

Olerup SSP[®] HLA-A*03

Product number:	101.413-24/04 – including <i>Taq</i> pol. 101.413-24u/04u – without <i>Taq</i> pol.
Lot number:	21E
Expiry date:	2010-March-01
Number of tests:	24 tests – Product No. 101.413-24 4 tests – Product No. 101.413-04
Number of wells per test:	42
Storage - pre-aliquoted primers:	dark at -20°C
- PCR Master Mix:	-20°C
- Adhesive PCR seals	RT
- Product Insert	RT

This Product Description is only valid for Lot No. 21E.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[®] HLA-A*03 LOT

The HLA-A*03 specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP[®]* HLA-A*03 lot was made (Lot No. X17).

Fourteen wells have been added to the HLA-A*03 kit,
wells **30 to 42**.

The primers of the wells detailed below have been exchanged, added or modified compared to the previous lot.

Well	5'-primer	3'-primer	rationale
4	-	Modified	Increased specificity of specific primer pair.
17	Modified	-	Increased specificity of specific primer pair.
30	New	New	Primer pair for the A*0327 allele.
31	New	New	Primer pair for the A*0328 allele.
32	New	New	Primer pair for the A*0329 allele.
33	New	New	Primer pair for the A*0330 allele.
34	New	New	Primer pair for the A*0331 allele.
35	New	New	Primer pair for the A*0332 allele.
36	New	New	Primer pair for the A*0333 allele.
37	New	New	Primer pair for the A*0334 allele.

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38	New	New	Primer pair for the A*0335 allele.
39	New	New	Primer pair for the A*0336 allele.
40	New	New	Primer pair for the A*0337 allele.
41	New	New	Primer pair for the A*0338 allele.
42	New	New	Primer pair for the A*0339 allele.

PRODUCT DESCRIPTION

HLA-A*03 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the A*0301 to A*0339 alleles.

PLATE LAYOUT

Each test consists of 42 PCR reactions in a 48 well PCR plate. Wells 43 to 48 are empty.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	empty	empty	empty	empty	empty	empty

The 48 well cut PCR plate is marked with 'HLA-A*03'.

Well No. 1 is marked with the Lot No. '21E'.

The PCR plates are covered with a PCR-compatible foil.

Please note: When removing each 48 well PCR plate, make sure that the remaining plates stay covered. Use a scalpel or a similar instrument to carefully cut the foil between the plates.

INTERPRETATION

The interpretation of HLA-A*03 SSP subtypings will be influenced by most A*01, most A*02, all A*11, two A*23, several A*24, the A*2503, seven A*26, the A*29, the A*30, most A*31, the A*32, most A*33, most A*34, the A*36, the A*66, most A*68, the A*6901, the A*74 and the A*8001 alleles when present on the other haplotype.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*03 alleles, i.e. **A*0301 to A*0339**, recognized by the HLA Nomenclature Committee in January 2008¹ will give rise to unique amplification patterns by the primers in the HLA-A*03 subtyping kit.

The HLA-A*03 subtyping kit cannot distinguish the A*03010101, A*03010103, A*030102 to A*030106 alleles.

¹HLA-A alleles listed on the IMGT/HLA web page 2008-January-11, release 2.20.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

The 39 HLA-A*03 alleles will generate 40 different amplification patterns that can be combined in 820 homozygous and heterozygous combinations. Sixty-four of these genotypes do not give rise to unique amplification patterns. The different sizes of the specific PCR products generated by primer mixes 18, 20 and 23 were not considered in these calculations.

```
++++---+ ++----- +----- ----+--- ----- -- 0301,0310 = 0302,0305
++++---+ -----+----- +----- ----+--- ----- -- 0301,0303N = 0303N,0303N
++++---+ -----+----- +----- ----+--- ----- -- 0301,0304 = 0304,0304
++++---+ -----+----- +----- ----+--- ----- -- 0301,0306 = 0306,0306
++++---+ -----+----- +----- ----+--- ----- -- 0301,0309 = 0309,0309
++++---+ -----+----- +----- ----+--- ----- -- 0301,03010102N =
03010102N,03010102N
++++---+ -----+----- +----- ----+--- ----- -- 0301,0311N = 0311N,0311N
++++---+ -----+----- +----- ----+--- ----- -- 0301,0314 = 0314,0314
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0320 = 0313,0316 =
0313,0320 = 0316,0320 =
0320,0320
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0313 = 0313,0313
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0319 = 0315,0319 =
0315,0322 = 0319,0319 =
0319,0322
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0315 = 0315,0315
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0316 = 0316,0316
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0317 = 0317,0317
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0322 = 0322,0322
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0321N = 0321N,0321N
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0323 = 0323,0323
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0324 = 0324,0324
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0325 = 0325,0325
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0326 = 0326,0326
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0327 = 0327,0327
++++---+ -----+----- ++-+----- ----+--- ----- -- 0301,0328 = 0328,0328
++++---+ -----+----- ++-+----- +----- -- 0301,0330 = 0330,0330
++++---+ -----+----- ++-+----- +----- -- 0301,0333 = 0333,0333
++++---+ -----+----- ++-+----- +----- -- 0301,0335 = 0335,0335
++++---+ -----+----- ++-+----- +----- -- 0301,0337 = 0337,0337
++++---+ -----+----- ++-+----- +----- +----- -- 0301,0338 = 0338,0338
++++---+ -----+----- ++-+----- +----- +----- -- 0301,0339 = 0339,0339
++-+----- +----- +----- ----+--- -+----- -- 0302,0331 = 0331,0331
```

(0301 = 03010101, 03010103 and 030102 to 030106)

SPECIFICITY TABLE

HLA-A*03 SSP subtyping

Specificities and sizes of the PCR products of the 29 primer mixes used for HLA-A*03 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*03 alleles	Other amplified HLA-A alleles ³
1	235 bp	800 bp	03010101-0304, 0306-0309, 0311N-0317, 0319-0339	3204, 3602
2⁴	225 bp	1070 bp	03010101-0307, 0309-0311N, 0313-0331, 0333-0335, 0337-0339	0113, 0117 ^{weakly} , 0234-023503 ^{weakly} , 0256 ^{weakly} , 0262 ^{weakly} , 9203 ^{weakly} , 3408
3⁵	205 bp	1070 bp	03010101-030106, 0303N-0306, 0308, 0309, 0311N-0317, 0319-0330, 0333-0339	1125, 3204, 3402-3404, 3407, 3408
4	215 bp	800 bp	0302, 0310, 0331, 0332	0112, 0119, 0125, 110101-1107, 1108 ^{weakly} , 1109-1122, 1127, 1129, 1130, 1132, 2451, 3004 ^{weakly} , 3006 ^{weakly} , 3017 ^{weakly} , 3602 ^{weakly}
5	185 bp	800 bp	0303N	
6	275 bp	1070 bp	0304	
7	235 bp	1070 bp	0306	
8	240 bp	1070 bp	03010101-0311N, 0313-0339	0113, 0128, 02010101-020115, 020117-0204, 0207, 0209, 0211-0213, 0215N-022002, 0222, 0224-0227, 0229-0240, 0242, 0243N, 0245-0250, 0252, 0253N, 0255, 0256, 0258-0260, 0262-0271, 0273-0277, 0280, 0282N, 0283N, 0285, 0286, 0288N-0290, 0292-0297, 9201-9205, 9207, 9209-9211, 9213N-9221, 9223, 9225N, 9228, 9230-

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				9235, 2419, 2428, 2444, 300101-300102, 301101-301102, 3013- 3020, 3023, 3024, 310102-3106, 3109, 3111-3121, 3301, 330301-3312, 3408, 6829, 7401-7409, 7411, 7412N
9	235 bp	1070 bp	0305, 0310	1104, 300101-3004, 3006-3013, 3015-3020, 3022-3024, 3103, 3104, 3402-3404, 3407, 3408, 3601
10⁷	205 bp	800 bp	0302, 0307, 0310, 0331, 0332	0112, 0119, 1131, 2451, 3004, 3006, 3009, 3017, 3103, 3104
11^{7,8}	225 bp	800 bp	0308, 0332	01010101-010105, 0103, 0104N, 0106, 0107 ^{weakly} , 0108-0112, 0114-0116N, 0118N, 0119, 0122N-0130, 2503, 3121, 320101- 3202, 3203 ^{weakly} , 3204- 3206, 3208 ^{weakly} , 3209- 3215, 3601-3604, 7401- 7404, 7408-7412N, 8001 ^{weakly}
12	190 bp	1070 bp	0309	020109, 0250, 9222, 1106, 1118, 2428, 2603, 2606, 2621, 2630, 6805, 6815, 6820, 7406
13⁶	145 bp	800 bp	03010102N	
14⁶	105 bp	1070 bp	0311N	
15	225 bp	1070 bp	0312	0278, 110101-110201, 110202 ^{weakly} , 1103- 1105, 1106 ^{weakly} , 1107- 1116, 1120-1127, 1129- 1132, 3008, 340101- 3407, 6601, 6602, 6604, 6606, 6607, 680101-680202, 6806- 6814, 6816-6819, 6821- 6828, 6830, 6832-6835, 6837-6842, 6901
16	275 bp	1070 bp	0314	

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17⁴	215 bp	1070 bp	03010101-030106, 0303N-0309, 0311N-0317, 0319- 0330, 0333-0339	0106, 1124, 1125, 1131, 300101-3003, 3007-3016, 3018-3020, 3022-3024, 3103, 3104, 3204, 3402-3404, 3407, 3408, 8001
18^{6,9}	135, 155 bp	1070 bp	0313, 0320	
19	230 bp	1070 bp	0315, 0319	
20¹⁰	155, 175 bp	1070 bp	0316, 0320	
21⁶	130 bp	1070 bp	0317	2451
22	250 bp	1070 bp	0318	01010101-0102, 0104N, 0106-0119, 0121-0130, 1127, 2451, 8001
23^{6,11}	95, 185 bp	1070 bp	0319, 0322	2418
24	470 bp	1070 bp	0321N	0104N, 1121N, 2307N, 2411N
25	155 bp	1070 bp	0323	020109, 023503, 0250, 9222, 2408, 2442, 260701-260702, 3308, 3309, 6830, 7404
26	200 bp	1070 bp	0324	0255 ^{weakly} , 2503, 2620 ^{weakly} , 3215, 3408
27⁶	145 bp	1070 bp	0325	
28	170 bp	1070 bp	0326	
29⁶	100 bp	1070 bp	03010101-0307, 0309-0328, 0330, 0331, 0333, 0335, 0337-0339	0234-023503, 0256, 0262, 0278, 9203, 1112, 2313, 2407, 2424, 29010101-2917, 300101-300102, 3008, 301101-301102, 3014L- 3020, 3023, 3024, 6602, 680101-680202, 6806-6814, 6816-6819, 6821-6830, 6832-6839, 6841, 6842, 6901
30⁶	130 bp	1070 bp	0327	
31	230 bp	800 bp	0328	
32	220 bp	1070 bp	0329	
33	210 bp	1070 bp	0330	3205
34	160 bp	1070 bp	0331	
35	235 bp	1070 bp	0332	3121, 7407

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36	160 bp	1070 bp	0333
37	225 bp	1070 bp	0334
38	165 bp	800 bp	0335
39	200 bp	1070 bp	0336N
40⁶	140 bp	1070 bp	0337
41	185 bp	1070 bp	0338
42	220 bp	1070 bp	0339

¹Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of HLA-A*03 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective length of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

Nonspecific amplifications, i.e. a ladder or a smear of bands, may sometimes be seen. GC-rich primers have a higher tendency of giving rise to nonspecific amplifications than other primers.

PCR fragments longer than the control bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.

PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherent feature of the primer pair(s) of a primer mix. More often it is due to other factors such as too low amount of DNA in the PCR reactions, taking too long time in setting up the PCR reactions, working at elevated room temperature or using thermal cyclers that are not pre-heated.

²The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A*03 subtyping.

In addition, wells number 4, 5, 10, 11, 13, 31 and 38 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

³Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*03 alleles will be amplified by primer mixes 1 to 4, 8 to 12, 15, 17, 19, 21 to 26, 29, 33 and 35.

⁴Primer mixes 2 and 17 may yield somewhat less specific PCR product than the other A*03 primer mixes.

⁵Primer mix 3 may give rise to a faint band in A*30-positive samples.

⁶Short specific PCR fragments are less intense and not as sharp as longer specific bands.

⁷Primer mixes 10 and 11 may give rise to nonspecific amplifications.

⁸Primer mix 11 may give rise to a faint band in A*02-positive samples.

⁹Primer mix 18: Specific PCR fragment of 135 bp in A*0313 allele. Specific PCR fragment of 155 bp in A*0320 allele.

¹⁰Primer mix 20: Specific PCR fragment of 155 bp in A*0320 allele. Specific PCR fragment of 175 bp in A*0316 allele.

¹¹Primer mix 23: Specific PCR fragment of 95 bp in A*0322 allele. Specific PCR fragment of 185 bp in A*0319 and A*2418 alleles.

HLA-A*03

Product Insert

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INTERPRETATION TABLE																								
HLA-A*03 SSP subtyping																								
Amplification patterns of the A*0301 to A*0339 alleles																								
	Well ⁴																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec.	235	225	205	215	185	275	235	240	235	205	225	190	145	105	225	275	215	135	230	155	130	250	95	470
PCR product																		155		175				185
Length of int.																								
pos. control ¹	800	1070	1070	800	800	1070	1070	1070	1070	800	800	1070	800	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	363	98	363	363	382	363	363	102	363	363	98	144	4 th	363	98	98	363	363	368	363	363	363	413	3 rd
	5'-ATA ^{3'}	5'-CTT ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-Tgg ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-ACA ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-CTT ^{3'}	5'-gCC ^{3'}	5'-ggA ^{3'}	5'-ATA ^{3'}	5'-CTA ^{3'}	5'-CTT ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-gTT ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-ATA ^{3'}	5'-CCA ^{3'}	5'-ATA ^{3'}
															363			890		890			502	
															5'-ATA ^{3'}			5'-gAA ^{3'}		5'-gAA ^{3'}			5'-CCA ^{3'}	5'-ATA ^{3'}
3'-primer(s) ³	555	282	527	539	527	595	557	299	555	527	282	292	899	426	282	333	539	455	555	496	453	570	555	621
	5'-CCA ^{3'}	5'-gAC ^{3'}	5'-CCT ^{3'}	5'-TCT ^{3'}	5'-CCT ^{3'}	5'-CCg ^{3'}	5'-Tgg ^{3'}	5'-CCA ^{3'}	5'-CCC ^{3'}	5'-CCA ^{3'}	5'-gAg ^{3'}	5'-gTg ^{3'}	5'-ACA ^{3'}	5'-TCT ^{3'}	5'-gAC ^{3'}	5'-CTg ^{3'}	5'-TCA ^{3'}	5'-CCA ^{3'}	5'-CCA ^{3'}	5'-gAA ^{3'}	5'-TCT ^{3'}	5'-CCg ^{3'}	5'-CCA ^{3'}	5'-ggg ^{3'}
	557	282		539						527	282							899		899				
	5'-Tgg ^{3'}	5'-gAC ^{3'}		5'-TCT ^{3'}						5'-CCA ^{3'}	5'-gAg ^{3'}							5'-ACA ^{3'}		5'-ACA ^{3'}				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
HLA-A allele																								
*03010101, 03010103-030106	1	2	3					8									17							
*03010102N	1	2	3					8					13				17							
*0302	1	2		4				8		10														
*0303N	1	2	3		5			8									17							
*0304	1	2	3			6		8									17							
*0305		2	3					8	9								17							
*0306	1	2	3				7	8									17							
*0307	1	2						8		10							17							
*0308	1		3					8			11						17							
*0309	1	2	3					8				12					17							
*0310		2		4				8	9	10														
*0311N	1	2	3					8						14			17							
*0312	1		3												15		17							
*0313	1	2	3					8									17	18						
*0314	1	2	3					8								16	17							
*0315	1	2	3					8									17		19					
*0316	1	2	3					8									17			20				
*0317	1	2	3					8									17				21			
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

INTERPRETATION TABLE																	
HLA-A*03 SSP subtyping																	
Amplification patterns of the A*0301 to A*0339 alleles																	
Well ⁴																	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
155	200	145	170	100	130	230	220	210	160	235	160	225	165	200	140	185	220
Length of spec. PCR product																	
1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070
Length of int. pos. control ¹																	
144	98	179	874	282	363	365	98	98	418	98	98	98	363	98	801	363	376
5'-primer(s) ²																	
5'-gCC ^{3'}	5'-CTT ^{3'}	5'-gTg ^{3'}	5'-CCg ^{3'}	5'-Cag ^{3'}	5'-ATA ^{3'}	5'-AAC ^{3'}	5'-CTT ^{3'}	5'-CTT ^{3'}	5'-AgT ^{3'}	5'-CTT ^{3'}	5'-CTT ^{3'}	5'-CTT ^{3'}	5'-ATA ^{3'}	5'-CTT ^{3'}	5'-AAC ^{3'}	5'-ATA ^{3'}	5'-gCT ^{3'}
3'-primer(s) ³																	
256	259	282	899	341	454	555	278	265	539	290	217	281	487	259	899	506	555
5'-CCC ^{3'}	5'-gTT ^{3'}	5'-gAC ^{3'}	5'-ACA ^{3'}	5'-Cgg ^{3'}	5'-CTg ^{3'}	5'-CCA ^{3'}	5'-ggA ^{3'}	5'-CCC ^{3'}	5'-TCT ^{3'}	5'-CAA ^{3'}	5'-CgA ^{3'}	5'-ACg ^{3'}	5'-Cgg ^{3'}	5'-CTC ^{3'}	5'-ACA ^{3'}	5'-Tgg ^{3'}	5'-CCA ^{3'}
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Well No.																	
HLA-A allele																	
				29											*03010101, 03010103-030106		
				29											*03010102N		
				29											*0302		
				29											*0303N		
				29											*0304		
				29											*0305		
				29											*0306		
				29											*0307		
				29											*0308		
				29											*0309		
				29											*0310		
				29											*0311N		
				29											*0312		
				29											*0313		
				29											*0314		
				29											*0315		
				29											*0316		
				29											*0317		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Well No.																	

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Length of spec.	235	225	205	215	185	275	235	240	235	205	225	190	145	105	225	275	215	135	230	155	130	250	95	470
PCR product																		155		175				185
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*0318		2						8															22	
*0319	1	2	3					8									17		19				23	
*0320	1	2	3					8									17	18		20				
*0321N	1	2	3					8									17							24
*0322	1	2	3					8									17						23	
*0323	1	2	3					8									17							
*0324	1	2	3					8									17							
*0325	1	2	3					8									17							
*0326	1	2	3					8									17							
*0327	1	2	3					8									17							
*0328	1	2	3					8									17							
*0329	1	2	3					8									17							
*0330	1	2	3					8									17							
*0331	1	2		4				8		10														
*0332	1			4				8		10	11													
*0333	1	2	3					8									17							
*0334	1	2	3					8									17							
*0335	1	2	3					8									17							
*0336N	1		3					8									17							
*0337	1	2	3					8									17							
*0338	1	2	3					8									17							
*0339	1	2	3					8									17							
*01010101-010105, 0108-0111N, 0114-0116N, 0118N, 0122N-0124, 0126, 0127N, 0129, 0130												11											22	
*0102, 0121																							22	
*0103, 320101-3202, 3206, 3209-3214, 3603, 3604, 7410												11												
*0104N												11											22	24
*0106												11					17						22	
*0107												w											22	
*0112, 0119				4						10	11												22	
*0113		2						8															22	
*0117		w																					22	
*0125				4								11											22	
*0128								8				11											22	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **21E**

Lot-specific information

www.olerup.com

155	200	145	170	100	130	230	220	210	160	235	160	225	165	200	140	185	220	Length of spec.
																		PCR product
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.
				29														*0318
				29														*0319
				29														*0320
				29														*0321N
				29														*0322
25				29														*0323
	26			29														*0324
		27		29														*0325
			28	29														*0326
				29	30													*0327
				29		31												*0328
							32											*0329
				29				33										*0330
				29					34									*0331
										35								*0332
				29							36							*0333
												37						*0334
				29									38					*0335
														39				*0336N
				29											40			*0337
				29												41		*0338
				29													42	*0339
																		*01010101-010105, 0108-0111N, 0114-0116N, 0118N, 0122N-0124, 0126, 0127N, 0129, 0130
																		*0102, 0121
																		*0103, 320101-3202, 3206, 3209-3214, 3603, 3604, 7410
																		*0104N
																		*0106
																		*0107
																		*0112, 0119
																		*0113
																		*0117
																		*0125
																		*0128
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.

Lot No.: **21E**

Lot-specific information

www.olerup.com

Length of spec.	235	225	205	215	185	275	235	240	235	205	225	190	145	105	225	275	215	135	230	155	130	250	95	470
PCR product																		155		175			185	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*02010101-020108, 020110-020115, 020117- 0204, 0207, 0209, 0211- 0213, 0215N-022002, 0222, 0224-0227, 0229- 0233, 0236-0240, 0242, 0243N, 0245-0249, 0252, 0253N, 0258-0260, 0263- 0271, 0273-0277, 0280, 0282N, 0283N, 0285, 0286, 0288N-0290, 0292- 0297, 9201, 9202, 9204, 9205, 9207, 9209-9211, 9213N-9221, 9223, 9225N, 9228, 9230-9235, 2419, 2444, 310102-3102, 3105, 3106, 3109, 3111-3120, 3301, 330301-3307, 3310- 3312, 7405								8																
*020109, 0250								8				12												
*0234-023502, 0256, 0262, 9203		w						8																
*023503		w						8																
*0255								8																
*0278, 6602, 680101- 680202, 6806-6814, 6816- 6819, 6821-6828, 6832- 6835, 6837-6839, 6841, 6842, 6901															15									
*9222												12												
*110101-110201, 1103, 1105, 1107, 1109-1111, 1113-1116, 1120, 1122, 1129, 1130, 1132				4											15									
*110202				4											w									
*1104				4					9						15									
*1106				4								12			w									
*1108				w											15									
*1112				4											15									
*1117, 1119				4																				
*1118				4								12												
*1121N				4											15									24
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **21E**

Lot-specific information

www.olerup.com

155	200	145	170	100	130	230	220	210	160	235	160	225	165	200	140	185	220	Length of spec.		
																			PCR product	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.		
																			*02010101-020108, 020110-020115, 020117- 0204, 0207, 0209, 0211- 0213, 0215N-022002, 0222, 0224-0227, 0229- 0233, 0236-0240, 0242, 0243N, 0245-0249, 0252, 0253N, 0258-0260, 0263- 0271, 0273-0277, 0280, 0282N, 0283N, 0285, 0286, 0288N-0290, 0292- 0297, 9201, 9202, 9204, 9205, 9207, 9209-9211, 9213N-9221, 9223, 9225N, 9228, 9230-9235, 2419, 2444, 310102-3102, 3105, 3106, 3109, 3111-3120, 3301, 330301-3307, 3310- 3312, 7405	
25																			*020109, 0250	
				29															*0234-023502, 0256, 0262, 9203	
25				29															*023503	
			w																*0255	
				29															*0278, 6602, 680101- 680202, 6806-6814, 6816- 6819, 6821-6828, 6832- 6835, 6837-6839, 6841, 6842, 6901	
25																			*9222	
																			*110101-110201, 1103, 1105, 1107, 1109-1111, 1113-1116, 1120, 1122, 1129, 1130, 1132	
																			*110202	
																			*1104	
																			*1106	
																			*1108	
				29															*1112	
																			*1117, 1119	
																			*1118	
																			*1121N	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.		

Lot No.: **21E**

Lot-specific information

www.olerup.com

Length of spec.	235	225	205	215	185	275	235	240	235	205	225	190	145	105	225	275	215	135	230	155	130	250	95	470
PCR product																		155		175				185
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*1123, 1126, 340101-340102, 3405, 3406, 6601, 6604, 6606, 6607, 6840															15									
*1124															15		17							
*1125			3												15		17							
*1127				4											15							22		
*1131									10						15		17							
*2307N, 2411N																								24
*2313, 2407																								
*2408, 2442, 260701-260702																								
*2418																								23
*2424, 29010101-2917, 6836																								
*2428, 7406								8				12												
*2451				4						10											21	22		
*2503, 3215											11													
*2603, 2606, 2621, 2630, 6805, 6815, 6820												12												
*2620																								
*300101-300102, 301101-301102, 3015, 3016, 3018-3020, 3023, 3024								8	9											17				
*300201-3003, 3007, 3010, 3012, 3022									9											17				
*3004, 3006				w					9	10														
*3008									9						15		17							
*3009									9	10							17							
*3013								8	9								17							
*3014L								8									17							
*3017				w				8	9	10														
*3103, 3104								8	9	10							17							
*3121								8			11													
*3203, 3208											w													
*3204	1		3								11						17							
*3205											11													
*3308, 3309								8																
*3402-3404, 3407			3						9						15		17							
*3408			2	3				8	9								17							
*3601									9		11													
*3602	1			w							11													
*6829								8																
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **21E**

Lot-specific information

www.olerup.com

155	200	145	170	100	130	230	220	210	160	235	160	225	165	200	140	185	220	Length of spec.		
																			PCR product	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.		
																			*1123, 1126, 340101-340102, 3405, 3406, 6601, 6604, 6606, 6607, 6840	
																			*1124	
																			*1125	
																			*1127	
																			*1131	
																			*2307N, 2411N	
				29															*2313, 2407	
25																			*2408, 2442, 260701-260702	
																			*2418	
				29															*2424, 29010101-2917, 6836	
																			*2428, 7406	
																			*2451	
	26																		*2503, 3215	
																			*2603, 2606, 2621, 2630, 6805, 6815, 6820	
	w																		*2620	
				29															*300101-300102, 301101-301102, 3015, 3016, 3018-3020, 3023, 3024	
																			*300201-3003, 3007, 3010, 3012, 3022	
				29															*3004, 3006	
																			*3008	
																			*3009	
																			*3013	
				29															*3014L	
				29															*3017	
																			*3103, 3104	
										35									*3121	
																			*3203, 3208	
																			*3204	
								33											*3205	
25																			*3308, 3309	
																			*3402-3404, 3407	
	26																		*3408	
																			*3601	
																			*3602	
				29															*6829	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.		

101.413-24/04 – including *Taq* polymerase101.413-24u/04u – without *Taq* polymeraseLot No.: **21E**

Lot-specific information

www.olerup.com

Length of spec.	235	225	205	215	185	275	235	240	235	205	225	190	145	105	225	275	215	135	230	155	130	250	95	470
PCR product																		155		175			185	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*6830															15									
*7401-7403, 7408, 7409, 7411, 7412N								8			11													
*7404								8			11													
*7407								8																
*8001											w						17					22		
HLA-A allele																								
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A*03 subtyping.

In addition, wells number 4, 5, 10, 11, 13, 31 and 38 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

²The nucleotide position, in the 2nd, 3rd or 4th exon or 3rd or 4th intron, matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

³The nucleotide position, in 2nd, 3rd, 4th or 5th exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

Lot No.: **21E**

Lot-specific information

www.olerup.com

155	200	145	170	100	130	230	220	210	160	235	160	225	165	200	140	185	220	Length of spec.
																		PCR product
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.
25				29														*6830
																		*7401-7403, 7408, 7409, 7411, 7412N
25																		*7404
										35								*7407
																		*8001
																		HLA-A allele
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Well No.

⁴Primer mix 18: Specific PCR fragment of 135 bp in A*0313 allele. Specific PCR fragment of 155 bp in A*0320 allele.
 Primer mix 20: Specific PCR fragment of 155 bp in A*0320 allele. Specific PCR fragment of 175 bp in A*0316 allele.
 Primer mix 23: Specific PCR fragment of 95 bp in A*0322 allele. Specific PCR fragment of 185 bp in A*0319 and A*2418 alleles.
 'w', may be weakly amplified.



CELL LINE VALIDATION SHEET																			
HLA-A*03 SSP subtyping kit																			
			Prod. No.:	Well															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				200628201	200628202	200628203	200842604	200628205	200628206	200628207	200628208	200628209	200628210	200628211	200628212	200628213	200628214	200628215	200628216
	IHWC cell line	A*																	
1	9001 SA	*2402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
3	9011 E4181324	*0101		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
4	9275 GU373	*3001		-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
5	9009 KAS011	*0101		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
6	9353 SM	*0201	*2603	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-
7	9020 QBL	*2601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9007 DEM	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
9	9026 YAR	*2601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*2402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*2902		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
13	9067 BTB	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
14	9071 OLGA	*3101		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
15	9075 DKB	*2402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*2902		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9008 WILJON	*2501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367	*3303	*7401	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-
19	9038 BM16	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
20	9059 SLE005	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
21	9064 AMALA	*0217		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
22	9056 KOSE	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
23	9124 IHL	*0201	*3401	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-
24	9035 JBUSH	*3201		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
25	9049 IBW9	*3301		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
26	9285 WT49	*0205		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
27	9191 CH1007	*2410	*2901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*0201	*2902	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
29	9050 MOU	*2902		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*3001	*6802	-	-	-	-	-	-	-	+	+	-	-	-	-	-	+	-
31	9019 DUCAF	*3002		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
32	9297 HAG	*0201		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
33	9098 MT14B	*3101		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
34	9104 DHIF	*3101		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
35	9302 SSTO	*3201		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
36	9024 KT17	*0206	*1101	-	-	-	+	-	-	-	+	-	-	-	-	-	-	+	-
37	9065 HHKB	*0301		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
38	9099 LZL	*0217		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
39	9315 CML	*0101	*0301	+	+	+	-	-	-	-	+	-	-	+	-	-	-	-	-
40	9134 WHONP199	*0207	*3001	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
41	9055 H0301	*0301		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
42	9066 TAB089	*0207		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
43	9076 T7526	*0207		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
44	9057 TEM	*6601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
45	9239 SHJO	*2301	*2402	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
46	9013 SCHU	*0301		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
47	9045 TUBO	*0216	*0301	+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
48	9303 TER-ND	*0201	*1101	-	-	-	+	-	-	-	+	-	-	-	-	-	-	+	-

CELL LINE VALIDATION SHEET																				
HLA-A*03 SSP subtyping kit																				
				Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
				Prod. No.:	200842617	200842618	200628219	200842620	200628221	200628222	200628223	200628224	200628225	200628226	200628227	200628228	200842629	200842630	200842631	200842632
IHCW cell line			A*																	
1	9001	SA	*2402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*0101	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*3001	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
5	9009	KAS011	*0101	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*0201	*2603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*2601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9007	DEM	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*2601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*2402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*2902	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
12	9052	DBB	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9067	BTB	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*2402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*2902	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
17	9008	WILJON	*2501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*3303	*7401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*0217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*0201	*3401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*3201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*3301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*0205	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*2410	*2901	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
28	9320	BEL5GB	*0201	*2902	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
29	9050	MOU	*2902	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
30	9021	RSH	*3001	*6802	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
31	9019	DUCAF	*3002	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*0201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*3201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*0206	*1101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*0301	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
38	9099	LZL	*0217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*0101	*0301	+	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-
40	9134	WHONP199	*0207	*3001	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
41	9055	H0301	*0301	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
42	9066	TAB089	*0207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*0207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*6601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*2301	*2402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*0301	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
47	9045	TUBO	*0216	*0301	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
48	9303	TER-ND	*0201	*1101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lot No.: **21E**

Lot-specific information

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CELL LINE VALIDATION SHEET														
HLA-A*03 SSP subtyping kit														
				Prod. No.:	Well									
					33	34	35	36	37	38	39	40	41	42
					200842633	200842634	200842635	200842636	200842637	200842638	200842639	200842640	200842641	200842642
	IHWC cell line		A*											
1	9001 SA		*2402		-	-	-	-	-	-	-	-	-	-
2	9280 LK707		*0201		-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*0101		-	-	-	-	-	-	-	-	-	-
4	9275 GU373		*3001		-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*0101		-	-	-	-	-	-	-	-	-	-
6	9353 SM		*0201	*2603	-	-	-	-	-	-	-	-	-	-
7	9020 QBL		*2601		-	-	-	-	-	-	-	-	-	-
8	9007 DEM		*0201		-	-	-	-	-	-	-	-	-	-
9	9026 YAR		*2601		-	-	-	-	-	-	-	-	-	-
10	9107 LKT3		*2402		-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT		*2902		-	-	-	-	-	-	-	-	-	-
12	9052 DBB		*0201		-	-	-	-	-	-	-	-	-	-
13	9067 BTB		*0201		-	-	-	-	-	-	-	-	-	-
14	9071 OLGA		*3101		-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*2402		-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007		*2902		-	-	-	-	-	-	-	-	-	-
17	9008 WILJON		*2501		-	-	-	-	-	-	-	-	-	-
18	9257 32367		*3303	*7401	-	-	-	-	-	-	-	-	-	-
19	9038 BM16		*0201		-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*0201		-	-	-	-	-	-	-	-	-	-
21	9064 AMALA		*0217		-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*0201		-	-	-	-	-	-	-	-	-	-
23	9124 IHL		*0201	*3401	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH		*3201		-	-	-	-	-	-	-	-	-	-
25	9049 IBW9		*3301		-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*0205		-	-	-	-	-	-	-	-	-	-
27	9191 CH1007		*2410	*2901	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB		*0201	*2902	-	-	-	-	-	-	-	-	-	-
29	9050 MOU		*2902		-	-	-	-	-	-	-	-	-	-
30	9021 RSH		*3001	*6802	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF		*3002		-	-	-	-	-	-	-	-	-	-
32	9297 HAG		*0201		-	-	-	-	-	-	-	-	-	-
33	9098 MT14B		*3101		-	-	-	-	-	-	-	-	-	-
34	9104 DHIF		*3101		-	-	-	-	-	-	-	-	-	-
35	9302 SSTO		*3201		-	-	-	-	-	-	-	-	-	-
36	9024 KT17		*0206	*1101	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB		*0301		-	-	-	-	-	-	-	-	-	-
38	9099 LZL		*0217		-	-	-	-	-	-	-	-	-	-
39	9315 CML		*0101	*0301	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199		*0207	*3001	-	-	-	-	-	-	-	-	-	-
41	9055 H0301		*0301		-	-	-	-	-	-	-	-	-	-
42	9066 TAB089		*0207		-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*0207		-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*6601		-	-	-	-	-	-	-	-	-	-
45	9239 SHJO		*2301	*2402	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU		*0301		-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*0216	*0301	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND		*0201	*1101	-	-	-	-	-	-	-	-	-	-

CERTIFICATE OF ANALYSIS

Olerup SSP[®] HLA-A*03 SSP

Product number: 101.413-24/04 – including *Taq* pol.
101.413-24u/04u – without *Taq* pol.

Lot number: 21E

Expiry date: 2010-March-01

Number of tests: 24 tests – Product No. 101.413-24
4 tests – Product No. 101.413-04

Number of wells per test: 42

Well specifications:

Tube No.	Production No.	Tube No.	Production No.	Tube No.	Production No.
1	2006-282-01	17	2008-426-17	33	2008-426-33
2	2006-282-02	18	2008-426-18	34	2008-426-34
3	2006-282-03	19	2006-282-19	35	2008-426-35
4	2008-426-04	20	2008-426-20	36	2008-426-36
5	2006-282-05	21	2006-282-21	37	2008-426-37
6	2006-282-06	22	2006-282-22	38	2008-426-38
7	2006-282-07	23	2006-282-23	39	2008-426-39
8	2006-282-08	24	2006-282-24	40	2008-426-40
9	2006-282-09	25	2006-282-25	41	2008-426-41
10	2006-282-10	26	2006-282-26	42	2008-426-42
11	2006-282-11	27	2006-282-27		
12	2006-282-12	28	2006-282-28		
13	2006-282-13	29	2008-426-29		
14	2006-282-14	30	2008-426-30		
15	2006-282-15	31	2008-426-31		
16	2006-282-16	32	2008-426-32		

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 5, 6, 7, 13, 14, 16, 18 to 21, 23 and 25 to 28 and 29 to 42 were available. The specificities of the primers in primer solutions 19, 21, 23, 25, 26, 33 and 35 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 5, 13, 27, 28, 31, 34, 40 and 42 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 6, 7, 14, 16, 18, 20, 30, 32, 36 to 39 and 41 it was only possible to test the 5'-primers, the 3'-primers were not possible to test.

Results: No false positive or false negative amplifications were obtained.

Date of approval: 2008-March-11

Approved by:

Quality Control, Supervisor

Lot No.: **21E**

Lot-specific information

www.olerup.com

Declaration of Conformity

Product name: *Olerup* SSP® HLA-A*03
Product number: 101.413-24/04, 101.413-24u/04u
Lot number: 21E

Intended use: HLA-A*03 high resolution histocompatibility testing

Manufacturer: *Olerup* SSP AB
Hasselstigen 1
SE-133 33 Saltsjöbaden, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2000 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

The Authorized Representative located within the Community is: *Olerup* SSP AB.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Saltsjöbaden, Sweden
2008-March-11

Olle Olerup
Managing Director

HLA-A*03

Product Insert

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101.413-24/04 – including *Taq* polymerase

101.413-24u/04u – without *Taq* polymerase

Lot No.: **21E**

Lot-specific information

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HLA-A*03

Product Insert

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101.413-24/04 – including *Taq* polymerase

101.413-24u/04u – without *Taq* polymerase

Lot No.: **21E**

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HLA-A*03

Product Insert

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101.413-24/04 – including *Taq* polymerase

101.413-24u/04u – without *Taq* polymerase

Lot No.: **21E**

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101.413-24/04 – including *Taq* polymerase
101.413-24u/04u – without *Taq* polymerase

Lot No.: **21E**

Lot-specific information

www.olerup.com**ADDRESSES:****Manufacturer:**

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For information on *Olerup* SSP distributors worldwide, contact **Olerup GmbH**.