

UCLA INTERNATIONAL HLA DNA EXCHANGE



85TH SUMMARY

SEPTEMBER 26, 2007

JOHN MURAMOTO, CHS / CERT. GENETIC MB SCI.
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DNA Sample	
#531	#532
#533	#534
#535	#536

DNA #531

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	0201	1101	218/218	124/125	79/90
B*	3802	4101	218/218	141/141	83/86
Cw*	0702	1701	187/188	110/111	64/84
DRB1*	1101	1504	224/226	165/167	87/92
DRB3*	0202		71/71	54/54	13/13
DRB4*					
DRB5*		0101	70/70	54/54	13/13
DQA1*	0102	0505	54/54	30/41	4/8
DQB1*	0301	0502	187/188	149/151	46/54
DPB1*	0401	1301	66/66	62/62	32/32
DPA1*	0103	0201	6/6	4/4	

Agreement for this sample was greater than 95%. This is the first DRB1*1504 - DQB1*0502 sent in the Exchange.

This sample was also sent in the UCLA Cell Exchange B-cell line Exchange as Ter-325 (May, 2007). In the Cell Exchange, DQA1*05 was unresolved with DQA1*0505 (29%), DQA1*0505/9 (43%). One lab reported DQA1*0509. (Report of the 325th Cell Exchange, May 2007).

With this sendout, the ambiguity still exists. DQA1*0505 was (39%) and DQA1*0505/9 was (22%). DQA1*0509 was (22%). Labs using one company's SSP tray detected the DQA1*0509. Labs using a different company's SSP tray detected DQA1*0505.

Discrepancies or ambiguities reported:

A*: 0225/85.	Not excluded: 1102/21.
Cw*: 0727, Blank.	Not excluded: 0723, 1702.
DRB1*: 0101, 1302.	Not excluded: 1104/6/51, 1515.

DNA 532

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	0201	0301	220/220	122/122	78/90
B*	1402	1501	220/220	142/142	83/87
Cw*	0304	0802	188/188	124/124	70/84
DRB1*	0401	1504	228/228	169/169	90/92
DRB3*					
DRB4*	0103		72/72	55/55	13/13
DRB5*		0101	71/71	54/54	13/13
DQA1*	0102	0301	52/52	36/36	6/8
DQB1*	0302	0602	187/188	143/145	53/54
DPB1*	0401	BLANK	32/32	32/32	16/16
DPA1*	0103	BLANK	3/3	2/2	

Agreement for this sample was greater than 95%. This sample also contains DRB1*1504, but this one is associated with DQB1*0602.

This sample was also sent in the UCLA Cell Exchange B-cell line Exchange as Ter-347 (Oct, 2004). The probable haplotype is: DRB1*1504 - DRB5*0101 - DQB1*0602 - DQA1*0102. (Report of the 304th Cell Exchange, Oct 2004).

Discrepancies or ambiguities reported:

A*:	Not excluded:
B*:	Not excluded: 1406, 1560.
Cw*:	Not excluded: 0328, 0804/5.
DRB1*:	Not excluded: 0413, 1515.

DNA #533 BLACK

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	3101	6802	217/220	137/138	83/90
B*	4901	5703	219/220	165/165	86/88
Cw*	0701	0718	184/188	94/94	33/84
DRB1*	0701	1503	230/230	175/175	91/92
DRB3*					
DRB4*	0101		74/74	57/57	13/13
DRB5*		0101	73/73	56/56	13/13
DQA1*	0102	0201	56/56	50/50	7/8
DQB1*	0202	0602	190/190	149/152	53/54
DPB1*	0201	BLANK	34/34	33/33	16/16
DPA1*	0103	BLANK	4/4	3/3	

Agreement for this sample was greater than 95%, except at Cw* locus.

This sample was previously sent as DNA #423 (Exchange #67, Sept. 2004). In 2004, the consensus was Cw*0701 (100%) homozygous. At that time, Cw*0701/*0718 was an ambiguous allele combination over exon 2-3. Not many labs were able to SBT up to exon 6 and only one company's SSP tray was able to identify Cw*0718. As a result 7 labs reported Cw*0701/*18 and 5 SBT reported the allele Cw*0718.

In this sendout, 36 labs were able to identify Cw*0718 and 23 labs were able to identify the presence of both Cw*0701 and Cw*0718 alleles.

The consensus is now Cw*0701 and Cw*0718. SBT labs able to sequence up to exon 7 have confirmed the presence of both alleles.

In the previous sample (2004), consensus at B*5703, DRB1*1503, DQA1*0102 and DQA*0201 was 97%, 96%, 94% and 94%, respectively. Consensus is now 100% for all.

DNA #534 HISPANIC

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	0201	6803	214/214	136/136	86/90
B*	3905	5801	214/214	141/141	80/88
Cw*	0702	0718	183/184	102/109	48/84
DRB1*	0301	0407	224/224	172/172	90/92
DRB3*	0101		72/72	55/55	13/13
DRB4*		0103	72/72	56/56	13/13
DRB5*					
DQA1*	0301	0501	54/54	39/39	4/8
DQB1*	0201	0302	186/186	150/150	54/54
DPB1*	0101	0402	66/66	64/64	32/32
DPA1*	0103	0201	8/8	7/7	

Agreement for this sample was greater than 95%, except at Cw* locus.

This sample was previously sent as DNA #468 (Exchange 74, Nov. 2005). In 2005, consensus was Cw*0701 (67%), Cw*0702 (100%). 6 labs identified the presence of both Cw*0702 and Cw*0718 and 7 labs reported Cw*0718.

Consensus is now Cw*0702 (98%), Cw*0718 (87%). 11% of labs reported Cw*0701.

Discrepancies or ambiguities reported:

A*:	Not excluded: 0297, 6805/24.
B*:	Not excluded: 3911, 5802/5/11.
Cw*:	0727. Blank. Not excluded: 0706/18/18/27.
DRB1*:	0101, 1302. Not excluded: 0319/28/32, 0403.

DNA #535 ASIAN

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	0206	2420	210/210	119/127	87/88
B*	1302	2704	210/210	136/138	83/86
Cw*	0602	1202	178/178	117/117	80/82
DRB1*	0701	1202	218/218	159/160	89/90
DRB3*	0202		69/69	52/52	12/12
DRB4*		0103	68/69	52/53	12/12
DRB5*					
DQA1*	0201	0601	48/50	43/45	7/8
DQB1*	0202	0301	180/180	142/142	47/52
DPB1*	0201	1701	58/58	57/57	30/30
DPA1*	0103	0201	4/4	3/3	

Agreement for this sample was greater than 95%, except at A*24. This sample is from a Chinese donor.

This is the first A*2420 sent in the DNA Exchange. Consensus for A*2420 is 89%. 11% of labs using high resolution reported A*2402. This sample was sent at a concentration of 400 ug/ml. 4 labs indicated that the volume was not sufficient for complete typing, using SSP testing methods.

Discrepancies or ambiguities reported:

A*: 0201, 2402.	Not excluded:
B*: 1316.	Not excluded: 1305/8/16, 2710.
Cw*: 0703.	Not excluded: 1213.
DRB1*: 0102, 0505/8..	Not excluded: 0602.

DNA #536 HISPANIC

	ALLELE		AGREEMENT (n/total)		SBT LABS
	#1	#2	low	high	Allele level
A*	0201	3002	206/208	126/127	81/88
B*	4011	4101	205/208	137/138	83/86
Cw*	0304	1701	177/178	102/102	63/82
DRB1*	0804	1406	218/220	168/168	79/90
DRB3*	0101		71/71	54/54	12/12
DRB4*					
DRB5*					
DQA1*	0401	0503	50/50	26/28	3/8
DQB1*	0301	0402	180/182	145/147	45/52
DPB1*	0401	BLANK	31/31	31/31	15/15
DPA1*	0103	BLANK	3/3	2/2	

Agreement for this sample was greater than 95%.

This sample was previously sent as DNA #160 (Exchange #23, May 1997) and DNA #338 (Exchange #53, June 2002). In 1997, the B* consensus was B*4002 (58%) and B*4101 (91%). In 2002, the B* consensus was B*4011 (91%) and B*4101 (97%).

Consensus is now B*4011 (99%) and B*4101 (100%).

Discrepancies or ambiguities reported:

A*: 03, 6901.	Not excluded: 0282, 3010.
B*: 35, 55, 4004.	Not excluded: 4002, 4105/6/7.
Cw*: 03, 11.	Not excluded: 0820, 1402/52.
DRB1*: 0501, 0507.	Not excluded: 0506/7.

ACKNOWLEDGMENT:

The UCLA Immunogenetics Center expresses its thanks to the following for contributing to this Exchange: E. Mickelson - Fred Hutchinson Cancer Research Center, J. Wade - Toronto Regional Histocompatibility lab, Fu-Meei Robbins - National Institute of Health, OneLegacy and all organ and tissue donors and families for giving the gift of life and the gift of knowledge by their generous donation to the education and advancement of the study of HLA.

DNA #531

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus			
616	11	15										
635	11	15	3	5			02	11	38	41	07	17
642	1101	1504					020101	110101	380201	4101		
702	1101	1504	30202	50101	0102	0505	0201	1101	3802	4101	0702	1701
714	1101	1504					0201	1101	3802	4101	0702	1701
726	1101	1504					0201	1101	3802	4101	0702	1701
732	110101	1504	3020201	5010101			020101	110101	380201	4101	070201	1701
743	11	15	3	5			02	11	38	41	07	17
805	1101	1504					0201	1101	3802	4101	0702	1701
1018	1101	1504	3	5			0201	1101	3802	4101	0702	1701
1113	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
1189	1101	1504	30202	50101			0201	1101	3802/15	4101	0702	1701
1212	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
1251												
1260	11	15	302	501			02	11	38	4101/07	07	17
1498	1101	1504	30202	5010101	0102	0505/08	02	11	38	41	0702	17
1647	11	15	3	5			02	11	38	41	07	17
1686	1101	1504	30202	50101	0102	0505	0201	1101	3802	4101	0702	1701
1905	1101	1504	302	50101			0201	1101	3802	4101	0702	1701
2004	1101	1504					020101	110101	380201	4101		
2013	1101	1504	302	501			02	11	38	41	07	17
2015												
2019	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
2042												
2063	1101	1504	302	501			02	11	38	41	07	17
2347												
2411	11	15					02	11	38	41		
2518	1101	1504					0201	1101	3802	4101	0702	1701
2549	1101	1504	30202	50101	0102	0509	0201	1101	3802	4101	0702	1701
3248	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
3261	11	15	3	5			02	11	38	41	07	17
3324	1101	1504	302	501	0102/6	05	0201	1101	3802	4101	0727	17
3325	1101	1504	302	501	0102	0505/8	0201	1101/2	3802	4101	07	17
3410	1101	1504					0201	1101	3802	4101	0702	1701
3438												
3522	1101	1504			0102	05	0201	1101	3802	4101	BLANK	17
3548	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
3582	1101	1504	302	50101			02	11	3802	4101	0702	17
3600	11	15	3	5			02	11	38	41	07	17
3614	1101	1504					0201	1101	3802	4101	0702	1701
3625	1101	1504	302	501	0102	05	02	11	38	41	0702	17
3631	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3798	110101	1504	30202	50101	01	05	0201	110101	380201	4101	070201	1701
3807	1101	1504	302	5010101	0102	0509	0201	1101	3802	4101	0702	1701
3849	1101	1504	302	50101	0102	0505/9	02	11	3802/8	41	07	17
4237												
4281												
4336	0101	1302					0201	1101	3802	4101	0702	17
4349	1101	1504	302	501			0201	1101	3802	4101	0702	1701
4420	1101	1504					0201	1101	3802	4101	0702	1701
4545	1101	1504	302	501	0102	0505	0201	1101	3802	4101	0702	17
4551	11	15	NT	NT			02	11	38	41	07	17
4582	1101	1504	30202	501			0201	1101	3802	4101	0702	1701
4585	11	15					02	11	3802	41	07	17
4613												
4623	110101	1504	3020201	5010101			020101	110101	380201	4101	070201	1701/2
4653	110101	1504					0201	1101	3802	4101	0702	1701
4709	1101/51	1504	30202	50101			02	11	38	41	07	17
5204							0201	11	38	41	07	17
5365	11	15	3	5			0201	11	38	41	07	17
5720	1101	1504	30202	50101			0201	1101	3802	4101	0702	1701
5982	1101	1504					020101	110101	380201	4101	070201	1701
6051	11	15	302	501			02	11	3802/8	4101/7	07	17
6313	1101	1504					0201	1101	3802	4101	07	17
9221	11	15	3	5			02	11	38	41	07	17

DNA #532

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus									
616	04	15																
635	04	15	4	5		03	06	02	03	14	15	03	08					
642	040101	1504						020101	030101	140201	150101							
702	0401	1504	40103	50101	0102	0301	0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
714	0401	1504					0302	0602					0201	0301	1402	1501	0304	0802
726	0401	1504					0302	0602					0201	0301	1402	1501	0304	0802
732	040101	1504	4010301	5010101			0302	0602					020101	030101	140201	150101	030401	0802
743	04	15	4	5			0302	0602					02	03	14	15	03	08
805	0401/63	1504					0302/18	0602/29					02	03	14	15	03	08
1018	0401	1504	4	5			0302	0602					0201	0301	1402	1501	0304	0802
1113	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
1189	0401	1504	40103	50101			0302	0602					0201	0301	1402	1501	0304	0802
1212	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
1251																		
1260	04	15	401	501			03	0602/15					02	03	1402	15	03	08
1498	040101	1504	40103	5010101	0102	030101	0302	0602					02	03	1402/03	1501	03	08
1647	04	15	4	5			03	06					02	03	14	15	03	08
1686	0401	1504	40103	50101	0102	0301	0302	0602	0401	BLANK	0103	BLANK	0201	0301	1402	1501	0304	0802
1905	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
2004	040101	1504											020101	030101	140201	150101		
2013	0401	1504	401	501			03	06					02	03	14	15	03	08
2015																		
2019	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
2042																		
2063	0401	1504	401	501			03	0602/15										
2347																		
2411	04	15											02	03	14	15		
2518	0401	1504					0302	0602					0201	0301	1402	1501	0304	0802
2549	0401	1504	40103	50101	0102	0301	0302/18	0602/29	0401	BLANK			0201	0301	1402	1501	0304	0802
3248	0401	1504	40103	50101			0302	0602					0201	0301	1402	1501	0304	0802
3261	04	15	4	5			03	06					02	03	14	15	03	08
3324	0401	1504	401	501	0102/6	03	0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
3325	0401	1504	401	501	0102	0301	0302	0602					0201	0301	1402	1501	03	08
3410	0401	1504					0302	0602					0201	0301	1402	1501	0304	0802
3438																		
3522	0401	1504			0102	0301	0302	0602					0201	0301	1402	1501	0304	0802
3548	0401	1504	40103	50101			0302	0602					0201	0301	1402	1501	0304	0802
3582	0401	1504	401	50101			0302	0602	0401	BLANK			02	03	1402	1501	0304/28	0802/4
3600	04	15	4	5			03	06					02	03	14	15	03	08
3614	0401	1504					0302	0602					0201	0301	1402	1501	0304	0802
3625	0401	1504	401	501	0102	03	0302	0602	0401	BLANK	01	BLANK	02	03	14	15	0304	0802
3631	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3798	040101	1504	40103	50101	01	03	0302	0602					0201	0301	140201	1501	030401	0802
3807	0401	1504	4010301	5010101	0102	030101	0301	0502	0401	BLANK			0201	030101	1402	1501	0304	0802
3849	0401	1504	401	50101	0102	03	0302	0602					02	03	1402	15	03	08
4237																		
4281																		
4336	0401	1504					0302	0602					0201	0301	1402	1501	0304/28	0802/4
4349	0401	1504	401	501			0302	0602					0201	0301	1402	1501	0304	0802
4420	0401	1504											0201	0301	1402	1501	0304	0802
4545	0401	1504	401	501	0102	0301	0302	0602	0401	BLANK	0103/9	BLANK	0201	0301	1402	1501	0304	0802
4551	04	15	NT	NT			03	06	NT	NT			02	03	14	15	03	08
4582	040101	1504	401	501			0302	0602					0201	0301	1402	1501	0304	0802
4585	04	15					03	06					02	03	14	15	03	0802
4613																		
4623	040101	1504	401030101	5010101			030201	0602					020101	030101	140201	150101	0304	0802
4653	040101	1504					0302	0602					020101	030101	140201	150101	0304	0802
4709	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
5204													02	03	14	15	03	08
5365	04	15	4	5			03	06					0201	03	14	15	03	08
5720	0401	1504	40103	50101			0302	0602	0401	BLANK			0201	0301	1402	1501	0304	0802
5982	040101	1504					030201	0602	040101	BLANK			020101	030101	140201	150101	030401	0802
6051	04	15	401	501			03	06	0401	BLANK			02	03	1402	15	03	0802/5
6313	0401	1504					03	0602					0201	0301	1402	1501	03	08
9221	04	15	4	5			03	06					02	03	14	15	03	08

DNA #533

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus
616	07	15							
635	07	15	4	5		02 06	31 68	49 57	07 07
642	0701	1503					310102 6802	4901 570301	
702	0701	1503	40101	50101	0102 0201	0202 0602	3101 6802	4901 5703	0701 0718
714	0701	1503				0202 0602	3101 6802	4901 5703	070101 0718
726	0701	1503				0201 0602	3101 6802	4901 5703	0701 0718
732	070101	1503	4010101	5010101		0202 0602	310102 680201	4901 570301	0701/18 0701/18
743	07	15	4	5		0202 0602	NT NT	NT NT	NT NT
805	07	1503				0202 0602/29	31 68	49 57	07 07
1018	0701	1503	4	5		0202 0602	3101 6802	4901 5703	0701 0718
1113	0701	1503	40101	50101		0202 0602	0201 BLANK		
1189	0701	1503	40101	50101		0202 0602	3101 6802	4901 5703	0701 0718
1212	0701	1503	40101	50101		0202 0602	0201 BLANK		
1251									
1260	07	1503	401	501		02 0602	31 68	4901 5703	07 07
1498	070101	1503	4010101	5010101	0102 0201	0202 0602	31 68	4901 57	07 07
1647	07	15	4	5		02 06	31 68	49 57	07 07
1686	0701	1503	40101	50101	0102 0201	0202 0602	0201 BLANK	0103 BLANK	
1905	0701	1503	40101	50101		0202 0602	0201 BLANK		
2004	0701	1503					3101 6802	4901 5703	0701/18 0718
2013	0701	1503	401	501		02 06	310102 680201	4901 570301	
2015							31 68	49 57	07 07
2019	0701	1503	40101	50101		0202 0602	0201 BLANK		
2042							3101 6802	4901 5703	BLANK 0718
2063	0701/11	1503	401	501		02 0602			
2347									
2411	07	15					31 68	49 57	
2518	0701	1503				0202 0602	3101 6802	4901 5703	0701/18 0701/18
2549	0701	1503	40101	50101	0102 0201	0202 0602/29	0201 BLANK		
3248	0701	1503	40101	50101		0202 0602	3101 6802	4901 5703	0701/18 0701/18
3261	07	15	4	5		02 06	31 68	4901 57	07 07
3324	0701	1503	401	501	0102/6 0201	0202 0602	0201 BLANK		
3325	0701	1503	401	501	0102 0201	0201/4 0602	3101 6802	4901 5703	07 07
3410	0701	1503				0202 0602	3101 6802	4901 5703	0701 0718
3438									
3522	0701	1503			0102 0201	0202 0602	3101 6802	4901 5703	07 07
3548	0701/10	1503	40101	50101		0202 0602	3101 6802	4901 5703	0701/18 0718
3582	0701	1503	401	50101		0202 0602	0201 BLANK		
3600	07	15	4	5		02 06	3101/14 6802	4901 5703	07 07
3614	0701	1503				0202 0602	31 68	49 57	07 07
3625	0701	1503	401	501	0102 0201	0202 0602	0201 BLANK	01 BLANK	
3631	0701	1503	40101	50101	0102 0201	0202 0602	0201 BLANK	0103 BLANK	
3798	070101	1503	40101	50101	01 0201	0202 0602	3101 6802	4901 570301	0701/18 0718
3807	0701	1503	40101	5010101	0102 0201	0202 0602	0201 BLANK		
3849	0701	1503	401	50101	0102 0201	0202 0602	310102 6802	4901 5703	0701 0718
4237							31 6802/18	4901 5703	07 07
4281									
4336	0701	1503				0202 0602	3101 6802	4901 5703	07 07
4349	0701	1503	401	501		0202 0602	3101 6802	4901 5703	0701 BLANK
4420	0701	1503					3101 6802	4901 5703	0701 BLANK
4545	0701	1503	401	501	0102 0201	0202 0602	0201 BLANK	0103/9 BLANK	
4551	07	15	NT	NT		02 06	31 68	49 57	07 07
4582	0701	1503	401	501		0202 0602	310102 68	4901 570301	0701 0718
4585	07	1503				0202 06	31 6802	4901 5703	07 07
4613									
4623	070101	1503	401010101	5010101		0202 0602	310102 680201	4901 570301	07 07
4653	070101	1503				0202 0602	310102 6802	4901 5703	0701 0718
4709	0701	1503	40101	50101		0202 0602	0201 BLANK		
5204							31 68	49 57	07 07
5365	07	15	4	5		02 06	31 68	49 57	07 07
5720	0701	1503	40101	50101		0202 0602	0201 BLANK		
5982	0701	1503				0202 0602	020102 BLANK		
6051	07	1503	401	501		02 0602/19	0201 BLANK		
6313	0701	1503				0202 0602	3101 6802	4901 5703	07 07
9221	0701	1503	4	5		02 06	31 68	49 57	07 07

DNA #534

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus								
616	03	04															
635	03	04	3	4		02	03										
642	030101	040701						02	07								
702	0301	0407	30101	40103	0301	0501	0201	0302	0101	0402	020101	680301	3905	5801	0702	0718	
714	0301	0407					0201	0302			0201	6803	3905	5801	0702	0718	
726	0301	0407					0201	0302			0201	6803	3905	5801	0702	0718	
732	030101	040701	30101	4010302			0201	0302			020101	680301	3905	5801	0702/27	07	
743	03	04	3	4			02	03			NT	NT	NT	NT	NT	NT	
805	0301	0407					0201	0302			02	68	39	58	07	07	
1018	0301	0407	3	4			0201	0302			0201	6803	3905	5801	0702	0718	
1113	0301	0407	30101	40103			0201	0302	0101	0402	0201	6803	3905	58	0702/19	0718/27	
1189	0301	0407	30101	40103			0201	0302			0201	6803	3905	5801	0702/19	0718/27	
1212	NT	NT	NT	NT			NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
1251																	
1260	03	0407	301	401			02	0302			02	6803	3905	58	07	07	
1498	030101	0407	30101	40103	030101	0501	0201	0302			02	68	39	58	0702	07	
1647	03	04	3	4			02	03			02	68	39	58	07	07	
1686	0301	0407	30101	40103	0301	0501	0201	0302	0101	0402	0103	0201	6803	3905	5801	0702	0718
1905	0301	0407	301	40103			0201	0302	0101	0402		0201	6803	3905	5801	0702/19	0718/27
2004	030101	040701					020101	030201			020101	680301	3905	5801			
2013	0301/19	0407	301	401			02	03			02	68	39	58	07	07	
2015																	
2019	0301	0407	30101	40103			0201	0302	0101	0402	0201/97	6803	3905	5801	0702/19	0718/27	
2042																	
2063	0301/32	0407	301	401			02	0302									
2347																	
2411	03	04					0201	0302			02	68	39	58			
2518	0301	0407					0201	0302	0101	0402	0201	6803	3905	5801	0702	0718	
2549	0301	0407	30101	40103	0301	0501	0201	0302	0101	0402	0201	6803	3905	5801	0702/19	0718/27	
3248	0301	0407	30101	40103			0201	0302			0201	6803	3905	5801	07	07	
3261	03	04	3	4			02	03			02	68	39	58	07	07	
3324	0301	0407	301	401	03	05	0201	0302	0101	0402	0201	6803	3905	5801	0702	07	
3325	0301	0407	301	401	0301	0501	0201/4	0302			0201	6803	3905	5801/2	07	07	
3410	0301	0407					0201	0302			0201	6803	3905	5801	0702	0701	
3438																	
3522	0301	0407			0301	0501	0201/4	0302			0201	6803	3905	5801	07	07	
3548	0301	0407	30101	40103			0201	0302			0201	6803	3905	5801	0702	0718	
3582	0301	0407	301	401			0201	0302	0101	0402	02	6803/5	3905	5801/11	0702/27	07	
3600	03	04	3	4			02	03			02	68	39	58	07	07	
3614	0301	0407					0201	0302			0201	6803	3905	5801	0702	0701/18	
3625	0301	0407	301	401	03	05	0201	0302	0101	0402	01	0201	68	39	58	0701/2	0718/19
3631	0301	0407	30101	40103	0301	0501	0201	0302	0101	0402	0103	0201	6803	3905	5801	0702	0718
3798	030101	040701	30101	40103	03	05	0201	0302			0201	680301	3905	5801	070201	0718	
3807	0301	0407	301	4010301	030101	0501	0201	0302	0101	0402	0201	6803	3905	5801	0702	0718	
3849	0301	0407	301	401	0301	0501	0201	0302			02	6803/24	3905/11	58	07	07	
4237																	
4281																	
4336	0301	0407					0201	0302			0201	6803	3905	5801	0702	07	
4349	0301	0407	301	401			0201	0302			0201	6803	3905	5801	0702	0701	
4420	0301	0407															
4545	0301	0407	301	401	0301	0501	0201	0302	0101	0402	0103/9	0201	6803	3905	5801	0702	07
4551	0301	0407	30101	40103			0201	0302	0101	0402	0201	6803	3905	5801	0702	0718	
4582	0301	0407	30101	401			0201	0302			0201	680301	3905	5801	0702/19	0718/27	
4585	03	04					0201	03			02	68	39	5801	07	07	
4613																	
4623	030101	040701	3010102	4010302			020101	030201			020101	680301	3905	5801	0702	0701/18	
4653	030101	040701					0201	0302			020101	680301	3905	5801	0702	0718	
4709	0301/28	0407	30101	40103			0201	0302	0101	0402	02	68	39	58	07	07	
5204											0201	68	39	58	07	07	
5365	03	04	3	4			02	03			0201	68	39	58	07	07	
5720	0301	0407	30101	40103			0201	0302	0101	0402	0201	6803	3905	5801	0702/19	0718/27	
5982	030101	0407					020101	030201	010101	0402	0201	6803	3905	5801	070201	0718	
6051	03	0407	301	401			02	0302	0101	0402	02	6803	3905	58	07	07	
6313	0301	0407					0201/4	0302			0201	6803	3905	5801	0702	07	
9221	0301	0407	3	4			02	03			02	68	39	58	07	07	

DNA #535

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus			
616	07	12										
635	07	12	3	4			02	03				
642	0701	120201					020601	24	13	27	06	12
702	0701	1202	30202	40103	0201	0601	0206	2420	1302	2704	0602	1202
714	0701	1202					0206	2420	1302	2704	0602	1202
726	0701	1202					0206	2420	1302	2704	0602	1202
732	070101	120201	3020201	4010301			020601	2420	130201	270401	060201	120201
743	07	12	3	4			NT	NT	NT	NT	NT	NT
805	07	1202					02	24	13	27	06	12
1018	0701	1202	3	4			0206	2420	1302	2704	0602	1202
1113	0701	12	30202	40103			0206	2420	1302/16	27	06	12
1189	0701	1202/13	30202	40103			0206	2420	1302	2704	0602	1202
1212	NT	NT	NT	NT			NT	NT	NT	NT	NT	NT
1251												
1260	07	1202/13	302	401			02	24	13	27	06	12
1498	070101	120201	30202	40103	0201	0601	0202	0301				
1647	07	12	3	4			02	03				
1686	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
1905	0701	1202	30202	40103			0206	2420	1302	2704	0602	1202
2004	0701	120201					020601	2420	130201	270401		
2013	0701	1202	302	401			02	24	13	27	06	12
2015												
2019	0701	1202	30202	40103			0206	2420	1302	2704	0602	1202
2042												
2063	07	1202	302	401			02	03				
2347												
2411	07	12					02	24	13	27	06	12
2518	0701	1202					0206	2420	1302	2704	0602	1202
2549	0701	1202	30202	40103	0201	0601	0206	2420	1302	2704	0602	1202
3248	0701	1202	30202	40103			0206	2420	1302	2704	0602	1202
3261	07	12	3	4			02	24	13	27	06	12
3324	0701	1202	302	401	0201	0601	0206	2420	1302	2704	0602	1202
3325	0701	1202	302	401	0102	0505/8	0206	2402	1302	2704	06	12
3410	0701	1202					0206	2420	1302	2704	0602	1202
3438												
3522	0701	1202			0201	0601	0206	2420	1302	2704	0602	1202
3548	0703	1202	30202	40103			0206	2420	1302	2704	0602	1202
3582	0701	1202	302	401			0206	2420	1302	2704	0602	1202
3600	07	12	3	4			02	24	13	27	06	12
3614	0701	1202					0206	2420	1302	2704	0602	1202
3625	0701	1202/13	302	401	0201	06	0202	0301	0201	1701	01	0201
3631	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3798	070101	120201	30202	40103	0201	0601/2	020601	2420	130201	270401	060201	120202
3807	0701	1202	3020201	4010301	0201	0601	0206	2420	1316	2731	0602	1202
3849	0701	1202	302	401	0201	0601/2	0206	24	1302/8	27	06	1202
4237												
4281												
4336	0701	1202					0206	2420	1302	2704	0602	1202
4349	0701	1202	302	401			0206	2420	1302	2704	0602	1202
4420	0701	1202					0206	2420	1302	2704	0602	1202
4545	0701	1202	302	401	0201	0601	0206	2420	1302	2704	0602	1202
4551	0701	1202	30202	40103			0206	2420	1302	2704	0602	1202
4582	0701	120201	30202	401			02	24	13	27	06	12
4585	07	12					02	24	1302	2704	06	12
4613												
4623	070101	120201	3020201	401030101			020601	2420	130201	270401	060201	1202
4653	070101	120201					0206	2420	1302	2704	0602	1202
4709	0701	1202	30202	40103			02	24	13	27	06	12
5204							0206	2420	1302	2704	0602	1202
5365	07	12	3	4			02	03				
5720	0701	1202	30202	40103			0206	2420	1302	2704	0602	1202
5982	0701	120201					020601	2420	130201	270401	060201	120202
6051	07	1202/13	302	401			02	24	1302/8	2704/10	06	12
6313	0701	1202					0206	2402	1302	2704	0602	1202
9221	07	12	3	4			02	24	13	27	06	12

DNA #536

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus									
616	08	14																
635	08	14	3	BLANK		03	04	02	30	40	41	03	17					
642	080401	1406						020101	300201	4011	4101							
702	0804	1406	30101	BLANK	0401	0503	0301	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
714	0804	1406					0301	0402					0201	3002	4011	4101	0304	1701
726	0804	1406					0301	0402					0201	3002	4011	4101	0304	1701
732	080401	1406	30101	BLANK			0301/19	0402					020101	300201	4011	4101	030401	1701
743	08	14	3	BLANK			03	04					NT	NT	NT	NT	NT	NT
805	0804	1406					0301/19	0402					02	30	40	41	03	17
1018	0804	1406	3	BLANK			0301	0402					0201	3002	4011	4101	0304	1701
1113	0804	1406	30101	BLANK			0301	0402	0401	BLANK			0201	3002	4011	4101	03	1701
1189	0804	1406	30101	BLANK			0301/19	0402					0201	3002	4011	4101	0304	1701
1212	NT	NT	NT	NT			NT	NT	NT	NT			NT	NT	NT	NT	NT	NT
1251																		
1260	0804/20	1406/52	301	BLANK			03	0402					02	30	4011	41	03	17
1498	0804	1406	30101	BLANK	040102	0503	0301	0402					02	30	40	41	03	17
1647	08	14	3	BLANK			03	04					02	30	40	41	03	17
1686	0804	1406	30101	BLANK	0401	0503	0301	0402	0401	BLANK	0103	BLANK	0201	3002	4011	4101	0304	1701
1905	0804	1406	301	BLANK			0301	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
2004	080401	1406											020101	300201	4011	4101		
2013	0804	1406	301	BLANK			03	04					02	30	4011	41	03	17
2015																		
2019	0804	1406	30101	BLANK			0301	0402	0401	BLANK			0201	30	4011	4101	0304	1701
2042																		
2063	0804	1406	301	BLANK			03	0402										
2347																		
2411	08	14											02	30	40	41		
2518	03	11					02	03					03	6901	35	55	03	17
2549	0804	1406	30101	BLANK	0401	05	03	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
3248	0804	1406	30101	BLANK			0301	0402					0201	3002	4011	4101	0304	1701
3261	08	14	3	BLANK			03	04					02	30	40	41	03	17
3324	0804	1406	301	BLANK	0401	05	0301	0402	0401	BLANK			0201	3002	4011	4101	0304	17
3325	0804	1406	301	BLANK	NT	NT	0301	0402					0201	3002	4002/11	4101	03	17
3410	0804	1406					0301	0402					0201	3002	4011	4101	0304	1701
3438																		
3522	08	1402/6			0401	05	0301	0402					0201	3002	4011	4101	0304	17
3548	0804	1406	30101	BLANK			0301	0402					0201	3002	4011	4101	0304	1701
3582	0804/20	1406/52	301	BLANK			0301/19	0402	0401	BLANK			02	3002	4011	4101	0304	17
3600	08	14	3	BLANK			03	04					02	30	40	41	03	17
3614	0804	1406					0301	0402					0201	3002	4011	4101	0304	1701
3625	0804	14	301	BLANK	04	05	0301	0402	0401	BLANK	01	BLANK	NT	NT	NT	NT	NT	NT
3631	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
3798	080401	1406	30101	BLANK	04	05	0301	0402					0201	3002	4011	4101	030401	1701
3807	0804	1406	301	BLANK	040101	0501	0301	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
3849	0804	1406	301	BLANK	04	0503/7	0301	0402					02	3002/10	4011	41	03	17
4237																		
4281																		
4336	0804	1406					0301	0402					0201	3002	4011	4101	0304	17
4349	0804	1406	301	BLANK			0301	0402					0201	3002	4011	4101	0304	1701
4420	0804	1406											0201	3002	4011	4101	0304	1701
4545	0804	1406	301	BLANK	0401	0503	0301	0402	0401	BLANK	0103/9	BLANK	0201	3002	4011	4101	0304	17
4551	0804	1406	30101	BLANK			0301	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
4582	0804	1406	30101	BLANK			0301	0402					0201/82	3002	4011	4101	0304	1701
4585	08	14					0301	0402					02	3002	4011	41	03	17
4613																		
4623	080401	1406	3010102	BLANK			030101	0402					020101	3002	4011	4101	0304	17
4653	080401	1406					0301	0402					0201	3002	4011	4101/5	0304	1701
4709	0804	1406	30101	BLANK			0301	0402	0401	BLANK			02	30	40	41	03	17
5204													0201	30	40	41	03	17
5365	08	14	3	BLANK			03	04					0201	30	40	41	03	17
5720	0804	1406	30101	BLANK			0301	0402	0401	BLANK			0201	3002	4011	4101	0304	1701
5982	0804	1406					030101	0402	040101	BLANK			020101	300201	4011	4101	030401	1701
6051	0804/20	1406/52	301	BLANK			0301/9	0402	0401	BLANK			02	30	4011	41	03	07
6313	0804	1406					0301/13	0402					0201	3002	4011	4101	0304	17
9221	0804	1406	3	BLANK			03	04					02	30	40	41	03	17

PARTICIPANTS AND METHODS

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus
7	RSSOP-OL	RSSOP	RSSOP	RSSOP			RSSOP	RSSOP	RSSOP
16	RSSOP-OL/SBT	RSSOP-OL,SSP-INVGTN	RSSOP-OL	RSSOP-OL	RSSOP-OL/SBT		RSSOP-OL/SBT	RSSOP-OL/SBT	RSSOP-OL/SBT
61	RSSOP-OL/SSP-INVGTN	RSSOP-OL/SSP-INVGTN		RSSOP-OL/SSP-INVGTN			RSSOP-OL/SSP-INVGTN	RSSOP-OL/SSP-INVGTN	RSSOP-OL/SSP-INVGTN
80	SSP-OL	SSP-OL					SSP-OL	SSP-OL	SSP-OL
124	SBT	SBT		SBT	SBT		SBT	SBT	SBT
131	SSP-INVGTN	SSP-INVGTN		SSP-INVGTN			SSP-INVGTN	SSP-INVGTN	SSP-INVGTN
134	SBT-ATRIA/SSP-OLRUP	SSP-OLRUP		SSP-OLRUP	SBT-ATRIA/SSP-OLRUP		SBT-ATRIA/SSP-OLRUP	SBT-ATRIA/SSP-OLRUP	SBT-ATRIA/SSP-OLRUP
138	SBT/SSP/SSOP			SSP/SSOP			SBT/SSP/SSOP	SBT/SSP/SSOP	SBT/SSP/SSOP
139	SSOP-Tepnel	SSOP-Tepnel					SSOP-Tepnel	SSOP-Tepnel	
142									
144	SSP/SBT-PRTRNS			SSP/SBT-PRTRNS			SSP/SBT-PRTRNS	SSP/SBT-PRTRNS	SSP/SBT-PRTRNS
145	RSSOP-OL/SSP-GV	SSP-GV-DYNL		SSP-GV			RSSOP-OL	RSSOP-OL	SSP-BIOTST
147	RSSOP/SSP-BIONBIS	RSSOP/SSP	SSP	RSSOP/SSP	SSP		RSSOP/SSP-BIONBIS	RSSOP/SSP-BIONBIS	RSSOP/SSP-BIONBIS
148	RSSOP-DYNL			RSSOP-DYNL			RSSOP-DYNL	RSSOP-DYNL	RSSOP-DYNL
151	SSOP/SSP	SSP					SSOP/SSP	SSOP/SSP	SSP-INVGTN
152	SSP-OL						SSP-OL	SSP-OL	
153	SSOP-DYNL/SSP-GV	SSOP-DYNL/SSP-GV		SSOP-DYNL/SSP-GV			SSOP-DYNL/SSP-GV	SSOP-DYNL/SSP-GV	SSOP-DYNL/SSP-GV
155									
156	SBT-ATRIA/SSP-OL						SBT-ATRIA/SSP-GV	SBT-ATRIA/SSP-GV	SBT-ATRIA/SSOP-DYNL/SSP-GV
158	SSP-GV	SSP-DYNL		SSP-OL	SSP-DYNL		SSP-INVGTN	SSP-INVGTN	SSP-INVGTN
160									
162	SBT-BIOSWM			SBT-BIOSWM			SBT-BIOSWM	SBT-BIOSWM	SBT-BIOSWM
163	SSP-GV	SSP-GV					SSP-GV	SSP-GV	
164									
166									
167	SSP-OL/SOP-OL/SBT						SSP-OL/SOP-OL/SBT	SSP-OL/SOP-OL/SOP-LM/SBT	SSP-OL/SOP-OL/SBT
168									
170	SSOP-INLPA/SSP-DYNL	SSP-DYNL		SSOP-INLPA/SSP-DYNL			SSOP	SSOP	SSOP
171									
173	ATRIA/Conexio		DYNALSSO	DYNALSSO			DYNALSSO	DYNALSSO	
174	RSSOP-TPNEL						RSSOP	RSSOP	
175	SSO-DYNALSBTInvitrogen			SSO-DYNALSSP-Invitrogen			SSO-DYNALSSP-Invitrogen	SSO-DYNALSSP-Invitrogen	SSO-Dynal
176									
179	SBT	SSP	SBT	SSOP			SBT	SBT	SBT
180									
185	SBT			SBT			SBT	SBT	SBT
186									
187	SBT-ATRIA			SBT-ATRIA			RSSOP-OL	RSSOP-OL	
188									
189	SSP-local	SSP-local		SSP-local			SBT-Atria/Rsso-ol	SBT-Atria/Rsso-ol	SBT-Atria/Rsso-ol
190	SSP-OL	SSP-OL		SSP-OL			SSP-OL	SSP-OL	SSP-OL
191	SSP-OLRUP-PF	SSP-OLRUP-PF	SSP-OLRUP-PF	SSP-OLRUP-PF	SSP-OLRUP-PF		SSP-OLRUP-PF	SSP-OLRUP-PF	SSP-OLRUP-PF
192	SSP/SBT	SSP/SBT		SSP/SBT			SSP/SBT	SSP/SBT	SSP/SBT
193	RSSOP-OL						RSSOP-OL	RSSOP-OL	
194	SSP-OLRUP	SSP-OLRUP					SSP-OLRUP	SSP-OLRUP	
195	SSOP-OL/SSP-OLRUP	SSOP-OL/SSP-OLRUP		SSOP-OL/SSP-OLRUP			SSOP-OL/SSP-OLRUP	SSOP-OL/SSP-OLRUP	SSOP-OL/SSP-OLRUP
196									
197	SBT-Atria/rSSO-OL	rSSO-OL	SSP-INVGTN/RSSOP-OL	SBT-Atria/rSSO-OL	SBT-Atria/rSSO-OL		SBT-Atria/rSSO-OL	SBT-Atria/rSSO-OL	SBT-Atria/rSSO-OL
199									
200	SSP-GV			SSP-GV			SSP-GV	SSP-GV	SSP-GV
201									
202									
203									
204	SBT-BIOSEWOOM						SBT-BIOSEWOOM	SBT-BIOSEWOOM	SBT-BIOSEWOOM
205	RSSOP/SBT	RSSOP-INLPA	SSP-OL	RSSOP/SSP			RSSOP-OL/SBT-ATRIA	RSSOP/SBT	RSSOP/SBT/SSP
206	SSO-OL						SSO-OL	SSO-OL	
207	SBT/SSO/SSP	SBT/SSO/SSP		SBT/SSO/SSP	SBT/SSO/SSP		SBT/SSO/SSP	SBT/SSO/SSP	SBT/SSO/SSP
208	SSP-INVGTN						SSP-INVGTN	SSP-INVGTN	
209	SSP-OLRUP	SSP-OLRUP					SSOP-INVGTN	SSOP-INVGTN	SSOP-INVGTN
210							SBT	SBT	SBT
211	RSSOP-OL/SSP-OLRUP	RSSOP-OL	RSSOP-OL	RSSOP-OL/SSP-OLRUP	SBT(inHouse)		RSSOP-OL/SBT	RSSOP-OL/SBT	RSSOP-OL/SBT
212	SBT						SBT	SBT	SBT
213	SBT-PRTRNS/SSP	SSP-OLERUP	SSP-OLERUP	SSP-OLERUP	SSP-OLERUP		PCR-OLERUP	PCR-OLERUP	PCR-OLERUP
216	SBT/SSP-OL	SSP-OL		SBT/SSP-OL			SSP-DYNL/SBT	SSP-DYNL	SSP-DYNL
230	SSOP/SSP	SSOP/SSP	SSOP/SSP	SSOP/SSP	SSOP/SSP		SSOP/SSP	SSOP/SSP	SSOP/SSP
239	SSP-OL	SSP-OL	SSP-OL	SSP-OL			SSP-OL	SSP-OL	
278	SSP/RSSOP	SSP/RSSOP	RSSOP	SSP/RSSOP	RSSOP		SSP/RSSOP	SSP/RSSOP	SSP/RSSOP
291	RSSOP-INLPA	RSSOP-INLPA	RSSOP-INLPA	RSSOP-INLPA			RSSOP-INLPA	RSSOP-INLPA	RSSOP-INLPA
401	SBT-ATRIA			SBT	SBT-ATRIA				
452	SSOP-LMNx/SSP-PF-GV/SSB-ATRIA			SSOP-LMNx/SSP-PF-GV/SSB-ATRIA	SSOP-LMNx/SSP-PF-GV/SSB-ATRIA		SSOP-LMNx/SSP-PF-GV/SSB-ATRIA	SSOP-LMNx/SSP-PF-GV/SSB-ATRIA	SSOP-LMNx/SSP-PF-GV/SSB-ATRIA
519	SBT-ATRIA			SSOP	SSOP		SBT-ATRIA	SBT-ATRIA	SBT-ATRIA
615	SBT	SBT	SSP	SBT	SBT				

PARTICIPANTS AND METHODS

CENTER	DRB1	DRB3/4/5	DQA1	DQB1	DPB1	DPA1	A-Locus	B-Locus	C-Locus
616	SSO								
635	SSP-OL	SSP-OL		SSP-OL			SSP-OL	SSP-OL	SSP-OL
642	SBT						SBT	SBT	
702									
714	SSP-PF			SSP-PF			SSP-PF	SSP-PF	SSP-PF
726	RSSOP-OL/SSP-GV-PF-OL			RSSOP-OL/SSP-GV-PF-OL			RSSOP-OL/SSP-GV-PF-OL	RSSOP-OL/SSP-GV-PF-OL	RSSOP-OL/SSP-GV-PF-OL
732	SBT	SBT		SBT			SBT	SBT	SBT
743	SSP-INVTGN	SSP-INVTGN					SSP-INVTGN	SSP-INVTGN	SSP-INVTGN
805	RSSOP-TPNEL/SSP-INVTGN			RSSOP-TPNEL/SSP-INVTGN			RSSOP-TPNEL/SSP-INVTGN	RSSOP-TPNEL/SSP-INVTGN	RSSOP-TPNEL/SSP-INVTGN
1018	SSP-OL/SSP-ATRIA	SSP-OL		SSP-OL/SSP-ATRIA			SSP-OL/SSP-OL	SSP/SSP	SSP-OL-PF/SSP-ATRIA
1113	RSSOP-INLPA/SSP-DYNL/SSP	SSP-DYNL		RSSOP-INLPA/SSP	SSP-DYNL-GV		RSSOP-INLPA.SSP-GV/SSP	RSSOP-INLPA.SSP-GV/SSP	RSSOP-INLPA.SSP-GV/SSP
1189	SSP-INVTGN						SSP-INVTGN		
1212	RSSOP/SSP-Dynal	SSP/Dynal		SSP-OL	SSP-DYNL		RSSOP/SSP-Dynal	RSSOP/SSP-Dynal	RSSOP/SSP-Dynal
1251									
1260	RSSOP-OL	RSSOP-OL		RSSOP-OL			RSSOP-OL	RSSOP-OL	RSSOP-OL
1498	SSOP	DynalSSP	DynalSSP	DynalSSP			InhouseSSP	InhouseSSP	InhouseSSP
1647	SSO-Tepnel	SSO-Tepnel		SSO-Tepnel			SSO-Tepnel	SSO-Tepnel	SSO-Tepnel
1686	SSP	SSP	SSP	SSP	SSP	SSP	SSP	SSP	SSP
1905	SSOP/SSP/SSP	SSOP/SSP/SSP		SSOP/SSP/SSP	SSOP/SSP/SSP		SSOP/SSP/SSP	SSOP/SSP/SSP	SSOP/SSP/SSP
2004	SBT-ATRIAGENETICS						SBT-ATRIAGENETICS	SBT-ATRIAGENETICS	
2013	RSSOP/SSP-BIOSYN	RSSOP/SSP-BIOSYN		RSSOP/SSP-BIOSYN			RSSOP-LMNX	RSSOP-LMNX	RSSOP-LMNX
2015									
2019	SSOP-INGNTCS/SSP-OLRUP	SSOP-INGNTCS/SSP-OLRUP		SSOP-INGNTCS/SSP-OLRUP	SSOP-INGNTCS/SSP-OLRUP		SSOP-INGNTCS/SSP-OLRUP	SSOP-INGNTCS/SSP-OLRUP	SSOP-INGNTCS/SSP-OLRUP
2042									
2063	RSSOP-OL/SSP-DYNL	RSSOP-OL/SSP-DYNL		SSOLabType					
2347									
2411	RSSOP-OL						RSSOP-OL	RSSOP-OL	
2518	SBT-ATRIA/SSP-OL			SBT-ATRIA/SSP-OL			SBT-ATRIA/SSP-OL	SBT-ATRIA/SSP-OL	SBT-ATRIA/SSP-OL
2549	SBT-ATRIA/SSP-INVTGN/SSOP	SSP-INVTGN	SSP	SSOP/SSP	SBT		SBT/SSP/SSOP	SBT-ATRIA/SSP/SSOP	SBT-ATRIA/SSP-INVTGN
3248	SBT-ABOT/SSP-GV	SBT-ABOT/SSP-GV		SBT-ABOT/SSP-GV			SBT-ABOT/SSP-GV	SBT-ABOT/SSP-GV	SBT-ABOT/SSP-GV
3261	SSP-Invitrogen	SSP-Invitrogen		SSP-Invitrogen			SSP-Invitrogen	SSP-Invitrogen	SSP-Invitrogen
3324	SSP/SSP-ATRIA	SSP/SSP-ATRIA	SSP/SSP-ATRIA	SSP/SSP-ATRIA	SSP/SSP-ATRIA		SSP/SSP-ATRIA	SSP/SSP-ATRIA	SSP/SSP-ATRIA
3325	Innogenetics/SSO	Innogenetics/SSO	Innogenetics/SSO	Innogenetics/SSO			Innogenetics/SSO	Innogenetics/SSO	Innogenetics/SSO
3410	SBT-Atria/SSP-GV			SBT-Atria/SSP-GV			SBT-Atria/SSP-GV	SBT-Atria/SSP-GV	SBT-Atria/SSP-GV
3438									
3522	SBT-ATRIA		RSSOP	RSSOP			SBT-ATRIA	SBT-ATRIA	SBT-ATRIA
3548									
3582	SBT	SBT		SBT	SBT		SBT	SBT	SBT
3600	SSP-Invitrogen	SSP-Invitrogen		SSP-Invitrogen			SSP-Invitrogen	SSP-Invitrogen	SSP-Invitrogen
3614	SBT			OLSSP			RSSOP-OL/SSP-OL	RSSOP-OL/SSP-OL	RSSOP-OL/SSP-OL
3625									
3631	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP	SSP-OLRUP
3798	SBT-PRTRNS/SSP-OL/RSSOP	RSSOP-OL/SSP-OL	RSSOP	SSP/RSSOP			SBT-PRTRNS/RSSOP-OL/SSP	SBT-PRTRNS/RSSOP-OL/SSP	SBT-PRTRNS/RSSOP-OL/SSP
3807	SBT-INVTGN	SBT-INVTGN	SBT-INVTGN	SBT-INVTGN	SBT-INVTGN		SBT-INVTGN	SBT-INVTGN	SBT-INVTGN
3849	SSOP	SSOP	SSOP	SSOP/SSP			SSOP	SSOP	SSOP
4237									
4281									
4336	SBT-ATRIA			SBT-ATRIA			SBT-ATRIA	SBT-ATRIA	SBT-ATRIA
4349	SBT-INVTGN/RSSOP-OL	SBT-INVTGN/RSSOP-OL		SBT-INVTGN/RSSOP-OL			SBT-INVTGN/RSSOP-OL	SBT-INVTGN/RSSOP-OL	SBT-INVTGN/RSSOP-OL
4420	WAK-FLOW						WAK-FLOW	WAK-FLOW	WAK-FLOW
4545	SSOP/SSP	SSOP	SSOP/SSP	SSOP/SSP	SSP/SSP-ATRIA	SSP-OLRUP	SBT/SSP/SSOP	SBT/SSP/SSOP	SBT/SSP/SSOP
4551	SBT-ATRIA/SSP-OLRUP	SSP-OLRUP/SSOLIPA		SSPOLERUP/SSOLIPA			SBT-ATRIA/SSP-DYNAL-PF	SBT-ATRIA/SSP-DYNAL-PF	SBT-ATRIA/SSP-DYNAL-PF
4582	RFLP/SSP-INVTGN	RFLP		RFLP/SSP			SSP-INVTGN	SSP-INVTGN	SSP-INVTGN
4585	RSSOP-INVTGN			RSSOP-INVTGN			RSSOP-INVTGN	RSSOP-INVTGN	RSSOP-INVTGN
4613									
4623	SBT	SBT		SBT			SSP/SSP	SSP/SSP	SSP/SSP
4653	SSP/SSP			SSP			SSP-kitsBionobis	SSP-kitsBionobis	SSP-kitsBionobis
4709	SSPOneLambda	SSPOneLambda		SSPOneLambda	SSP-KitsBionobis		SSP-kitsBionobis	SSP-kitsBionobis	SSP-kitsBionobis
5204							SSP-INVTGN-OL	SSP-INVTGN-OL	SSP-INVTGN-OL
5365									
5720	SSOP/SSP/SSP	SSOP/SSP/SSP		SSOP/SSP	SBT		SSOP/SSP/SSP	SSOP/SSP/SSP	SSOP/SSP/SSP
5982	SBT-ATRIA			SBT	SBT		SBT-ATRIA	SBT	SBT
6051	SSP-OL	SSP-OL		SSP-OL	SSP-OL		SSP-OL	SSP-OL	SSP-OL
6313	SSOP-INGNTCS/SSP-ATRIA			SSOP			SSOP-INGNTCS/SSP-ATRIA	SSOP-INGNTCS/SSP-ATRIA	SSOP-INGNTCS/SSP-ATRIA
9221	SSP-INVTGN	SSP-INVTGN		SSP-INVTGN			SSP-INVTGN	SSP-INVTGN	SSP-INVTGN