex - class I**

**** Serum 1251 ****																					Method									
Ctr	% POS	A2	A68	A69	B49	B51	B52	B53	B57	B63	B76	A24	A25	A32	A80	B13	B27	B37	B38	B44	B47	B58	B59	B77	A1	A23	Cw2	Cw4	Other	Method
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,B60,B61,A66,A*34:01>	LMX
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2403	LMX
774	82	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A203,B61,B5 >	LMX
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,B61,A66,B82 >	LMX
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,B45,Cw5,Cw7 >	LMX
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A203,B45,B54 >	LMX
3582	NT																													LMX
3632	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A66,B82,B45 >	LMX
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B45,A34,A43 >	LMX
3766	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,B45,A29,A43 >	LMX
3966	63	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A34,Cw5,Cw17 >	LMX
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A66,A43,B45 >	LMX
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A34,A43,Cw5,Cw15 >	LMX
5219	34	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A9,A203,B15,B5 >	LMX
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A34,Cw5,A2403,A*34:01>	LMX
6649	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,Cw17	LMX
8048	78	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A34,A43,Bw4 >	LMX
8058	28	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B50,B82,B75 >	LMX
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A34,Bw4,Cw5,Cw17 >	LMX
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A34,A29,Cw5 >	LMX
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw6,A66,B82,B45 >	LMX
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw403,A203,B15,A2403 >	LMX

**Table 30. Individual laboratory results for Serum #1252 by Luminex - class I**

**** Serum 1252 ****																											
Ctr	% POS	A2	A68	B44	B45	B57	B58	B76	A69	B82	B63	A1	B35	B53	B49	B71	B50	B51	B66	B75	B77	A24	B52	B62	Other	Method	
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,A23,B46,B72 >	LMX	
725		+	+	+	+	+	+	+	+	+																	LMX
774	45	+	+	+	+	+	+	+	+	+	+																LMX
786		+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B46,B72,Cw10 >	LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					LMX
2400		+	+	+	+	+	+	+	+	+																	LMX
3224		+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B46,B72,A2403 >	LMX	
3582		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,A23,B46,B72	LMX	
3632	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B72	LMX	
3753		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+						LMX
3766	95	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	A23,A2403,B8201	LMX	
3966	16	+	+	+	+	+	+	+	+	+	+	+														LMX	
4322	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,A23,B46,B72 >	LMX	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+											LMX	
5219	12	+	+	+	+	+	+	+	+	+	+		+	+		+									A28,B12,B17,A2C	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+													A203,B8201	LMX	
6649	19	+	+	+	+	+	+	+	+	+	+			+								+				LMX	
8048	44	+	+	+	+	+	+	+	+	+	+	+	+									+			A203	LMX	
8058	0																									LMX	
8062		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+		+	+	B78	LMX	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	B78,B46,B72	LMX	
8086	200	+	+	+	+	+	+	+	+	+	+	+														LMX	
8100		+	+	+	+	+	+	+	+	+	+	+														LMX	
8103		+	+	+	+	+	+	+	+	+															A203,B15	LMX	

**Table 31. Individual laboratory results for Serum #1249 - 1252 by C1q - class I**

		**** Serum 1249 ****						**** Serum 1250 ****									**** Serum 1251 ****											**** Serum 1252 ****									
Ctr	% POS	A30	B13	Cw18	Cw7	Other	% POS	A25	A26	A31	A33	A34	A68	A69	Cw7	Other	% POS	A23	A24	A32	B38	B49	B51	B52	B53	B57	B58	B59	B63	B77	Other	% POS		Method			
786		+	+	+	+			+	+	+	+	+	+	+	+	Cw16,A6601,A6602		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	NT		C1q
2400		+	+	+	+	Cw4,Cw6>		+	+	+	+	+	+	+	+	A66,A29		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0		C1q		

**Table 32. Individual laboratory results for Serum #1249 - 1252 by NIH-Extended, Flow Cytometry, and C1q - class II**

		**** Serum 1249 ****						**** Serum 1250 ****						**** Serum 1251 ****				**** Serum 1252 ****						
Ctr	% POS					Other	% POS						Other	% POS				Other	% POS				Other	Method
3753	U						U							U					U					EXT

EXT = NIH-Extended; U = Undetermined

		**** Serum 1249 ****						**** Serum 1250 ****						**** Serum 1251 ****				**** Serum 1252 ****						
Ctr	% POS					Other	% POS						Other	% POS				Other	% POS				Other	Method
3224	86						100							72					NT					FC
5214	88						99							69					0					FC
8067	94						97							98					0					FC

FC = Flow Cytometry

		**** Serum 1249 ****						**** Serum 1250 ****												**** Serum 1251 ****				**** Serum 1252 ****										
Ctr	% POS	DQ2	DQ4	DQ6	DQ8	DR7	Other	% POS	DQ4	DR103	DR11	DR12	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR8	DR51	DR52	Other	% POS				Other	% POS				Other	Method
2400		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQ7,DPw1>	0					0					C1q



**Table 33. Individual laboratory results for Serum #1249 - 1252 by Other - class II**

**** Serum 1249 ****														**** Serum 1250 ****															
Ctr	% POS	DQ2	DR12	DR7	DR9	DR52							Other	% POS	DQ4	DR103	DR11	DR12	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR8	DR10	Other	Method
2400		+	+	+	+	+								100															Other
3753	43	+	+	+	+									97	+	+	+	+	+	+	+	+	+	+	+	+	+		Other

**** Serum 1251 ****														**** Serum 1252 ****																
Ctr	% POS	DQ7	DQ8	DQ9	DR1	DR10	DR4	DR7	DR9	DR103	DR15	DR16	DR51	DR53	Other	% POS													Other	Method
2400		+	+	+	+	+	+	+	+		+	+	+	+		0													Other	
3753	90	+	+	+	+	+	+	+	+	+						0													Other	

Other = Luminex PRA

**Table 34. Individual laboratory results for Serum #1249 by Luminex - class II**

**** Serum 1249 ****												
Ctr	% POS	DQ2	DR12	DR7	DR9	DR52	DQA1*02	DR18	DQA1*05	DQ9	DQ7	Other
615		+	+	+	+	+	+	+				DR17
774	66	+	+	+	+	+						
910		+	+	+	+	+		+				
2400		+	+	+	+	+						
3224		+	+	+	+	+	+	+				
3582		+	+	+	+	+	+	+				DR8,DR11,DR13,DR14 >
3632	78	+	+	+	+	+	+	+				DPw6
3753		+	+	+	+	+						DRB3*01:01,DRB3*03:01
3766	70	+	+	+	+	+	+		+			
3966	17	+	+	+	+	+	+		+			
4322		+	+	+	+	+	+	+				DR8,DR11,DR13,DR14 >
5214		+	+	+	+	+						
5219	13	+	+	+	+	+						DPA1*02
5462		+	+	+	+	+						
6649	15	+	+	+	+	+						
8048	51	+	+	+	+	+						
8058	16	+	+	+	+	+				+	+	DQ8
8062		+	+	+	+	+	+					
8082		+	+	+	+	+	+	+	+			
8086	200	+	+	+	+	+				+	+	DQ4
8100		+	+	+	+	+				+	+	DQ4
8103		+	+	+	+	+						

**Table 35. Individual laboratory results for Serum #1250 by Luminex - class II**

		**** Serum 1250 ****																																			
Ctr	% POS	DQ4	DR103	DR11	DR12	DR13	DR14	DR15	DR16	DR17	DR18	DR4	DR52	DR8	DP11	DP13	DP15	DP19	DPw1	DPw5	DR51	DP23	DQA1*04	DQA1*05	DQ7	DQA1*06	DPw4	DP401	DQA1*03	DQ9	DQ6	DQ8	DQ2	DPA1*04	Other		
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DRB5*01:01,DQB1*06:01>	
774	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DRB5*01:01	
3582		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DRB5*01:01,DQB1*06:01>	
3632	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DRB5*01:01,DQB1*06:01	
3766	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQB1*06:01	
3966	58	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DQA1*02	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DPA1*01,DPA1*02>	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
5219	69	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR2,DR3,DR5,DR6 >	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DRB5*01:01,DPB1*04:01>	
6649	69	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8048	97	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8058	59	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR1,DR3,DR1403,DR1404 >

**Table 36. Individual laboratory results for Serum #1251-1252 by Luminex - class II**

**** Serum 1251 ****																			**** Serum 1252 ****												
Ctr	% POS	DR4	DR53	DQ7	DQ8	DQ9	DR10	DR9	DR1	DR7	DQ5	DR103	DQ2	DR15	DR51	DR16	DQ6	DQA1*05	DQA1*06	Other	Ctr	% POS	DP10	DP14	DR7	DP17	DP9	DR1	Other	Method	
615	NT																				615		+	+	+	+	+			LMX	
774	20	+	+																		774	0								LMX	
910		+	+	+	+	+	+	+	+	+		+		+	+	+				DP15	910		+	+	+					LMX	
2400		+	+	+	+	+	+	+	+	+	+		+	+		+				DP15	2400		+	+						LMX	
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	DQB1*05:02,DQB1*06:02	3224		+	+	+	+					LMX
3582	NT																				3582		+	+	+	+	+			LMX	
3632	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DQ4,DP14,DQA1*02	3632	22	+	+	+	+	+	+			LMX
3753		+	+	+	+	+	+	+	+	+		+									3753	0									LMX
3766	97	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+			DQA1*02,DQB1*05:02	3766	63	+	+	+	+	+	+	DR4,DPw6,DP11		LMX
3966	47	+	+	+	+	+	+	+										+	+	DQA1*03	3966										LMX
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR4,DQA1*02,DQA1*03>	4322		+	+	+	+	+	+	DR4,DP11,DQ4>		LMX
5214		+	+	+	+	+	+	+				+	+								5214		+	+							LMX
5219	9	+											+								5219	0									LMX
5462		+	+	+	+	+	+	+			+									DQB1*05:02	5462		+	+							LMX
6649	22	+	+				+	+	+	+					+					DR52	6649	1						DR15		LMX	
8048	43	+	+	+	+	+	+	+													8048	0	+		+						LMX
8058	4									+											8058										LMX
8062		+	+	+	+	+															8062		+	+	+						LMX
8082		+	+	+	+	+					+							+	+	DQA1*03	8082		+	+	+	+	+	+	DR4		LMX
8086	200	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DR52	8086										LMX
8100		+	+	+	+	+	+	+	+		+	+	+				+				8100		+	+							LMX
8103		+																			8103										LMX