

# UCLA INTERNATIONAL HLA DNA EXCHANGE—163RD SUMMARY



SEPTEMBER 09, 2020

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DNA Sample	
#999	#1002
#1000	#1003
#1001	#1004

## DNA #999 ASIAN

The consensus type for this sample from an Asian donor is A\*02:06-B\*51:01-B\*59:01-C\*01:02-C\*14:02-DRB1\*04:05-DRB4\*01:03-DQA1\*03:03-DQB1\*04:01-DPA1\*01:03-DPB1\*02:01.

The likely associations for this cell are A\*02:06-B\*51:01-DRB1\*04:05 and A\*02:06-B\*59:01-DRB1\*04:05, with respective frequencies of HF=0.00085 and HF=0.00280, found exclusively in Asians, according to the NMDP Bioinformatics website.

The results for DNA #999 are summarized in Table 1 and individual laboratory results are listed in Tables 7-9.

## DNA #1000 ASIAN

The consensus type for this sample from an Asian donor is A\*24:07-A\*33:03-B\*35:05-B\*44:03-C\*04:01-C\*07-DRB1\*07:01-DRB1\*12:02-DRB3\*03:01-DRB4\*01:03-DQA1\*02:01-DQA1\*06-DQB1\*02:02-DQB1\*03:01-DPA1\*01:03-DPA1\*02:02-DPB1\*04:01-DPB1\*05:01.

A consensus for the second C locus could not be reached seeing as 90% agreement was not obtained. Six participants reported C\*07:06:01:01, 11 participants reported C\*07:06:01, 5 participants reported C\*07:01:01G, 4 participants reported C\*07:01P, 24 participants reported C\*07:06, 2 participants reported C\*07:01, and 1 participant reported C\*16:01. Because the ambiguity includes both the C\*07:06 and C\*07:01 alleles, a consensus could not be agreed upon. Ninety-four percent of our participants reporting NGS results reported C\*07:06.

A consensus for the second DQA locus could not be reached as well seeing as 80% agreement was not obtained. Four participants reported DQA1\*06:01:01, 13 participants reported DQA1\*06:01, 1 participant reported DQA1\*03:01, 1 participant reported DQA1\*01:01, and 21 participants reported a NEW allele. Twenty participants commented they observed a novel DQA1\*06 allele with one nucleotide change from DQA1\*06:01:01 at position 191 in exon 2 (G ->A).

The likely associations for this cell are A\*24:07-B\*35:05-DRB1\*12:02 and A\*33:03-B\*44:03-DRB1\*07:01, with respective frequencies of HF=0.00415 and HF=0.01499, as seen in Asians, according to the NMDP Bioinformatics website.

The results for DNA #1000 are summarized in Table 2 and individual laboratory results are listed in Tables 10-12.

## DNA #1001 HISPANIC

The consensus type for this sample from a Hispanic donor is A\*24:25-A\*30:02-B\*15:30-B\*57:03-C\*01:02-C\*18:02-DRB1\*04:03-DRB1\*13:01-DRB3\*03:01-DRB4\*01:03-DQA1\*01:02-DQA1\*03:01-DQB1\*03:02-DQB1\*05:01-DPA1\*01:03-DPB1\*03:01:01G-DPB1\*04:02.

The likely class II associations for this cell are DRB1\*04:03-DQB1\*03:02 and DRB1\*13:01-DQB1\*05:01, with respective frequencies of HF=0.01716 and HF=0.00186, as seen in Hispanic, according to the NMDP Bioinformatics website.

The results for DNA #1001 are summarized in Table 3 and individual laboratory results are listed in Tables 13-15.



DNA Sample	
#999	#1002
#1000	#1003
#1001	#1004

### DNA #1002 HISPANIC

The consensus type for this sample from a Hispanic donor is A\*24:02-A\*68:03-B\*39:05-B\*40:01-C\*03:04-C\*07:02-DRB1\*01:01-DRB1\*04:07-DRB4\*01:03-DQA1\*01:01-DQA1\*03:01-DQB1\*03:02-DQB1\*05:01-DPA1\*02:02-DPB1\*01:01-DPB1\*13:01.

The likely class I associations in this cell are A\*24:02-B\*40:01-C\*03:04 and A\*68:03-B\*39:05-C\*07:02, with respective frequencies of HF=0.00121 and HF=0.00653, as seen in Hispanics, according to the NMDP Bioinformatics website.

The results for DNA #1002 are summarized in Table 4 and individual laboratory results are listed in Tables 16-18.

### DNA #1003 HISPANIC

The consensus type for this sample from a Hispanic donor is A\*02:01-A\*29:02-B\*44:03-B\*51:13-C\*15:02-C\*16:01-DRB1\*04:04-DRB1\*07:01-DRB4\*01:01-DRB4\*01:03-DQA1\*02:01-DQA1\*03:01-DQB1\*02:02-DQB1\*03:02-DPA1\*01:03-DPA1\*02:01-DPB1\*04:02-DPB1\*11:01.

This is the second time we have seen B\*51:13 in the DNA Exchange. The likely association for this cell is A\*02:01-B\*51:13-C\*15:02, as seen in DNA Exchange sample 957, also a Hispanic donor.

The results for DNA #1003 are summarized in Table 5 and individual laboratory results are listed in Tables 19-21.

### DNA #1004 CAUCASIAN

The consensus type for this sample from a Caucasian donor is A\*24:02-A\*26:01-B\*38:09-B\*44:03-C\*12:03-C\*16:01-DRB1\*04:02-DRB1\*15:01-DRB4\*01:03-DRB5\*01:01-DQA1\*01:02-DQA1\*03:01-DQB1\*03:02-DQB1\*06:02-DPA1\*01:03-DPB1\*04:01.

This is the first B\*38:09 sent out in the DNA Exchange. Three participants mistyped B\*38:09 as B\*38:01. B\*38:09 differs from B\*38:01 by “mutation C->G at position 483 in exon 3, resulting in an amino-acid substitution at codon 161 from aspartic acid in B\*38:01 to glutamic acid in B\*38:09, respectively” as noted in *A novel B\*38 allele, B\*38019, was identified via sequence-based typing of B-cell line no. 299 of the UCLA International Cell Exchange* (Witter K et al. Tissue Antigens. 2003; 62(6):548-550).

The likely class II associations in this cell are DRB1\*04:02-DQB1\*03:02 and DRB1\*15:01-DQB1\*06:02, with respective frequencies of HF=0.00966 and HF=0.14155, as seen in Caucasians, according to the NMDP Bioinformatics website.

The results for DNA #1004 are summarized in Table 6 and individual laboratory results are listed in Tables 22-24.

#### ACKNOWLEDGMENTS:

The UCLA Immunogenetics Center would like to express our deepest thanks to One Legacy and all organ and tissue donors and their families for giving the gift of knowledge by their generous donation to the education and advancement of the study of HLA. We would also like to thank the NMDP Bioinformatics website (<https://bioinformatics.bethematchclinical.org>) and the 43 participants reporting their NGS results (See Tables 7, 10, 13, 16, 19, 22).



**Table 2. Summary of the 163rd DNA Exchange (DNA #1000)**

A				B				C			
55 labs High / 58 labs Low		% (n)		57 labs High / 57 labs Low		% (n)		54 labs High / 54 labs Low		% (n)	
A*24:07:01:01	2 (1)	A*33:03:01:01	2 (1)	B*35:05:01:01	11(6)	B*44:03:02:01	2 (1)	C*04:01:01	28(15)	C*07:06:01:01	11(6)
A*24:07:01	32(17)	A*33:03:01	25(14)	B*35:05:01	23(13)	B*44:03:02	26(15)	C*04:01:01G	9 (5)	C*07:06:01	21(11)
A*24:07	64(34)	A*33:03:01G	9 (5)	B*35:05P	5 (3)	B*44:03:01	2 (1)	C*04:01P	7 (4)	C*07:01:01G	9 (5)
A*02:01	2 (1)	A*33:03P	7 (4)	B*35:05	55(31)	B*44:03:02G	5 (3)	C*04:01	54(29)	C*07:01P	7 (4)
A*24	98(57)	A*33:03	53(29)	B*35:01	4 (2)	B*44:03P	7 (4)	C*15:02	2 (1)	C*07:06	45(24)
A*02	2 (1)	A*33:01	2 (1)	B*51:13	2 (1)	B*44:03	58(33)	C*04	98(53)	C*07:01	4 (2)
		A*29:02	2 (1)	B*35	98(56)	B*44	98(56)	C*15	2 (1)	C*16:01	2 (1)
		A*33	98(57)	B*51	2 (1)	B*45	2 (1)			C*07	98(53)
		A*29	2 (1)							C*16	2 (1)

  

DRB1				DRB3/4/5				DQA1			
56 labs High / 59 labs Low		% (n)		31 labs High / 38 labs Low				40 labs High / 42 labs Low		% (n)	
DRB1*07:01:01	18(10)	DRB1*12:02:01	29(16)	DRB3*03:01:03	35(11)	DRB4*01:03:01	32(9)	DQA1*02:01:01	32(12)	DQA1*06:01:01	10(4)
DRB1*07:01:01G	14(8)	DRB1*12:01:01	2 (1)	DRB3*03:01P	6 (2)	DRB4*01:01:01G	4 (1)	DQA1*02:01:01G	5 (2)	DQA1*06:01	32(13)
DRB1*07:01P	16(9)	DRB1*12:02P	7 (4)	DRB3*03:01	48(15)	DRB4*01:01P	4 (1)	DQA1*02:01	63(24)	DQA1*03:01	3 (1)
DRB1*07:01	52(29)	DRB1*12:02	61(34)	<i>DRB3*01:01</i>	6 (2)	DRB4*01:03	50(14)	DQA1*02	100(42)	DQA1*01:01	3 (1)
DRB1*07	100(59)	<i>DRB1*04:04</i>	2 (1)	<i>DRB4*01:03</i>	3 (1)	<i>DRB4*01:01</i>	7 (2)			NEW	53(21)
		DRB1*12	98(58)	DRB3*03	66(25)	<i>DRB3*03:01</i>	4 (1)			DQA1*06	90(38)
		<i>DRB1*04</i>	2 (1)	<i>DRB3*01</i>	3 (1)	DRB4*01	68(26)			<i>DQA1*04</i>	5 (1)
				<i>DRB4*01</i>	3 (1)	DRB4*PRESENT	32(12)			<i>DQA1*03</i>	2 (1)
				DRB3*PRESENT	29(11)					NEW	2 (1)

  

DQB1				DPA1				DPB1			
52 labs High / 56 labs Low		% (n)		30 labs High / 29 labs Low		% (n)		52 labs High / 27 labs Low		% (n)	
DQB1*02:02:01	15(8)	DQB1*03:01:01	25(13)	DPA1*01:03:01:04	3 (1)	DPA1*02:02:02	40(12)	DPB1*04:01:01	16(8)	DPB1*05:01:01	15(8)
DQB1*02:01:01G	13(7)	DQB1*03:01:01G	8 (4)	DPA1*01:03:01	33(10)	DPA1*02:02P	3 (1)	DPB1*04:01:01G	25(13)	DPB1*05:01:01G	25(13)
DQB1*02:01P	10(5)	DQB1*03:01P	6 (3)	DPA1*01:03:01G	3 (1)	DPA1*02:02	57(17)	DPB1*04:01P	22(11)	DPB1*05:01P	19(10)
DQB1*02:02	61(32)	DQB1*03:01	59(30)	DPA1*01:03P	7 (2)	DPA1*02	100(29)	DPB1*04:01	35(18)	DPB1*05:01	38(20)
DQB1*02	100(55)	<i>DQB1*03:02</i>	2 (1)	DPA1*01:03	53(16)			<i>DPB1*04:02</i>	2 (1)	<i>DPB1*11:01</i>	2 (1)
		DQB1*03	100(56)	DPA1*01	100(29)			DPB1*04(DP401)	96(25)	DPB1*05	96(26)
								<i>DPB1*04(DP402)</i>	4 (1)	<i>DPB1*11</i>	4 (1)

Discrepant results from consensus are italicized in Tables 1-6

**Table 3. Summary of the 163rd DNA Exchange (DNA #1001)**

A				B				C			
58 labs High / 55 labs Low		% (n)		58 labs High / 55 labs Low		% (n)		57 labs High / 51 labs Low		% (n)	
A*24:25	95(55)	A*30:02:01:03	2 (1)	B*15:30:01	34(20)	B*57:03:01:01	9 (5)	C*01:02:01:01	2 (1)	C*18:02:01:01	2 (1)
A*24:02	5 (3)	A*30:02:01	26(15)	B*15:30	59(34)	B*57:03:01	22(13)	C*01:02:01	25(14)	C*18:02:01	29(16)
A*24	100(55)	A*30:02:01G	9 (5)	B*15:01	5 (3)	B*57:03:01G	5 (3)	C*01:02:01G	5 (3)	C*18:01:01G	4 (2)
		A*30:02P	5 (3)	B*38:09	2 (1)	B*57:03P	5 (3)	C*01:02P	5 (3)	C*18:01P	5 (3)
		A*30:02	57(33)	B*15	96(53)	B*57:03	55(32)	C*01:02	61(35)	C*18:02	47(26)
		A*26:01	2 (1)	B*38	2 (1)	B*57:01	2 (1)	C*12:03	2 (1)	C*18:01	11(6)
		A*30	98(54)	B*27	2 (1)	B*44:03	2 (1)	C*01	98(50)	C*16:01	2 (1)
		A*26	2 (1)			B*57	98(54)	C*12	2 (1)	C*18	98(50)
						B*44	2 (1)			C*16	2 (1)

  

DRB1				DRB3/4/5				DQA1			
58 labs High / 57 labs Low		% (n)		32 labs High / 37 labs Low		% (n)		40 labs High / 40 labs Low		% (n)	
DRB1*04:03:01	25(14)	DRB1*13:01:01	26(15)	DRB3*03:01:01	28(9)	DRB4*01:03:01	34(10)	DQA1*01:02:01	33(13)	DQA1*03:01:01	35(14)
DRB1*04:03P	12(7)	DRB1*13:01:01G	3 (2)	DRB3*03:01:01G	3 (1)	DRB4*01:01:01G	3 (1)	DQA1*01:02:01G	5 (2)	DQA1*03:01:01G	5 (2)
DRB1*04:03	61(35)	DRB1*13:01P	5 (3)	DRB3*03:01P	6 (2)	DRB4*01:01P	3 (1)	DQA1*01:02	61(24)	DQA1*03:01	60(24)
DRB1*04:02	2 (1)	DRB1*13:01	60(35)	DRB3*03:01	59(19)	DRB4*01:03	52(15)	DQA1*01	100(40)	DQA1*03	100(40)
DRB1*04	100(57)	DRB1*13:02	3 (2)	DRB3*01:01	3 (1)	DRB4*01:01	7 (2)				
		DRB1*15:01	2 (1)	DRB3*03	68(25)	DRB4*01	70(26)				
		DRB1*13	98(56)	DRB3*01	3 (1)	DRB4*PRESENT	30(11)				
		DRB1*15	2 (1)	DRB5*01	3 (1)						
				DRB3*PRESENT	27(10)						

  

DQB1				DPA1				DPB1			
56 labs High / 54 labs Low		% (n)		31 labs High / 29 labs Low		% (n)		52 labs High / 25 labs Low		% (n)	
DQB1*03:02:01	12(7)	DQB1*05:01:01:03	4 (2)	DPA1*01:03:01	32(10)			DPB1*03:01:01	10(5)	DPB1*463:01:01:02	2 (1)
DQB1*03:02:01G	14(8)	DQB1*05:01:01	20(11)	DPA1*01:03:01G	6 (2)			DPB1*03:01:01G	33(17)	DBP1*04:02:01	10(5)
DQB1*03:02P	11(6)	DQB1*05:01:01G	7 (4)	DPA1*01:03P	6 (2)			DPB1*03:01P	25(13)	DBP1*04:02:01G	29(15)
DQB1*03:02	62(35)	DQB1*05:01P	5 (3)	DPA1*01:03	52(16)			DPB1*03:01	29(15)	DBP1*04:01:01G	2 (1)
DQB1*03	100(54)	DQB1*05:01	62(35)	NEW	3 (1)			DPB1*04:01	2 (1)	DBP1*04:02P	25(13)
		DQB1*06:02	2 (1)	DPA1*01	100(29)			DPB1*351:01	2 (1)	DBP1*04:02	31(16)
		DQB1*05	98(53)					DPB1*03	96(24)	DBP1*04:01	2 (1)
		DQB1*06	2 (1)					DPB1*04(DP401)	4 (1)	DBP1*04(DP401)	96(24)
										DBP1*04(DP401)	4 (1)

Discrepant results from consensus are italicized in Tables 1-6



**Table 5. Summary of the 163rd DNA Exchange (DNA #1003)**

A				B				C			
55 labs High / 58 labs Low		% (n)		58 labs High / 58 labs Low		% (n)		54 labs High / 55 labs Low		% (n)	
A*02:01:01:01	2 (1)	A*29:02:01:01	13(7)	B*44:03:01	32(18)	B*51:13:01	38(22)	C*15:02:01:01	11(6)	C*16:01:01:01	11(6)
A*02:01:01	29(16)	A*29:02:01	20(11)	B*44:03:01G	9 (5)	B*51:13P	5 (3)	C*15:02:01	20(11)	C*16:01:01	22(12)
A*02:01:01G	7 (4)	A*29:02:01G	7 (4)	B*44:03P	7 (4)	B*51:13	55(32)	C*15:01:01G	9 (5)	C*16:01:01G	7 (4)
A*02:01P	7 (4)	A*29:02P	7 (4)	B*44:03	51(29)	<i>B*44:03</i>	2 (1)	C*15:01P	7 (4)	C*16:01P	7 (4)
A*02:01	52(28)	A*29:02	47(26)	B*35:05	2 (1)	B*51	96(56)	C*15:02	52(28)	C*16:01	50(27)
<i>A*24:07</i>	2 (1)	<i>A*29:01</i>	4 (2)	B*44	100(58)	<i>B*59</i>	2 (1)	C*15	98(54)	<i>C*07:06</i>	2 (1)
A*02	98(57)	<i>A*33:03</i>	2 (1)			<i>B*35</i>	2 (1)	<i>C*04</i>	2 (1)	C*16	98(54)
<i>A*24</i>	2 (1)	A*29	97(56)							<i>C*05</i>	2 (1)
		<i>A*33</i>	2 (1)								
		<i>A*02</i>	2 (1)								

DRB1				DRB3/4/5				DQA1			
55 labs High / 60 labs Low		% (n)		30 labs High / 39 labs Low				41 labs High / 41 labs Low		% (n)	
DRB1*04:04:01	35(19)	DRB1*07:01:01	18(10)	DRB4*01:01:01:01	7 (2)	DRB4*01:03:01	37(11)	DQA1*02:01:01	37(15)	DQA1*03:01:01	39(16)
DRB1*04:04P	7 (4)	DRB1*07:01:01G	14(8)	DRB4*01:01:01	33(10)	DRB4*01:01:01G	3 (1)	DQA1*02:01:01G	5 (2)	DQA1*03:01:01G	5 (2)
DRB1*04:04	56(30)	DRB1*07:01P	16(9)	DRB4*01:01P	10(3)	DRB4*01:01P	10(3)	DQA1*02:01	58(24)	DQA1*03:01P	2 (1)
<i>DRB1*12:02</i>	2 (1)	DRB1*07:01	51(28)	DRB4*01:01	50(15)	DRB4*01:03	43(13)	DQA1*02	100(41)	DQA1*03:01	49(20)
DRB1*04	98(59)	DRB1*07	100(60)	DRB4*01	67(26)	<i>DRB4*01:01</i>	7 (2)			<i>DQA1*03:02</i>	2 (1)
<i>DRB1*12</i>	2 (1)			<i>DRB3*03</i>	3 (1)	DRB4*01	67(24)			NEW	2 (1)
				DRB4*PRESENT	31(12)	DRB4*PRESENT	33(12)			DQA1*03	98(40)
										<i>DQA1*06</i>	2 (1)

DQB1				DPA1				DPB1			
54 labs High / 57 labs Low		% (n)		29 labs High / 29 labs Low		% (n)		50 labs High / 29 labs Low		% (n)	
DQB1*02:02:01:01	2 (1)	DQB1*03:02:01	13(7)	DPA1*01:03:01	41(12)	DPA1*02:01:01:01	7 (2)	DPB1*04:02:01	31(15)	DPB1*11:01:01	30(15)
DQB1*02:02:01	13(7)	DQB1*03:02:01G	15(8)	DPA1*01:03:01G	3 (1)	DPA1*02:01:01	31(9)	DPB1*04:02:01G	12(6)	DPB1*11:01:01G	12(6)
DQB1*02:01:01G	13(7)	DQB1*03:02P	13(7)	DPA1*01:03P	7 (2)	DPA1*02:01:01G	7 (2)	DPB1*04:02P	16(8)	DPB1*11:01P	16(8)
DQB1*02:01P	11(6)	DQB1*03:02	57(31)	DPA1*01:03	48(14)	DPA1*02:01P	7 (2)	DPB1*04:02	39(19)	DPB1*11:01	40(20)
DQB1*02:02	60(32)	<i>DQB1*03:01</i>	2 (1)	DPA1*01	100(29)	DPA1*02:01	48(14)	<i>DPB1*04:01</i>	2 (1)	<i>DPB1*05:01</i>	2 (1)
DQB1*02	100(57)	DQB1*03	100(57)			DPA1*02	100(29)	DPB1*04(DP402)	96(27)	DPB1*11	97(28)
								<i>DPB1*04(DP401)</i>	4 (1)	<i>DPB1*05</i>	3 (1)

Discrepant results from consensus are italicized in Tables 1-6

**Table 6. Summary of the 163rd DNA Exchange (DNA #1004)**

A				B				C			
54 labs High / 56 labs Low		% (n)		57 labs High / 56 labs Low		% (n)		55 labs High / 53 labs Low		% (n)	
A*24:02:01:01	2 (1)	A*26:01:01:01	15(8)	B*38:09	93(52)	B*44:03:01:01	2 (1)	C*12:03:01:01	11(6)	C*16:01:01:01	13(7)
A*24:02:01	34(18)	A*26:01:01	22(12)	<i>B*38:01</i>	5 (3)	B*44:03:01	33(19)	C*12:03:01	25(14)	C*16:01:01	24(13)
A*24:02:01G	6 (3)	A*26:01:01G	6 (3)	<i>B*15:30</i>	2 (1)	B*44:03:01G	7 (4)	C*12:03:01G	5 (3)	C*16:01:01G	6 (3)
A*24:02P	7 (4)	A*26:01P	7 (4)	B*38	98(55)	B*44:03P	7 (4)	C*12:03P	7 (4)	C*16:01P	7 (4)
A*24:02	49(26)	A*26:01	48(26)	<i>B*15</i>	2 (1)	B*44:03	49(28)	C*12:03	47(26)	C*16:01	48(26)
<i>A*24:25</i>	2 (1)	<i>A*30:02</i>	2 (1)			<i>B*57:03</i>	2 (1)	<i>C*12:02</i>	2 (1)	<i>C*16:02</i>	2 (1)
A*24	100(56)	A*26	98(55)			B*44	96(54)	<i>C*01:02</i>	2 (1)	C*16	98(52)
		<i>A*30</i>	2 (1)			<i>B*57</i>	2 (1)	C*12	98(52)	<i>C*18</i>	2 (1)
						<i>B*39</i>	2 (1)	<i>C*01</i>	2 (1)		
<b>DRB1</b>				<b>DRB3/4/5</b>				<b>DQA1</b>			
56 labs High / 58 labs Low		% (n)		30 labs High / 37 labs Low		% (n)		41 labs High / 38 labs Low		% (n)	
DRB1*04:02:01	36(20)	DRB1*15:01:01	24(13)	DRB4*01:03:01	37(11)	DRB5*01:01:01	33(10)	DQA1*01:02:01:01	2 (1)	DQA1*03:01:01	41(17)
DRB1*04:02P	7 (4)	DRB1*15:01:01G	7 (4)	DRB4*01:01:01G	10(3)	DRB5*01:01:01G	10(3)	DQA1*01:02:01	37(15)	DQA1*03:01:01G	5 (2)
DRB1*04:02	55(31)	DRB1*15:01P	17(9)	DRB4*01:01P	7 (2)	DRB5*01:01P	7 (2)	DQA1*01:02:01G	5 (2)	DQA1*03:01P	2 (1)
<i>DRB1*04:03</i>	2 (1)	DRB1*15:01	49(26)	DRB4*01:03	40(12)	DRB5*01:01	50(15)	DQA1*01:02P	2 (1)	DQA1*03:01	51(21)
DRB1*04	100(58)	<i>DRB1*13:01</i>	2 (1)	<i>DRB4*01:01</i>	7 (2)	DRB5*01	67(25)	DQA1*01:02	21(52)	DQA1*03	100(38)
		DRB1*15	98(57)	DRB4*01	68(25)	<i>DRB3*03</i>	3 (1)	DQA1*01	100(38)		
		<i>DRB1*13</i>	2 (1)	DRB4*PRESENT	32(12)	DRB5*PRESENT	30(11)				
<b>DQB1</b>				<b>DPA1</b>				<b>DPB1</b>			
54 labs High / 55 labs Low		% (n)		31 labs High / 27 labs Low		% (n)		49 labs High / 25 labs Low		% (n)	
DQB1*03:02:01	17(9)	DQB1*06:02:01:01	4 (2)	DPA1*01:03:01:04	6 (2)			DPB1*04:01:01	35(17)		
DQB1*03:02:01G	15(8)	DQB1*06:02:01	19(10)	DPA1*01:03:01	35(11)			DPB1*04:01:01G	6 (3)		
DQB1*03:02P	13(7)	DQB1*06:02:01G	6 (3)	DPA1*01:03:01G	3 (1)			DPB1*04:01P	16(8)		
DQB1*03:02	56(30)	DQB1*06:02P	8 (4)	DPA1*01:03P	6 (2)			DPB1*04:01	41(20)		
DQB1*03	100(55)	DQB1*06:02	61(32)	DPA1*01:03	48(15)			<i>DPB1*03:01</i>	2 (1)		
		<i>DQB1*05:01</i>	2 (1)	DPA1*01	100(27)			DPB1*04	96(24)		
		DQB1*06	98(54)					<i>DPB1*03</i>	4 (1)		
		<i>DQB1*05</i>	2 (1)								

Discrepant results from consensus are italicized in Tables 1-6



**Table 7. Individual laboratory results for DNA # 999 using Next Generation Sequencing**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
7	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
16	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	NT	NT	NT	NT	01:02	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:01	02:01
138	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	02:06:01G	02:06:01G	51:01:01G	59:01:01G	01:02:01G	14:02:01G	04:05:01	04:05:01	4*01:03	4*01:03	NT	NT	04:01:01G	04:01:01G	NT	NT	02:01:02G	02:01:02G
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
185	02:06:01G	02:06:01G	51:01:01G	59:01:01G	01:02P	14:02P	04:05P	04:05P	4*01:01P	4*01:01P	03:01:01G	03:01:01G	04:01P	04:01P	NT	NT	02:01:02G	02:01:02G
188	02:06:01:01	02:06:01:04	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03:01:03	03:03:01:03	04:01	04:01	01:03P	01:03P	02:01	02:01
189	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
190	02:06:01:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	NT	NT	NT	NT	04:01:01	04:01:01	NT	NT	02:01:02	02:01:02
192	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03	01:03	02:01:02	02:01:02
195	NT	NT	NT	59:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
205	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
207	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	NT	NT	02:01	02:01
213	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	NT	NT	02:01	02:01
218	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	02:01	02:01
227	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
240	NT	NT	51:01:01	59:01:01	NT	NT	04:05:01	04:05:01	NT	NT	03:03:01	03:03:01	04:01:01	04:01:01	NT	NT	NT	NT
258	02:06:01:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03	01:03	02:01:02	02:01:02
264	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
279	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	NT	NT	02:01	02:01
294	02:06P	02:06P	51:01P	59:01	01:02P	14:02P	04:05P	04:05P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
298	02:06:01:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	NT	NT	03:03:01	03:03:01	04:01:01	04:01:01	NT	NT	02:01:02	02:01:02
316	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	NT	NT	04:01	04:01	NT	NT	02:01	02:01
403	02:06:01:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	NT	NT	NT	NT	04:01:01	04:01:01	NT	NT	02:01:02	02:01:02
702	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05	04:05	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
726	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
732	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
769	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
805	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
1189	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
1251	NT	NT	NT	NT	NT	NT	NT	NT	4*01:03	4*01:03	NT	NT	NT	NT	NT	NT	02:01	02:01
2063	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
3325	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
3410	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	02:01	02:01
3438	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
3582	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4582	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
5451	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	02:06:01	02:06:01	51:01:01	59:01:01	01:02:01	14:02:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02

Final Consensus based on High Resolution	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
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**Table 8. Individual laboratory results for DNA # 999 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	02:06:01G	02:06:01G	51:01:01G	59:01:01G	01:02:01G	14:02:01G	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	02:01:02G	02:01:02G
155	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
162	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
173	02:01	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
176	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	NT	NT	02:01	02:01
193	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	04:05	04:05	NT	NT	NT	NT	NT	NT	NT	NT	02:01P	02:01P
239	02:06	NT	NT	59:01	01:02	14:02	NT	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	NT	NT	02:01P	02:01P
267	02:01	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:01	4*01:01	03:02	03:02	04:01	04:01	NT	NT	NT	NT
278	02:01	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
292	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
313	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	NT	NT
317	02:01	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:01	4*01:01	03:02	03:02	04:01	04:01	01:03	01:03	02:01	02:01
331	02:06:01:01	02:06:01	51:01:01:01	59:01:01	01:02:01:01	14:02:01:01	04:05:01	04:05:01	4*01:03:01	4*01:03:01	03:03:01	03:03:01	04:01:01	04:01:01	01:03:01	01:03:01	02:01:02	02:01:02
402	02:06	02:06	50:01	59:01	01:02	14:02	04:05	04:05	NT	NT	NT	NT	04:01	04:01	NT	NT	02:01	02:01
714	02:06P	02:06P	51:01P	59:01P	01:02P	14:02P	04:05P	04:05P	NT	NT	NT	NT	04:01P	04:01P	01:03P	01:03P	02:01P	02:01P
2015	02:06P	02:06P	51:01P	59:01P	01:02P	14:02P	04:05P	04:05P	NT	NT	NT	NT	04:01P	04:01P	NT	NT	02:01P	02:01P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:03	01:03	02:01	02:01
2549	02:06:01G	02:06:01G	51:01:01G	59:01	01:02:01G	14:02	04:05:01	04:05:01	NT	NT	03:01:01G	03:01:01G	04:01	04:01	01:03:01G	01:03:01G	02:01:02G	02:01:02G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:01P	02:01P
3625	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	NT	NT	02:01	02:01
3849	02:06:01G	02:06:01G	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	NT	NT	03:01	03:03	04:01	04:01	01:03	01:03	02:01	02:01
4545	02:06:01G	02:06:01G	51:01:01G	59:01	01:02	14:02	04:05	04:05	NT	NT	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01
4585	NT	NT	NT	59:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4613	02:06P	02:06P	51:01P	59:01P	01:02P	14:02P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:01P	02:01P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Final Consensus	02:06	02:06	51:01	59:01	01:02	14:02	04:05	04:05	4*01:03	4*01:03	03:03	03:03	04:01	04:01	01:03	01:03	02:01	02:01

**Table 9. Individual laboratory results for DNA # 999 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
134	02	02	51	59	01	14	04	04	NT	NT	NT	NT	04	04	NT	NT	02(DP201)	02(DP201)
138	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
144	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	02	02(DP201)	02(DP201)
147	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
152	02	02	51	59	NT	NT	04	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
188	02	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
189	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	NT	NT
190	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
192	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
195	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
199	NT	NT	NT	NT	NT	NT	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
205	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
213	NT	NT	NT	NT	01	14	04	04	NT	NT	NT	NT	04	04	NT	NT	NT	NT
215	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
227	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
228	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
252	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
255	02	02	51	59	NT	NT	04	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
266	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
267	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	NT	NT	NT	NT
278	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
279	02	02	51	59	01	14	04	04	NT	NT	NT	NT	04	04	NT	NT	NT	NT
280	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
285	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
286	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
290	02	02	51	59	NT	NT	04	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
293	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	04	04	04	04	NT	NT	NT	NT
294	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	NT	NT	NT	NT
305	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
309	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
310	02	02	44	59	NT	NT	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
318	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
329	02	02	51	59	01	14	04	NT	4*PRESENT	NT	NT	NT	04	NT	NT	NT	NT	NT
334	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
336	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
339	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
402	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
615	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	NT	NT
702	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
714	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	NT	NT	NT	NT
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
805	02	02	51	59	01	14	04	04	4*01	4*01	NT	NT	04	04	NT	NT	NT	NT

**Table 9. Individual laboratory results for DNA # 999 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	02	02	51	59	01	14	04	04	4*01	4*01	NT	NT	04	04	NT	NT	02(DP201)	02(DP201)
1647	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	03	03	04	04	01	01	02(DP201)	02(DP201)
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2518	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
2549	NT	NT	NT	NT	NT	NT	NT	NT	4*01	NT	NT	NT	NT	NT	NT	NT	NT	NT
3438	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
3600	02	02	51	59	01	14	04	04	4*01	NT	03	03	04	04	01	01	NT	NT
3625	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
3849	02	02	51	59	01	14	04	04	4*PRESENT	4*PRESENT	NT	NT	04	04	NT	NT	NT	NT
4420	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	01	01	02(DP201)	02(DP201)
4545	NT	NT	NT	NT	NT	NT	NT	NT	4*01	4*01	NT	NT	NT	NT	NT	NT	NT	NT
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4582	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
4585	02	02	51	59	01	14	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
4613	02	02	51	59	01	14	04	04	NT	NT	NT	NT	04	04	NT	NT	NT	NT
8050	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)
9221	02	02	51	59	01	14	04	04	4*01	NT	03	NT	04	04	01	NT	02(DP201)	NT
9222	02	02	51	59	NT	NT	04	04	NT	NT	03	03	04	04	NT	NT	NT	NT
<b>Final Consensus</b>	02	02	51	59	01	14	04	04	4*01	4*01	03	03	04	04	01	01	02(DP201)	02(DP201)

**Table 10. Individual laboratory results for DNA # 1000 using Next Generation Sequencing**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
7	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	NEW	02:01:01G	03:01	01:03:01	02:02:02	04:01:01G	05:01:01G
16	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	06:01:01	02:01:01G	03:01	01:03:01	02:02:02	04:01:01G	05:01:01G
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01	05:01
138	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	06:01	02:02	03:01	01:03	02:02	04:01	05:01
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	24:07:01	33:03:01G	35:05:01:01	44:03:02G	04:01:01G	07:06:01:01	07:01:01G	12:02:01	3*03:01:03	4*01:03	NT	NT	02:02	03:01:01G	NT	NT	04:01:01G	05:01:01G
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
185	24:07:01	33:03:01G	35:05:01	44:03:02G	04:01:01G	07:01:01G	07:01P	12:02P	3*03:01P	4*01:01P	02:01:01G	NEW	02:01P	03:01P	NT	NT	04:01:01G	05:01:01G
188	24:07:01:01	33:03	35:05:01:01	44:03:02:01	04:01	07:06:01:01	07:01P	12:02	NT	NT	02:01	NEW	02:02	03:01	01:03P	02:02	04:01P	05:01P
189	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	NT	02:01	NEW	02:02	03:01	01:03	02:02	04:01	05:01
190	24:07:01	33:03:01	35:05:01:01	44:03:02	04:01:01	07:06:01:01	07:01P	12:02:01	NT	NT	NT	NT	02:01P	03:01:01	NT	NT	04:01:01	05:01:01
192	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01G	12:02:01	3*03:01:03	4*01:03:01	02:01:01	NEW	02:02	03:01:01	01:03:01	02:02:02	04:01:01G	05:01:01G
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	06:01	NT	NT	NT	NT	NT	NT	NT
205	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	06:01:01	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01	05:01:01
207	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	02:01	NEW	02:02	03:01	NT	NT	04:01P	05:01P
213	24:07	33:03	35:05	44:03	04:01	07:06	07:01P	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	NT	NT	04:01P	05:01P
218	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	04:01	05:01
227	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	01:03	02:02	04:01	05:01
240	NT	NT	35:05:01	44:03:02	NT	NT	07:01P	12:02:01	NT	NT	02:01:01	NEW	02:01P	03:01:01	NT	NT	NT	NT
258	24:07:01	33:03:01	35:05:01:01	44:03:02	04:01:01	07:06:01:01	07:01:01G	12:02:01	3*03:01:03	4*01:01:01G	02:01:01	NEW	02:01:01G	03:01:01	01:03:01:04	02:02:02	04:01:01	05:01:01
264	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	06:01:01	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01G	05:01:01G
279	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	4*01:03	3*03:01	02:01	06:01	02:02	03:01	NT	NT	04:01P	05:01P
294	24:07	33:03P	35:05	44:03P	04:01P	07:01P	07:01P	12:02P	3*03:01P	NT	NT	NT	NT	NT	NT	NT	NT	NT
298	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	NT	NT	02:01:01	NEW	02:02:01	03:01:01	NT	NT	04:01	05:01
316	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*01:01	4*01:03	NT	NT	02:02	03:01	NT	NT	04:01	05:01
403	24:07:01	33:03:01	35:05:01:01	44:03:02	04:01:01	07:06:01:01	07:01:01G	12:02:01	NT	NT	NT	NT	02:01:01G	03:01:01	NT	NT	04:01:01	05:01:01
702	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	NEW	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01	05:01:01
726	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	01:03	02:02	04:01	05:01
732	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	01:03	02:02	04:01:01G	05:01:01G
769	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	01:03	02:02	04:01P	05:01
805	24:07	33:03	35:05	44:03	04:01	07:06	07:01:01G	12:02	3*03:01	FTA	02:01	NEW	02:02	03:01	01:03	02:02	04:01	05:01
1189	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	06:01	02:02	03:01	01:03	02:02	04:01	05:01
1251	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01	05:01
2063	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01:01	NEW	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01	05:01:01
3325	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	NT	NT	02:02	03:01	01:03	02:02	04:01:01G	05:01:01G
3410	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	04:01	05:01
3438	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
3582	24:07:01	33:03:01	35:05:01	44:03:01	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01	4*01:03	02:01:01	06:01:01	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01	05:01:01
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4582	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	NEW	02:02	03:01	01:03	02:02	04:01:01G	05:01:01G
5451	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	24:07:01	33:03:01	35:05:01	44:03:02	04:01:01	07:06:01	07:01:01	12:02:01	3*03:01:03	4*01:03:01	02:01	NEW	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01	05:01:01
Final Consensus based on High Resolution	24:07	33:03	35:05	44:03	04:01	NG	07:01	12:02	3*03:01	4*01:03	02:01	NG	02:02	03:01	01:03	02:02	04:01	05:01

**Table 11. Individual laboratory results for DNA # 1000 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	24:07	33:03:01G	35:05	44:03	04:01:01G	07:01:01G	07:01:01G	12:02	NT	NT	NT	NT	02:01:01G	03:01:01G	NT	NT	04:01:01G	05:01:01G
155	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
162	24:07	33:03	35:05	44:03	04:01	07:01:01G	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
173	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	02:01	06:01	02:02	03:01	01:03	02:02	04:01	05:01
176	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	02:01	NEW	02:02	03:01	NT	NT	04:01	05:01
193	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	07:01P	12:02	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	05:01P
239	NT	33:03	35:05	44:03	NT	NT	07:01	12:02	3*03:01	4*01:03	02:01	06:01	02:02	NT	NT	NT	04:01P	05:01P
267	24:07	33:01	35:01	44:03	04:01	07:01	07:01	12:02	3*03:01	4*01:01	02:01	06:01	02:02	03:01	NT	NT	NT	NT
278	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	3*03:01	4*01:03	02:01	06:01	02:02	03:01	01:03	02:02	04:01	05:01
292	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:01	06:01	NT	NT	NT	NT	NT	NT
313	24:07	33:03	35:05	44:03	04:01	07:06	07:01	12:02	NT	NT	NT	NT	02:02	03:01	NT	NT	NT	NT
317	24:07	33:03	35:01	44:03	04:01	07:01	07:01	12:02	3*01:01	4*01:01	02:01	01:01	02:02	03:01	01:03	02:02	04:01	05:01
331	24:07:01	33:01:01:01	35:05:01:01	44:03:02	04:01:01	07:06:01:01	07:01:01	12:01:01	3*03:01:03	4*01:03:01	02:01:01	NEW	02:02:01	03:01:01	01:03:01	02:02:02	04:01:01G	05:01:01G
402	NT	NT	35:05	44:03	04:01	NT	07:01	12:02	NT	NT	NT	NT	NT	NT	NT	NT	04:01	05:01
714	24:07	33:03P	35:05P	44:03P	04:01P	07:01P	07:01P	12:02P	NT	NT	NT	NT	02:01P	03:01P	01:03P	02:02P	04:01P	05:01P
2015	24:07	33:03P	35:05P	44:03P	04:01P	07:01P	07:01P	12:02P	NT	NT	NT	NT	02:01P	03:01P	NT	NT	04:01P	05:01P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:03	02:02	04:01	05:01
2549	24:07	33:03:01G	35:05	44:03:02G	04:01:01G	07:01:01G	07:01:01G	12:02:01	NT	NT	02:01:01G	06:01	02:01:01G	03:01:01G	01:03:01G	02:02:02	04:01:01G	05:01:01G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	05:01P
3625	02:01	29:02	51:13	44:03	15:02	16:01	07:01	04:04	NT	NT	02:01	03:01	02:02	03:02	NT	NT	04:02	11:01
3849	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	NT	33:03	NT	44:03	NT	NT	07:01	12:02	NT	NT	02:01	06:01	NT	NT	01:03	02:02	NT	05:01
4545	24:07	33:03:01G	35:05	44:03	04:01:01G	07:01:01G	07:01:01G	12:02	NT	NT	02:01	06:01	02:01:01G	03:01:01G	01:03	02:02	04:01:01G	05:01:01G
4585	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	06:01	NT	NT	NT	NT	NT	NT	NT
4613	24:07	33:03P	35:05P	44:03P	04:01P	07:01P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	05:01P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Final Consensus	24:07	33:03	35:05	44:03	04:01	NG	07:01	12:02	3*03:01	4*01:03	02:01	NG	02:02	03:01	01:03	02:02	04:01	05:01

**Table 12. Individual laboratory results for DNA # 1000 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
134	24	33	35	44	04	07	07	12	NT	NT	NT	NT	02	03	NT	NT	04(DP401)	05
138	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
144	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
147	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
152	24	33	35	44	NT	NT	07	12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
189	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	NT	NT
190	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
192	24	33	35	44	04	07	07	12	3*03	4*01	02	NEW	02	03	01	02	04(DP401)	05
195	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
199	NT	NT	NT	NT	NT	NT	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
205	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
213	NT	NT	NT	NT	04	07	07	12	NT	NT	NT	NT	02	03	NT	NT	NT	NT
215	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
227	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
228	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
252	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
255	24	33	35	44	NT	NT	07	12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
266	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
267	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	NT	NT	NT	NT
278	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
279	24	33	35	44	04	07	07	12	NT	NT	NT	NT	02	03	NT	NT	NT	NT
280	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
285	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
286	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
290	24	33	35	44	NT	NT	07	12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
293	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	02	06	02	03	NT	NT	NT	NT
294	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	NT	NT	NT	NT
305	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
309	24	33	35	44	04	07	07	12	NT	NT	02	04	NT	03	01	02	04(DP401)	05
310	24	33	35	44	NT	NT	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
311	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	02	06	02	03	NT	NT	NT	NT
318	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
329	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
334	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	04(DP401)	05
336	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
339	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
402	24	33	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
615	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	NT	NT
702	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
714	24	33	35	45	04	07	07	12	3*01	4*01	02	06	02	03	NT	NT	NT	NT
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
805	24	33	35	44	04	07	07	12	3*03	4*01	NT	NT	02	03	NT	NT	NT	NT

**Table 12. Individual laboratory results for DNA # 1000 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
1647	24	33	35	44	04	07	07	12	3*PRESENT	4*PRESENT	02	06	02	03	01	02	04(DP401)	05
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2518	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
2549	NT	NT	NT	NT	NT	NT	NT	NT	3*03	4*01	NT	NT	NT	NT	NT	NT	NT	NT
3438	24	33	35	44	04	07	07	12	NT	NT	02	04	02	03	NT	NT	NT	NT
3600	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	NT	NT
3625	02	29	51	44	15	16	07	04	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
3849	24	33	35	44	04	07	07	12	3*03	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
4420	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	01	02	NT	05
4545	NT	NT	NT	NT	NT	NT	NT	NT	3*03	4*01	NT	NT	NT	NT	NT	NT	NT	NT
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4582	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
4585	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
4613	24	33	35	44	04	07	07	12	NT	NT	NT	NT	02	03	NT	NT	NT	NT
8050	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
9221	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05
9222	24	33	35	44	04	07	07	12	NT	NT	02	06	02	03	NT	NT	NT	NT
<b>Final Consensus</b>	24	33	35	44	04	07	07	12	3*03	4*01	02	06	02	03	01	02	04(DP401)	05



**Table 13. Individual laboratory results for DNA # 1001 using Next Generation Sequencing**

CENTER	A		B		C		DRB1	DRB3/4/5		DQA1		DQB1		DPA1		DPB1		
7	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01G	05:01	01:03:01	01:03:01	03:01:01G	04:02:01G
16	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01G	05:01	01:03:01	01:03:01	03:01:01G	04:02:01G
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
138	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
147	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
148	24:25	30:02:01G	15:30:01	57:03:01:01	01:02:01G	18:02:01	04:03P	13:01:01G	3*03:01	4*01:03	NT	NT	03:02:01G	05:01:01G	NT	NT	03:01:01G	04:02:01G
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
185	24:25	30:02:01G	15:30:01	57:03:01G	01:02:01G	18:01:01G	04:03P	13:01P	3*03:01P	4*01:01P	01:02:01G	03:01:01G	03:02P	05:01P	NT	NT	03:01:01G	04:02:01G
188	24:25	30:02:01:03	15:30:01	57:03:01:01	01:02	18:02:01:01	04:03P	13:01	NT	NT	01:02	03:01:01	03:02	05:01:01:03	01:03P	01:03P	03:01P	04:02P
189	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	NT	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
190	24:25	30:02:01	15:30:01	57:03:01:01	01:02:01	18:02:01	04:03P	13:01:01	NT	NT	NT	NT	03:02P	05:01:01	NT	NT	351:01	463:01:01:02
192	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01	4*01:03:01	01:02:01	03:01:01	03:02	05:01:01	01:03:01	01:03:01	03:01:01G	04:02:01G
195	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02P	05:01	01:03	01:03	03:01	04:02
205	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01	04:02:01
207	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
213	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
218	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	03:01	04:02
227	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
240	NT	NT	15:30:01	57:03:01	NT	NT	04:03P	13:01:01	NT	NT	01:02:01	03:01:01	03:02P	05:01:01	NT	NT	NT	NT
258	24:25	30:02:01	15:30:01	57:03:01:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01G	4*01:01:01G	01:02:01	03:01:01	03:02:01G	05:01:01	01:03:01G	01:03:01	03:01:01G	04:02:01G
264	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01G	04:02:01G
279	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
294	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01P	NT	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
298	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	NT	NT	01:02:01	03:01:01	03:02:01	05:01:01:03	NT	NT	03:01	04:02
316	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	NT	NT	03:02	05:01	NT	NT	03:01	04:02
403	24:25	30:02:01	15:30:01	57:03:01:01	01:02:01	18:02:01	04:03:01	13:01:01	NT	NT	NT	NT	03:02:01G	05:01:01	NT	NT	03:01:01G	04:02:01G
702	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01	04:02:01
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
732	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:02:01G
769	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01P	04:02P
805	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	FTA	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:01:01G
1189	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
1251	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	03:01	04:02
2063	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01	04:02:01
3325	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:02:01G
3410	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	03:01	04:02
3438	24:25	30:02	15:30	57:03	01:02	18:01	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
3582	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02	05:01	01:03:01	01:03:01	03:01:01	04:02:01
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NEW	NT	NT	NT	NT
4582	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:02:01G
5451	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	24:25	30:02:01	15:30:01	57:03:01	01:02:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01	04:02:01

Final Consensus based on High Resolution	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:02
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**Table 14. Individual laboratory results for DNA # 1001 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	24:25	30:02:01G	15:30	57:03:01G	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02:01G	05:01:01G	NT	NT	03:01:01G	04:02:01G
155	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
162	24:25	30:02	15:30	57:03	01:02	18:01:01G	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
173	24:25	30:02	15:01	57:03	01:02	18:01	04:03	13:01	NT	NT	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
176	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	01:02	03:01	03:02	05:01	NT	NT	03:01	04:02
193	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	04:03	13:01	NT	NT	NT	NT	NT	NT	NT	NT	03:01P	04:02P
239	NT	30:02	NT	NT	01:02	NT	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	NT	NT	03:01P	04:02P
267	24:02	30:02	15:01	57:03	01:02	18:01	04:03	13:02	3*03:01	4*01:01	01:02	03:01	03:02	05:01	NT	NT	NT	NT
278	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
292	24:25	30:02	15:30	57:03	01:02	18:01	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
313	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
317	24:02	30:02	15:01	57:01	01:02	18:01	04:03	13:01	3*01:01	4*01:01	01:02	03:01	03:02	05:01	01:03	01:03	03:01	04:02
331	24:25	30:02:01	15:30:01	57:03:01	01:02:01:01	18:02:01	04:03:01	13:01:01	3*03:01:01	4*01:03:01	01:02:01	03:01:01	03:02:01	05:01:01	01:03:01	01:03:01	03:01:01G	04:02:01G
402	24:25	30:02	15:30	57:03	01:02	18:01	04:03	13:01	NT	NT	NT	NT	03:02	05:01	NT	NT	03:01	04:02
714	24:25	30:02P	15:30	57:03P	01:02P	18:01P	04:03P	13:01P	NT	NT	NT	NT	03:02P	05:01P	01:03P	01:03P	03:01P	04:02P
2015	24:25	30:02P	15:30	57:03P	01:02P	18:01P	04:03P	13:01P	NT	NT	NT	NT	03:02P	05:01P	NT	NT	03:01P	04:02P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:03	01:03	03:01:01G	04:02	
2549	24:25	30:02:01G	15:30	57:03	01:02:01G	18:02	04:03:01	13:01:01G	NT	NT	01:02:01G	03:01:01G	03:02:01G	05:01:01G	01:03:01G	01:03:01G	03:01:01G	04:02:01G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	03:01P	04:02P
3625	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	01:02	03:01	03:02	06:02	NT	NT	04:01	04:01
3849	24:25	30:02:01G	15:30:01	57:03:01G	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	24:25	30:02	15:30	57:03	01:02	NT	04:03	13:01	NT	NT	NT	03:01	03:02	05:01	01:03	01:03	NT	NT
4545	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	01:02	03:01	03:02:01G	05:01:01G	01:03	01:03	03:01:01G	04:02:01G
4585	24:25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4613	24:25	30:02P	15:30	57:03P	01:02P	18:01P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	03:01P	04:02P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Final Consensus	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	3*03:01	4*01:03	01:02	03:01	03:02	05:01	01:03	01:03	03:01:01G	04:02

**Table 15. Individual laboratory results for DNA # 1001 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
134	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
138	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
144	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	02	03	04(DP402)
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
152	24	30	15	57	NT	NT	04	13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
189	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	NT	NT
190	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
192	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
195	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
199	NT	NT	NT	NT	NT	NT	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
205	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
213	NT	NT	NT	NT	01	18	04	13	NT	NT	NT	NT	03	05	NT	NT	NT	NT
215	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
227	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
228	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
252	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
255	24	30	15	57	NT	NT	04	13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
266	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
267	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	NT	NT	NT	NT
278	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
279	24	30	15	57	01	18	04	13	NT	NT	NT	NT	03	05	NT	NT	NT	NT
280	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
285	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
286	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
290	24	30	15	57	NT	NT	04	13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
293	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	01	03	03	05	NT	NT	NT	NT
294	24	30	15	57	01	18	04	13	3*03	4*01	NT	NT	03	05	NT	NT	NT	NT
305	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
309	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
310	24	30	27	57	NT	NT	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
318	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
329	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
334	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	03	04(DP402)
336	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
339	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
402	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
615	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	NT	NT
702	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
714	24	30	15	57	01	18	04	13	3*01	4*01	01	03	03	05	NT	NT	NT	NT
726	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
805	24	30	15	57	01	18	04	13	3*03	4*01	NT	NT	03	05	NT	NT	NT	NT

**Table 15. Individual laboratory results for DNA # 1001 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
1647	24	30	15	57	01	18	04	13	3*PRESENT	4*PRESENT	01	03	03	05	01	01	03	04(DP402)
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2518	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
2549	NT	NT	NT	NT	NT	NT	NT	NT	3*03	4*01	NT	NT	NT	NT	NT	NT	NT	NT
3438	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
3600	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	NT	NT
3625	24	26	38	44	12	16	04	15	5*01	4*01	01	03	03	06	01	01	04(DP401)	04(DP401)
3849	24	30	15	57	01	18	04	13	3*03	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
4420	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	01	01	NT	NT
4545	NT	NT	NT	NT	NT	NT	NT	NT	3*03	4*01	NT	NT	NT	NT	NT	NT	NT	NT
4551	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4582	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
4585	24	30	15	57	01	18	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
4613	24	30	15	57	01	18	04	13	NT	NT	NT	NT	03	05	NT	NT	NT	NT
8050	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)
9221	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	NT	03	04(DP402)
9222	24	30	15	57	NT	NT	04	13	NT	NT	01	03	03	05	NT	NT	NT	NT
<b>Final Consensus</b>	24	30	15	57	01	18	04	13	3*03	4*01	01	03	03	05	01	01	03	04(DP402)

**Table 16. Individual laboratory results for DNA # 1002 using Next Generation Sequencing**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
7	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01G	05:01	02:02:02	02:02:02	01:01:01	13:01:01G
16	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01G	05:01	02:02:02	02:02:02	01:01:01	13:01:01G
124	24:02:01	68:03:01:01	39:05:01:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01
134	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
138	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	4*01:03	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
147	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01P
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
185	24:02:01G	68:03:01	39:05:01G	40:01:01G	03:04:01G	07:02:01G	01:01P	04:07P	4*01:01P	NP	01:01:01G	03:01:01G	03:02P	05:01P	NT	NT	01:01:01G	13:01:01G
188	24:02	68:03:01:01	39:05:01:01	40:01	03:04:01:01	07:02	01:01P	04:07P	NT	NT	01:01	03:01:01	03:02	05:01:01:03	02:02	02:02	01:01	13:01P
189	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01:01G
190	24:02:01	68:03:01	39:05:01:01	40:01:02	03:04:01:01	07:02:01	01:01P	04:07P	NT	NT	NT	NT	03:02P	05:01:01	NT	NT	01:01:01	13:01P
192	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01G	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01G
195	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02P	05:01	02:02	02:02	01:01	13:01P
205	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01
207	24:02	68:03	39:05	40:01	03:04	07:02	01:01P	04:07	NT	NT	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01P
213	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NT	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01P
218	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	01:01	13:01
227	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01:01G
240	NT	NT	39:05:01	40:01:02	NT	NT	01:01P	04:07P	NT	NT	01:01:01	03:01:01	03:02P	05:01:01	NT	NT	NT	NT
258	24:02:01	68:03:01	39:05:01:01	40:01:02	03:04:01:01	07:02:01	01:01:01G	04:07:01G	4*01:03:02	NP	01:01:01	03:01:01	03:02:01G	05:01:01	02:02:02	02:02:02:04	01:01:01	13:01
264	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01G	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01
279	24:02	68:03	39:05	40:01	03:04	07:02	01:01P	04:07	NT	NT	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01P
294	24:02	68:03	39:05	40:01	03:04	07:02	01:01P	04:07	NT	NP	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01P
298	24:02:01	68:03:01	39:05:01:01	40:01:02	03:04:01	07:02:01	01:01	04:07:01	NT	NT	01:01:01	03:01:01	03:02:01	05:01:01:03	NT	NT	01:01:01	13:01
316	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	4*01:03	NT	NT	03:02	05:01	NT	NT	01:01	13:01
403	24:02:01	68:03:01	39:05:01:01	40:01:02	03:04:01:01	07:02:01	01:01:01G	04:07:01G	NT	NT	NT	NT	03:02:01G	05:01:01	NT	NT	01:01:01	13:01:01G
702	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
732	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01:01G
769	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
805	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	FTA	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01:01G
1189	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
1251	NT	68:03	39:05	NT	NT	NT	NT	NT	4*01:03	NP	NT	NT	NT	NT	NT	NT	01:01	13:01
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3325	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
3410	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	01:01	13:01
3438	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
3582	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02	05:01	02:02:02	02:02:02	01:01:01	13:01:01
4551	24:02P	68:03P	39:05P	40:01P	03:04P	07:02P	01:01P	04:07P	4*01:03	NP	01:01P	03:01P	03:02P	05:01P	NT	NT	01:01P	13:01P
4582	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
5451	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	24:02:01	68:03:01	39:05:01	40:01:02	03:04:01	07:02:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01	13:01:01
Final Consensus based on High Resolution	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01

**Table 17. Individual laboratory results for DNA # 1002 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
155	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
162	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
173	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
176	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01
193	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	01:01P	04:07P	NT	NT	NT	NT	NT	NT	NT	NT	01:01P	13:01P
239	NT	NT	NT	40:01	NT	07:02	01:01	NT	4*01:03	NT	01:01	03:01	03:02	05:01	NT	NT	01:01P	13:01P
267	24:02	68:03	39:01	40:01	03:02	07:02	01:01	04:07	4*01:01	NP	01:01	03:01	03:02	05:01	NT	NT	NT	NT
278	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NT	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
292	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
313	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	NT	NT	03:02	05:01	NT	NT	NT	NT
317	24:02	68:03	39:01	40:01	03:02	07:01	08:02	13:02	4*01:01	4*01:01	03:01	03:02	06:01	06:04	02:02	02:02	01:01	13:01
331	24:02:01:01	68:03:01	39:05:01:01	40:01:02	03:04:01:01	07:02:01:01	01:01:01	04:07:01	4*01:03:02	NP	01:01:01	03:01:01	03:02:01	05:01:01	02:02:02	02:02:02	01:01:01G	13:01:01G
402	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
714	24:02P	68:03P	39:05P	40:01P	03:04P	07:02P	01:01P	04:07P	NT	NT	NT	NT	03:02P	05:01P	02:02P	02:02P	01:01P	13:01P
2015	24:02P	68:03P	39:05P	40:01P	03:04P	07:02P	01:01P	04:07P	NT	NT	NT	NT	03:02P	05:01P	NT	NT	01:01P	13:01P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:02	02:02	01:01	13:01
2549	24:02:01G	68:03	39:05	40:01:01G	03:04:01G	07:02:01G	01:01:01G	04:07:01G	NT	NT	01:01:01G	03:01:01G	03:02:01G	05:01:01G	02:02:02	02:02:02	01:01:01G	13:01:01G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:01P	13:01P
3625	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	NT	NT	01:01	03:01	03:02	05:01	NT	NT	01:01	13:01
3849	24:02:01G	68:03:01	39:05:01G	40:01:01G	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	NT	NT	39:05	40:01	NT	07:02	01:01	04:07	NT	NT	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01
4545	24:02:01G	68:03	39:05	40:01:01G	03:04	07:02	01:01	04:07	NT	NT	01:01	03:01	03:02:01G	05:01:01G	02:02	02:02	01:01	13:01:01G
4585	NT	68:03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4613	24:02P	68:03P	39:05P	40:01P	03:04P	07:02P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:01P	13:01P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Final Consensus	24:02	68:03	39:05	40:01	03:04	07:02	01:01	04:07	4*01:03	NP	01:01	03:01	03:02	05:01	02:02	02:02	01:01	13:01

**Table 18. Individual laboratory results for DNA # 1002 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
138	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
144	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	01	02	01	13
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	24	68	39	40	03	07	01	04	NT	NT	NT	NT	03	05	NT	NT	NT	NT
151	24	68	39	40	03	07	01	04	NT	NT	NT	NT	03	05	NT	NT	01	13
152	24	68	39	40	NT	NT	01	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	01	13
189	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	NT	NT
190	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
192	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
195	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
199	NT	NT	NT	NT	NT	NT	01	04	4*PRESENT	4*PRESENT	NT	NT	03	05	NT	NT	NT	NT
205	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
213	NT	NT	NT	NT	03	07	01	04	NT	NT	NT	NT	03	05	NT	NT	NT	NT
215	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
227	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
228	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	24	68	39	40	03	07	01	04	4*01	NT	01	03	03	05	02	02	01	13
252	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
255	24	68	39	40	NT	NT	01	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
266	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
267	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	NT	NT	NT	NT
278	24	68	39	40	03	07	01	04	4*01	NT	01	03	03	05	02	02	01	13
279	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
280	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
285	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
286	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
290	24	68	39	40	NT	NT	01	04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
293	24	68	39	40	03	07	01	04	4*PRESENT	NP	01	03	03	05	NT	NT	NT	NT
294	24	68	39	40	03	07	01	04	4*01	NP	NT	NT	03	05	NT	NT	NT	NT
305	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
309	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
310	24	68	39	40	NT	NT	07	04	4*PRESENT	4*NULL	NT	NT	03	05	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
318	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	24	68	NT	NT	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
329	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
334	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
336	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
339	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
402	24	68	39	40	03	07	01	04	NT	NT	NT	NT	03	05	NT	NT	NT	NT
615	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	NT	NT
702	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
714	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	NT	NT	NT	NT
726	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
805	24	68	39	40	03	07	01	04	4*01	NP	NT	NT	03	05	NT	NT	NT	NT

**Table 18. Individual laboratory results for DNA # 1002 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
1647	24	68	39	40	03	07	01	04	4*PRESENT	NP	01	03	03	05	02	02	01	13
2063	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
2518	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
2549	NT	NT	NT	NT	NT	NT	NT	NT	4*01	NP	NT	NT	NT	NT	NT	NT	NT	NT
3438	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
3600	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	NT	NT
3625	24	68	39	40	03	07	01	04	4*01	4*01	01	03	03	05	02	02	01	13
3849	24	68	39	40	03	07	01	04	4*PRESENT	NP	NT	NT	03	05	NT	NT	NT	NT
4420	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	02	02	01	13
4545	NT	NT	NT	NT	NT	NT	NT	NT	4*01	NP	NT	NT	NT	NT	NT	NT	NT	NT
4551	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	NT	NT	01	13
4582	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
4585	24	68	39	40	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
4613	24	68	39	40	03	07	01	04	NT	NT	NT	NT	03	05	NT	NT	NT	NT
8050	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13
9221	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	NT	01	13
9222	24	68	NT	NT	03	07	01	04	NT	NT	01	03	03	05	NT	NT	NT	NT
<b>Final Consensus</b>	24	68	39	40	03	07	01	04	4*01	NP	01	03	03	05	02	02	01	13



**Table 19. Individual laboratory results for DNA # 1003 using Next Generation Sequencing**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
7	02:01:01	29:02:01	44:03:01	51:13	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:01:01G	03:02:01G	01:03:01	02:01:01	04:02:01	11:01:01
16	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:01:01G	03:02:01G	01:03:01	02:01:01	04:02:01	11:01:01
124	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01	04:02:01	11:01:01
134	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01P	4*01:01P	4*01:01P	02:01:01	03:01:01	02:02	03:02P	NT	NT	04:02:01	11:01:01
138	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	02:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01:01	16:01:01:01	04:04:01	07:01:01G	4*01:01:01:01	4*01:03:01	02:01:01	03:01:01	02:01:01G	03:02:01G	01:03:01	02:01:01:01	04:02:01	11:01:01
185	02:01:01G	29:02:01G	44:03:01G	51:13:01	15:02:01G	16:01:01G	04:04P	07:01P	4*01:01P	4*01:01P	02:01:01G	03:01:01G	02:01P	03:02P	NT	NT	04:02:01G	11:01:01G
188	02:01	29:02:01:01	44:03	51:13:01	15:02:01:01	16:01:01:01	04:04	07:01P	NT	NT	02:01	03:01:01	02:02:01:01	03:02	01:03P	02:01P	04:02P	11:01P
189	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
190	02:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01:01	16:01:01:01	04:04:01	07:01P	NT	NT	NT	NT	02:01P	03:02P	NT	NT	04:02:01	11:01:01
192	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01G	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02	03:02	01:03:01	02:01:01	04:02:01	11:01:01
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
205	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01	04:02:01	11:01:01
207	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	02:02	03:02	NT	NT	04:02	11:01
213	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	NT	NT	04:02	11:01
218	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	04:02	11:01
227	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
240	NT	NT	44:03:01	51:13:01	NT	NT	04:04:01	07:01P	NT	NT	02:01:01	03:01:01	02:01P	03:02P	NT	NT	NT	NT
258	02:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01:01	16:01:01:01	04:04:01	07:01:01G	4*01:01:01:01	4*01:01:01G	02:01:01	03:01:01	02:01:01G	03:02:01G	01:03:01	02:01:01:01	04:02:01	11:01:01
264	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01G	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01G	04:02:01	11:01:01
279	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	02:02	03:02	NT	NT	04:02	11:01
294	NT	NT	NT	51:13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
298	02:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	NT	NT	02:01:01	03:01:01	02:02:01	03:02:01	NT	NT	04:02:01	11:01:01
316	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	NT	NT	02:02	03:02	NT	NT	04:02	11:01
403	02:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01:01	16:01:01:01	04:04:01	07:01:01G	NT	NT	NT	NT	02:01:01G	03:02:01G	NT	NT	04:02:01	11:01:01
702	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01	04:02:01	11:01:01
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
732	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
769	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01P	4*01:01P	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
805	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01:01G	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
1189	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
1251	02:01:01G	29:02:01G	44:03:01G	51:13:01	15:02:01G	16:01:01G	04:04:01	07:01:01G	4*01:01	4*01:03	NT	NT	02:02	03:02:01G	NT	NT	04:02	11:01
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3325	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02:01G	11:01:01G
3410	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	04:02	11:01
3438	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
3582	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02	03:02	01:03:01	02:01:01	04:02:01	11:01:01
4551	02:01P	29:02P	44:03P	51:13P	15:02P	16:01P	04:04P	07:01P	4*01:01	4*01:03	02:01	03:01P	02:01P	03:02P	NT	NT	04:02P	11:01P
4582	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02:01G	11:01:01G
5451	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	02:01:01	29:02:01	44:03:01	51:13:01	15:02:01	16:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01	04:02:01	11:01:01
Final Consensus based on High Resolution	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01

**Table 20. Individual laboratory results for DNA # 1003 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
155	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
162	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
173	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
176	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	02:02	03:02	NT	NT	04:02	11:01
193	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	04:04	07:01P	NT	NT	NT	NT	NT	NT	NT	NT	04:02P	11:01P
239	NT	29:02	44:03	NT	15:02	NT	NT	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	NT	NT	04:02P	11:01P
267	02:01	29:01	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:01	02:01	03:01	02:02	03:02	NT	NT	NT	NT
278	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:02	02:02	03:02	01:03	02:01	04:02	11:01
292	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	02:01	03:01	NT	NT	NT	NT	NT	NT
313	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	NT	NT	02:02	03:02	NT	NT	NT	NT
317	02:01	29:01	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:01	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01
331	02:01:01:01	29:02:01:01	44:03:01	51:13:01	15:02:01:01	16:01:01:01	04:04:01	07:01:01	4*01:01:01	4*01:03:01	02:01:01	03:01:01	02:02:01	03:02:01	01:03:01	02:01:01	04:02:01G	11:01:01G
402	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
714	02:01P	29:02P	44:03P	51:13P	15:02P	16:01P	04:04P	07:01P	NT	NT	NT	NT	02:01P	03:02P	01:03P	02:01P	04:02P	11:01P
2015	02:01P	29:02P	44:03P	51:13:01	15:02P	16:01P	04:04P	07:01P	NT	NT	NT	NT	02:01P	03:02P	NT	NT	04:02P	11:01P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:03	02:01	04:02	11:01
2549	02:01:01G	29:02:01G	44:03:01G	51:13	15:02:01G	16:01:01G	04:04:01	07:01:01G	NT	NT	02:01:01G	03:01:01G	02:01:01G	03:02:01G	01:03:01G	02:01:01G	04:02:01G	11:01:01G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:02P	11:01P
3625	24:07	33:03	35:05	44:03	NT	07:06	12:02	07:01	NT	NT	02:01	NEW	02:02	03:01	NT	NT	04:01	05:01
3849	NT	NT	44:03:01G	51:13:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	NT	NT	02:01	03:01	NT	03:02	01:03	02:01	NT	11:01
4545	02:01:01G	29:02:01G	44:03:01G	51:13	15:02:01G	16:01:01G	04:04	07:01:01G	NT	NT	02:01	03:01	02:01:01G	03:02:01G	NT	NT	04:02:01G	11:01:01G
4585	NT	NT	NT	51:13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4613	02:01P	29:02P	44:03P	51:13P	15:02P	16:01P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:02P	11:01P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
<b>Final Consensus</b>	02:01	29:02	44:03	51:13	15:02	16:01	04:04	07:01	4*01:01	4*01:03	02:01	03:01	02:02	03:02	01:03	02:01	04:02	11:01

**Table 21. Individual laboratory results for DNA # 1003 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
138	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
144	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	02	29	44	51	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	NT	NT
151	02	29	44	51	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	04(DP402)	11
152	02	29	44	51	NT	NT	04	07	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
189	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	NT	NT
190	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
192	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
195	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
199	NT	NT	NT	NT	NT	NT	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
205	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
213	NT	NT	NT	NT	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	NT	NT
215	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
227	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
228	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
252	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
255	02	29	44	51	NT	NT	04	07	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
266	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
267	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	NT	NT	NT	NT
278	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
279	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
280	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
285	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
286	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
290	02	29	44	51	NT	NT	04	07	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
293	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	02	03	02	03	NT	NT	NT	NT
294	02	29	44	51	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	04(DP402)	11
305	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
309	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
310	02	29	44	51	NT	NT	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
311	02	29	44	59	15	16	04	07	4*PRESENT	4*PRESENT	02	03	02	03	NT	NT	NT	NT
318	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
329	02	02	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
334	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	04(DP402)	11
336	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
339	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
402	02	29	44	51	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	NT	NT
615	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	NT	NT
702	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
714	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	NT	NT	NT	NT
726	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
805	02	29	44	51	15	16	04	07	4*01	4*01	NT	NT	02	03	NT	NT	NT	NT

**Table 21. Individual laboratory results for DNA # 1003 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
1647	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	02	03	02	03	01	02	04(DP402)	11
2063	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
2518	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
2549	NT	NT	NT	NT	NT	NT	NT	NT	4*01	NT	NT	NT	NT	NT	NT	NT	NT	NT
3438	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
3600	02	29	44	51	15	16	04	07	4*01	NT	02	03	02	03	01	02	NT	NT
3625	24	33	44	35	04	07	12	07	3*03	4*01	02	06	02	03	NT	NT	04(DP401)	05
3849	02	29	44	51	15	16	04	07	4*PRESENT	4*PRESENT	NT	NT	02	03	NT	NT	NT	NT
4420	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	01	02	NT	11
4545	NT	NT	NT	NT	NT	NT	NT	NT	4*01	4*01	NT	NT	NT	NT	01	02	NT	NT
4551	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	NT	NT	04(DP402)	11
4582	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
4585	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
4613	02	29	44	51	15	16	04	07	NT	NT	NT	NT	02	03	NT	NT	NT	NT
8050	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11
9221	02	29	44	51	15	16	04	07	4*01	NT	02	03	02	03	01	02	04(DP402)	11
9222	02	29	44	51	15	16	04	07	NT	NT	02	03	02	03	NT	NT	NT	NT
<b>Final Consensus</b>	02	29	44	51	15	16	04	07	4*01	4*01	02	03	02	03	01	02	04(DP402)	11

**Table 22. Individual laboratory results for DNA # 1004 using Next Generation Sequencing**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
7	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01G	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
16	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01G	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
124	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
134	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01P	4*01:01P	5*01:01P	01:02:01	03:01:01	03:02P	06:02	NT	NT	04:01:01	04:01:01
138	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01:01	16:01:01:01	04:02:01	15:01:01G	4*01:01:01G	5*01:01:01G	01:02:01	03:01:01	03:02:01G	06:02	01:03:01:04	01:03:01:04	04:01:01	04:01:01
185	24:02:01G	26:01:01G	38:09	44:03:01G	12:03:01G	16:01:01G	04:02P	15:01P	4*01:01P	5*01:01P	01:02:01G	03:01:01G	03:02P	06:02P	NT	NT	04:01:01G	04:01:01G
188	24:02	26:01:01:01	38:09	44:03	12:03:01:01	16:01:01:01	04:02:01	15:01P	NT	NT	01:02	03:01:01	03:02	06:02:01:01	01:03P	01:03P	04:01	04:01
189	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
190	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01:01	16:01:01:01	04:02:01	15:01P	NT	NT	NT	03:02P	06:02	NT	NT	04:01:01	454:01	
192	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01G	01:02:01	03:01:01	03:02	06:02	01:03:01	01:03:01	04:01:01	04:01:01
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
205	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
207	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	01:02	03:01	03:02	06:02	NT	NT	04:01	04:01
213	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	NT	NT	04:01	04:01
218	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	03:02	06:02	NT	NT	04:01	04:01	
227	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
240	NT	NT	38:09	44:03:01	NT	NT	04:02:01	15:01P	NT	NT	01:02:01	03:01:01	03:02P	06:02	NT	NT	NT	NT
258	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01:01	16:01:01:01	04:02:01	15:01:01G	4*01:01:01G	5*01:01:01G	01:02:01	03:01:01	03:02:01G	06:02	01:03:01:04	01:03:01:04	04:01:01	04:01:01
264	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
279	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	01:02	03:01	03:02	06:02	NT	NT	04:01	04:01
294	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
298	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01	16:01:01:01	04:02:01	15:01:01	NT	NT	01:02:01:01	03:01:01	03:02:01	06:02:01:01	NT	NT	04:01:01	04:01:01
316	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	NT	NT	03:02	06:02	NT	NT	04:01	04:01
403	24:02:01	26:01:01:01	38:09	44:03:01	12:03:01:01	16:01:01:01	04:02:01	15:01:01G	NT	NT	NT	03:02:01G	06:02	NT	NT	04:01:01	04:01:01	
702	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
726	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
732	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01:01G	04:01:01G
769	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01P	04:01P
805	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:01:01G	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
1189	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
1251	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	NT	NT	NT	03:02:01G	06:02:01G	NT	NT	NT	NT	
2063	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
3325	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
3410	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	03:02	06:02	NT	NT	04:01	04:01	
3438	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	03:02	06:02	NT	NT	NT	NT	
3582	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
4551	24:02P	26:01P	38:09	44:03P	12:03P	16:01P	04:02P	15:01P	4*01:03	5*01:01	01:02P	03:01P	03:02P	06:02P	NT	NT	04:01P	04:01P
4582	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
5451	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
6051	24:02:01	26:01:01	38:09	44:03:01	12:03:01	16:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
Final Consensus based on High Resolution	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01

**Table 23. Individual laboratory results for DNA # 1004 High Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
151	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
155	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
162	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	NT	03:02	06:02	NT	NT	NT	NT
173	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
176	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	01:02	03:01	03:02	06:02	NT	NT	04:01	04:01
193	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	NT	03:02	06:02	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	04:02	15:01P	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	04:01P
239	NT	NT	NT	44:03	12:03	NT	04:02	NT	4*01:03	NT	01:02	03:01	03:02	NT	NT	NT	04:01P	04:01P
267	24:02	26:01	38:01	44:03	12:02	16:01	04:02	15:01	4*01:01	5*01:01	01:02	03:01	03:02	06:02	NT	NT	NT	NT
278	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
292	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	NT	03:02	06:02	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
313	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	NT	NT	NT	NT	03:02	06:02	NT	NT	NT	NT
317	24:02	26:01	38:01	44:03	12:03	16:01	04:02	15:01	4*01:01	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01
331	24:02:01:01	26:01:01:01	38:09	44:03:01:01	12:03:01:01	16:01:01:01	04:02:01	15:01:01	4*01:03:01	5*01:01:01	01:02:01	03:01:01	03:02:01	06:02:01	01:03:01	01:03:01	04:01:01	04:01:01
402	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
714	24:02P	26:01P	38:09	44:03P	12:03P	16:01P	04:02P	15:01P	NT	NT	NT	NT	03:02P	06:02P	01:03P	01:03P	04:01P	04:01P
2015	24:02P	26:01P	38:09	44:03P	12:03P	16:01P	04:02P	15:01P	NT	NT	NT	NT	03:02P	06:02P	NT	NT	04:01P	04:01P
2518	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	01:03	01:03	04:01	04:01	04:01
2549	24:02:01G	26:01:01G	38:09	44:03:01G	12:03:01G	16:01:01G	04:02	15:01:01G	NT	NT	01:02:01G	03:01:01G	03:02:01G	06:02:01G	01:03:01G	01:03:01G	04:01:01G	04:01:01G
3600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	04:01P
3625	24:25	30:02	15:30	57:03	01:02	18:02	04:03	13:01	NT	NT	01:02	03:01	03:02	05:01	NT	NT	03:01	04:02
3849	NT	NT	38:09	44:03:01G	NT	NT	04:02	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4420	NT	26:01	38:01	44:03	12:03	16:01	04:02	NT	NT	NT	NT	03:01	03:02	NT	01:03	01:03	NT	NT
4545	24:02:01G	26:01:01G	38:09	44:03:01G	12:03:01G	16:01:01G	04:02	15:01	NT	NT	01:02	03:01	03:02:01G	06:02:01G	01:03	01:03	04:01	04:01
4585	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4613	24:02P	26:01P	38:09	44:03P	12:03P	16:01P	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	04:01P	04:01P
9222	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
45452	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Final Consensus	24:02	26:01	38:09	44:03	12:03	16:01	04:02	15:01	4*01:03	5*01:01	01:02	03:01	03:02	06:02	01:03	01:03	04:01	04:01

**Table 24. Individual laboratory results for DNA # 1004 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
124	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
134	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
138	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
144	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	04(DP401)	04(DP401)
147	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
148	24	26	38	44	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	NT	NT
151	24	26	38	44	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	04(DP401)	04(DP401)
152	24	26	38	44	NT	NT	04	15	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
158	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
189	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	NT	NT
190	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
192	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
195	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
199	NT	NT	NT	NT	NT	NT	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
205	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
213	NT	NT	NT	NT	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	NT	NT
215	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
227	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
228	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
239	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
252	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
255	24	26	38	44	NT	NT	04	15	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
265	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
266	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	04(DP401)	04(DP401)
267	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	NT	NT	NT	NT
278	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
279	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
280	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	04(DP401)	04(DP401)
285	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
286	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
290	24	26	38	44	NT	NT	04	15	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
292	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
293	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	01	03	03	06	NT	NT	NT	NT
294	24	26	38	44	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	04(DP401)	04(DP401)
305	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
309	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	NT	NT
310	24	26	38	39	NT	NT	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
318	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	04(DP401)	04(DP401)
324	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
328	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
329	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
334	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	04(DP401)	04(DP401)
336	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
339	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	NT	NT	03	06	NT	NT	NT	NT
402	24	26	38	44	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	NT	NT
615	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	NT	NT
702	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
714	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	NT	NT	NT	NT
726	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
805	24	26	38	44	12	16	04	15	4*01	5*01	NT	NT	03	06	NT	NT	NT	NT

**Table 24. Individual laboratory results for DNA # 1004 Low Resolution**

CENTER	A		B		C		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1	
1251	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1647	24	26	38	44	12	16	04	15	4*PRESENT	5*PRESENT	01	03	03	06	01	01	04(DP401)	04(DP401)
2063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2518	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
2549	NT	NT	NT	NT	NT	NT	NT	NT	4*01	5*01	NT	NT	NT	NT	NT	NT	NT	NT
3438	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
3600	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	NT	NT
3625	24	30	15	57	01	18	04	13	4*01	3*03	01	03	03	05	01	01	03	04(DP402)
3849	24	26	38	44	12	16	04	15	4*PRESENT	5*01	NT	NT	03	06	NT	NT	NT	NT
4420	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	01	01	NT	NT
4545	NT	NT	NT	NT	NT	NT	NT	NT	4*01	5*01	NT	NT	NT	NT	NT	NT	NT	NT
4551	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	NT	NT	04(DP401)	04(DP401)
4582	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
4585	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
4613	24	26	38	44	12	16	04	15	NT	NT	NT	NT	03	06	NT	NT	NT	NT
8050	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)
9221	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	NT	04(DP401)	NT
9222	24	26	38	44	12	16	04	15	NT	NT	01	03	03	06	NT	NT	NT	NT
<b>Final Consensus</b>	24	26	38	44	12	16	04	15	4*01	5*01	01	03	03	06	01	01	04(DP401)	04(DP401)



## Participants and Methods High Resolution

CENTER	A	B	C	DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
7	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
16	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
124	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH
134	NGS-GIL	NGS-GIL	SSP-OLE	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL		NGS-GIL SSP-OLE
138	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
147	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL	SSP-OLE	SSP-OLE	NGS-GIL		NGS-GIL
148	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD		NGS-GD		NGS-GD
151	SBT-LT	SBT-LT	SBT-LT	SBT-LT			SBT-LT		SBT-LT
155	SBT-INH	SBT-INH	SBT-INH	SBT-INH			SBT-INH		
158	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD	NGS-GD
162	SBT-BS	SBT-BS	SBT-BS	SBT-BS			SBT-BS		
176	SBT-INH	SBT-INH	SBT-INH	SBT-INH		SBT-INH	SBT-INH		SBT-INH
185	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH		NGS-INH
188	NGS-GIL	NGS-GIL	NGS-GIL SBT-ACT	NGS-GIL SBT-ACT SSP-OLE		NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL SBT-ACT SSP-OLE
189	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OL-OMX	NGS-OMX SSO-OL
190	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL			NGS-GIL		NGS-GIL
192	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH	NGS-GIL-INH
193	SBT-SC SSO-LUM-OL	SBT-SC SSO-LUM-OL	SBT-SC SSO-LUM-OL	SBT-SC SSO-LUM-OL			SBT-SC SSO-LUM-OL		
195	NGS-OL	NGS-OL SSO-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
205	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM
207	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX		NGS-OMX-TEP	NGS-OMX		NGS-OMX
213	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX SSO-OL	SSP-OLE	NGS-OMX	NGS-OMX		NGS-OMX
218	NGS-INH SBT-INH SSP-INH	NGS-INH SBT-INH SSP-INH	NGS-INH SBT-INH SSP-INH	NGS-INH SBT-INH SSP-INH			NGS-INH SBT-INH SSP-INH		NGS-INH SBT-INH SSP-INH
227	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
238				SSO-HT					SSO-HT
239	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
240		NGS-GD		NGS-GD		NGS-GD	NGS-GD		
258	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC	NGS-GD SSO-LC
264	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH
267	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL		
279	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	SSP-OLE	NGS-OMX SSP-OLE	NGS-OMX		NGS-OMX SSP-OLE
292	SSO-OL	SSO-OL	SSO-OL	SSO-OL			SSO-OL		
294	NGS-OMX SBT-INH	NGS-OMX SBT-INH	NGS-OMX SBT-INH	NGS-OMX SBT-INH SSO-IMM	SBT-INH SSP-OLE	SSO-IMM	NGS-OMX SSO-IMM		NGS-OMX
298	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX		NGS-OMX	NGS-OMX		NGS-OMX
311						SSP-OLE			
313	SBT-TBG	SBT-TBG	SBT-TBG	SBT-TBG			SBT-TBG		
316	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL		NGS-OL		NGS-OL
317	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL
331	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others

**Participants and Methods High Resolution**

CENTER	A	B	C	DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
402	SBT-GD	SBT-GD	SBT-GD	SBT-GD			SBT-GD		SBT-GD
403	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL			NGS-GIL		NGS-GIL
				NGS-GIL					
				SBT-INH					
702	NGS-GIL	NGS-GIL	NGS-GIL	SSP-OLE	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL
714	SBT-GIL	SBT-GIL	SBT-GIL	SBT-SC			SBT-SC	SSO-LUM-OL	SSO-LUM-OL
726	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH	NGS-INH
732	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM
769	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM	NGS-IMM
	NGS-GIL	NGS-GIL	NGS-GIL	NGS-GIL			NGS-GIL		NGS-GIL
805	SBT-OL	SBT-OL	SBT-OL	SBT-OL	NGS-GIL	NGS-GIL	SBT-OL	NGS-GIL	SBT-OL
1189	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
	NGS-GIL	NGS-GIL		NGS-GIL			NGS-GIL		Other-Others
	SBT-PRO	SBT-PRO	NGS-GIL	SBT-PRO			SBT-PRO		SSO-LUM
1251	SSO-LUM	SSO-LUM	SBT-PRO	SSP-OLE					SSP-OLE
	SBT-GIL	SBT-GIL	SBT-GIL	SBT-GIL			SBT-GIL-OLE		SBT-GIL
2015	SSO-OL	SSO-OL	SSO-OL	SSO-OL			SSO-OL		SSO-OL
2063	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL
2518								SSO-OL	SSO-OL
2549	SBT-OLE	SBT-OLE	SBT-OLE	SBT-OLE		SSP-OLE	SBT-OLE	SSO-OL	SSO-OL
3325	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE
				NGS-GIL			NGS-GIL		NGS-GIL
3410	NGS-GIL	NGS-GIL	NGS-GIL	SSO-OL			SSO-OL		SSP-GV
	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX			NGS-OMX		
3438	SBT-TBG	SBT-TBG	SBT-TBG	SBT-TBG			SBT-TBG		
3582	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL	NGS-OL
3600									rtPCR-LB
3625	SBT-INH	SBT-INH	SBT-INH	SBT-INH	SBT-INH	SBT-INH	SBT-INH		SBT-INH
3849	SBT-CG-INH	SBT-CG-INH	SBT-CG-INH	SBT-OL					
4420	SSO-WAK	SSO-WAK	SSO-WAK	SSO-WAK		SSO-WAK	SSO-WAK	SSO-LC	SSO-WAK
	SBT-SC	SBT-SC	SBT-SC	SBT-SC		SSO-OL	SBT-SC	SSO-OL	SBT-SC
4545	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSP-OLE	SSO-OL	SSP-OLE	SSO-OL
									NGS-OMX
4551	NGS-OMX	NGS-OMX	NGS-OMX	NGS-OMX	SSP-OLE	NGS-OMX	NGS-OMX		SSP-OLE
4582	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE	NGS-OLE
4585	SSO-LUM	SSO-LUM				SSO-LUM			
	SBT-GD	SBT-GD	SBT-GD						SBT-GD
4613	SSP-OLE	SSP-OLE	SSP-OLE						SSP-OLE
5451	NGS-INH	NGS-INH	NGS-INH						
6051	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL	NGS-IL

## Participants and Methods Low Resolution

CENTER	A	B	C	DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
124	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG
134	SSO-OL SSP-OLE	SSO-OL SSP-OLE	SSO-OL SSP-OLE	SSO-OL SSP-OLE	SSP-OLE	SSO-OL	SSO-OL SSP-OLE	SSP-OLE	SSP-OLE
144	SSO-OL	SSO-OL	SSO-IMM	SSO-IMM-OL		SSO-OL	SSO-OL	SSO-IMM	SSO-IMM
147	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
148	SSO-BAG	SSO-BAG	SSO-BAG	SSO-BAG			SSO-BAG		
151	SSO-OL	SSO-OL	SSO-OL	SSO-OL			SSO-OL-TEP		SSO-OL
152	SSP-INV	SSP-INV		SSP-INV					
158	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN	SSO-OL SSP-INN
189	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	
190	SSP-OL-OLE	SSP-OL-OLE	SSP-OL-OLE	SSP-OLE	SSP-OLE		SSP-OLE		
192	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others
195	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB	Other-Others SSO-OL rtPCR-LB
199				SSP-OL	SSP-OL		SSP-OL		
205	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS	SSO-OL rtPCR-LS
213			SSO-OL	SSO-OL			SSO-OL		
215	SSP-BT	SSP-BT	SSP-BT	SSP-BT	SSP-BT		SSP-BT		
227	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others
228	SSP-BAG	SSP-BAG	SSP-BAG	SSP-BAG	SSP-BAG		SSP-BAG		
239	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
252	SSP-INT-TEP	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT
255	SSO-OL	SSO-OL		SSO-OL					
265	SSP-OL	SSP-OL	SSP-OL	SSP-OL	SSO-OL	SSO-OL	SSP-OL	SSO-OL	SSP-OL
266	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL	SSO-OL	SSO-OL
267	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL		
279	SSP-LB-OLE	SSP-LB-OLE	SSP-LB-OLE	SSP-LB-OLE	SSP-LB	SSP-LB	SSP-LB-OLE	SSP-LB	SSP-LB
280	Other-Others	Other-Others	Other-Others	Other-Others		Other-Others	Other-Others	Other-Others	Other-Others
285	SSO-LUM	SSO-LUM	SSO-LUM	SSO-LUM		SSO-LUM	SSO-LUM		
286	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL		SSO-LUM-OL	SSO-LUM-OL		
290	SSO-OL	SSO-OL		SSO-OL					
292	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL		
293	SSO-IMM	SSO-IMM	SSO-IMM	SSO-IMM	Other-Others	SSO-IMM	SSO-IMM		
294	Other-Others SSO-IMM SSP-OLE	Other-Others SSO-IMM SSP-OLE	Other-Others SSO-IMM SSP-OLE	Other-Others SSO-IMM SSP-OLE	Other-Others SSP-OLE	SSO-IMM	Other-Others SSO-IMM SSP-OLE		SSP-OLE
305	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL		
309	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL	SSO-OL	SSO-OL
310	SSP-OL	SSP-OL		SSP-OL	SSP-OL		SSP-OL		
311	SSP-PRO	SSP-PRO	SSP-PRO	SSP-PRO	SSP-PRO	SSP-OLE	SSP-PRO		
318	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL	SSO-OL	SSO-OL
328	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL		
329	SSP-OLE	SSP-OLE	SSP-OLE	SSP-OLE	SSP-OLE		SSP-OLE		
334	SSO-OL	SSO-OL	SSO-OL	SSO-OL		SSO-OL	SSO-OL	SSO-OL	SSO-OL
336	SSP-BAG	SSP-BAG	SSP-BAG	SSP-BAG	SSP-BAG		SSP-BAG		
339	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT	SSP-INT
402	SSO-IMM-OL	SSO-IMM-OL	SSO-IMM-OL	SSO-IMM-OL			SSO-IMM-OL		
615	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
702	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL

**Participants and Methods Low Resolution**

CENTER	A	B	C	DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
714	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL	SSO-LUM-OL		
726	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-INN-OL	SSO-OL
805	SSO-IMM	SSO-IMM	SSO-IMM	SSO-IMM	SSO-IMM		SSO-IMM		
1251	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM	Other-Others SSO-LUM SSP-OLE	Other-Others SSO-LUM	Other-Others SSO-LUM SSP-OLE
1647	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
2063	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS
2518	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL	SSO-OL
2549					SSO-OL				
3438	SSO-LUM SSP-OLE	SSO-LUM SSP-OLE	SSO-LUM SSP-OLE-TBG	SSO-LUM SSP-OLE		SSO-LUM	SSO-LUM SSP-OLE-TBG		
3600	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
3625	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS	rtPCR-LS
3849	SSO-INH	SSO-INH	SSO-INH	SSO-INH	SSO-INH		SSO-INH		
4420	SSO-WAK	SSO-WAK	SSO-WAK	SSO-WAK		SSO-WAK	SSO-WAK	SSO-LC	SSO-WAK
4545					SSO-OL SSP-OLE			SSO-OL SSP-OLE	
4551	SSO-IMM	SSO-IMM	SSO-IMM	SSO-IMM	SSP-OLE	SSO-IMM	SSO-IMM		SSO-IMM
4582	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others	Other-Others
4585	SSO-LUM	SSO-LUM	SSO-LUM	SSO-LUM		SSO-LUM SSP-LUM	SSO-LUM SSP-LUM		
4613	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB			rtPCR-LB		
8050	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB	rtPCR-LB
9221	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB	SSO-OL rtPCR-LB
9222	SSO-LUM	SSO-LUM	SSO-LUM	SSO-LUM		SSO-LUM	SSO-LUM		