

Olerup SSP® HLA-B*07

Product number:	101.512-24u/03u – without <i>Taq</i> pol.
Lot number:	03L
Expiry date:	2013-August-01
Number of tests:	24 tests – Product No. 101.512-24u 3 tests – Product No. 101.512-03u
Number of wells per test:	72
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. 03L.

CHANGES COMPARED TO THE PREVIOUS *OLERUP SSP*® HLA-B*07 LOT

The HLA-B*07 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP*® HLA-B*07 lot was made (Lot No. 68G).

Four wells have been added to the HLA-B*07 kit, wells **69 to 72**.
The amplification patterns for some rare HLA-B*07 alleles only differ by the length of the specific PCR products.

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

Well	5'-primer	3'-primer	rationale
14	Removed	Removed	Primer pair for the B*07:13 removed.
25	-	Added	Primer added for the B*07:117 allele.
38	-	Added	Primers added for the B*07:103 and B*07:113 alleles.
54	Added	Added	Primer pair added for the B*07:116 allele.
57	Added	-	Primer added for the B*07:109 allele.
58	-	Added	Primer added for the B*07:112 allele.
59	-	Added	Primers added for the B*07:113 and B*07:115 alleles.
61	-	Added	Primer added for the B*07:105 allele.
65	-	Added	Primer added for the B*07:111N allele.
68	-	Added	Primer added for the B*07:101 allele.

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

69	New	New	New primer pairs for the B*07:102, B*07:106 and B*07:108 alleles.
70	New	New	New primer pairs for the B*07:104 and B*07:114 alleles.
71	New	New	New primer pairs for the B*07:107 and B*07:108 alleles.
72	New	New	New primer for the B*07:110 allele.

Change in revision R01 compared to R00:

1. In addition to primer mix 26, the positive control band in primer mix 56 may be weaker than for other HLA-B*07 primer mixes.

Change in revision R02 compared to R01:

1. Primer mix 14 amplifies the B*39:03, 39:14, 39:24 and 40:90 alleles. This has been corrected in the Specificity and Interpretation tables.

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

PRODUCT DESCRIPTION

HLA-B*07 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*07:02 to B*07:117 alleles.

PLATE LAYOUT

Each test consists of 72 PCR reactions in a 96 well cut PCR plate. Wells 73 to 96 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	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
empty	empty	empty	empty	empty	empty	empty	empty
empty	empty	empty	empty	empty	empty	empty	empty
empty	empty	empty	empty	empty	empty	empty	empty

The 96 well cut PCR plate is marked with ‘HLA-B*07’ in silver/gray ink.

Well No. 1 is marked with the Lot Number ‘03L’.

A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays, and should be disregarded.

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

INTERPRETATION

The interpretation of HLA-B*07 SSP subtypings will be influenced by the B*08, most B*13, twelve B*14, several B*15, the B*18, the B*27, several B*35, the B*37, the B*38, the B*39, the B*40, the B*41, the B*42, twenty B*44, the B*45, four B*46, the B*48, the B*49, the B*50, fourteen B*51, three B*52, three B*53, most B*54, most B*55, eight B*56, two B*57, four B*58, most B*59, the B*67, the B*73, four B*78, the B*81 and the B*82 alleles when present on the other haplotype.

In addition, the C*02:23 allele will be amplified by primer mixes 3, 10 and 18, the C*03:05, C*03:25 and C*03:27 alleles will be amplified by primer mixes 14, 26, 31 and 56, the C*04:49 and C*05:15 alleles will be amplified by primer mix 63, the C*04:77 allele will be amplified by primer mixes 4, 10, 18 and 53, the C*07:38 allele will be amplified by primer mixes 10, 12, 13, 18, 29, 48 and 53, the C*07:102 allele will be weakly amplified by primer mixes 5 and 72, the C*08:08 allele will be amplified by primer mixes 14, 20, 26, 31 and 59 and the C*15:24 allele will be amplified by primer mix 32.

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

UNIQUELY IDENTIFIED ALLELES

All the HLA-B*07 alleles, i.e. **B*07:02 to B*07:117**, recognized by the HLA Nomenclature Committee in October 2010¹ will give rise to unique amplification patterns by the primers in the HLA-B*07 subtyping kit².

The B*07:98 and B*07:116 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 54.

The B*07:102 and 07:106 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 69.

The HLA-B*07 subtyping kit cannot distinguish the B*07:02:01-07:02:20 alleles, the B*07:05:01-07:05:06 alleles, the B*07:18:01-07:18:02 alleles, the B*07:22:01-07:22:02 alleles, the B*07:68:01-07:68:02 alleles or the *07:96:01-07:96:02 alleles.

¹HLA-B alleles listed on the IMGT/HLA web page 2010-October-15, release 3.2.0, www.ebi.ac.uk/imgt/hla.

²The B*07:50 and B*48:08 alleles will give rise to identical amplification patterns. These alleles can e.g. be distinguished by the HLA-B low resolution primer set.

SPECIFICITY TABLE

HLA-B*07 SSP subtyping

Specificities and sizes of the PCR products of the 72 primer mixes used for HLA-B*07 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*07 alleles ^{3,4}	Other amplified HLA Class I alleles ^{3,5}
1	395 bp	800 bp	*07:02:01-07:02:20, 07:04-07:07, 07:09, 07:10 ^w , 07:11-07:12, 07:14-07:15, 07:17-07:26, 07:28-07:31, 07:33-07:36, 07:39-07:49N, 07:51-07:64, 07:66-07:68:02, 07:70-07:82, 07:84, 07:86-07:117	*38:26, 42:01:01-42:02, 42:04-42:06, 42:08-42:10, 42:12-42:14, 45:06, 67:01:01-67:01:02, 67:03, 73:01 ^w -73:02 ^w , 81:02
2	285 bp	1070 bp	*07:02:01-07:06, 07:08-07:11, 07:13, 07:15-07:17, 07:20-07:32, 07:34-07:39, 07:41-07:52, 07:54-07:59, 07:61-07:76, 07:79-07:83, 07:85-07:99, 07:101-07:117	*35:66, 37:07, 40:15-40:16, 40:31-40:32, 40:45, 40:80, 40:98, 42:05:01-42:05:02, 48:01:01-48:01:03, 48:05-48:12, 48:14-48:16, 48:18-48:20, 48:22, 81:01-81:05
3	235 bp	1070 bp	*07:02:01-07:04, 07:07-07:13, 07:15-07:16, 07:18:01-07:18:02, 07:20-07:27, 07:29-07:31, 07:35-07:39, 07:41-07:52, 07:54-07:59, 07:61-07:68:02, 07:70-07:73, 07:75-07:77, 07:79, 07:81-07:89, 07:91-07:95, 07:98-07:99, 07:101-07:104, 07:106-07:111N, 07:113-07:114, 07:116-07:117	*15:138, 18:35, 35:66, 37:07, 40:31-40:33, 40:52, 40:59, 40:98, 46:06, 48:08, 48:23, C*02:23
4⁶	105 bp	800 bp	*07:02:01-07:03, 07:05:01-07:18:02, 07:20-07:24,	*35:66, 37:07, 40:15-40:16, 40:23, 40:32, 40:98, 40:128, 48:05, 48:08, C*04:77

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

			07:27-07:32, 07:35-07:39, 07:41-07:42, 07:44-07:47, 07:49N-07:52, 07:54, 07:56-07:59, 07:61-07:65, 07:67N-07:79, 07:81-07:99, 07:101-07:117	
5⁷	220 bp	1070 bp	*07:02:01-07:02:20, 07:04-07:07, 07:09-07:15, 07:17-07:26, 07:28, 07:30-07:31, 07:33-07:36, 07:39-07:49N, 07:51-07:64, 07:66-07:68:02, 07:73-07:84, 07:87-07:117	*27:01-27:11, 27:13-27:15, 27:17, 27:19-27:21, 27:24-27:28, 27:30-27:38, 27:40-27:58, 27:60-27:73, 38:26, 42:01:01-42:02, 42:04-42:06, 42:08-42:10, 42:12-42:14, 54:02, 55:10, 67:01:01-67:03, 73:01-73:02, 81:01-81:05, C*07:102^w
6	215 bp	1070 bp	*07:03, 07:08, 07:16, 07:27, 07:32, 07:38, 07:50, 07:69, 07:85	*13:14, 14:01:01-14:01:02, 14:07N-14:08, 14:10, 14:12, 14:14, 14:19, 15:68, 15:71, 15:175, 18:01:01-18:03, 18:05-18:15, 18:17N-18:24, 18:26-18:52, 27:12, 27:16, 27:18, 27:23, 27:29, 35:50, 35:84, 37:01:01-37:25, 38:01:01-38:04, 38:06-38:25, 39:01:01:01-39:01:01:02L, 39:01:03-39:03, 39:05:01-39:11, 39:13:01-39:20, 39:22-39:51, 39:53-39:62, 40:02:01-40:06:03, 40:08-40:09, 40:11:01-40:11:02, 40:13, 40:18-40:20, 40:24, 40:26-40:29, 40:35, 40:37, 40:39-40:40, 40:44, 40:50, 40:56, 40:64, 40:68, 40:70-40:71, 40:74-40:75, 40:78, 40:82-40:83, 40:85-40:86, 40:89-40:91, 40:93-40:99, 40:104-40:105, 40:107, 40:109, 40:111, 40:115, 40:119-40:120, 40:122, 40:127, 40:131, 40:133Q, 40:142N-40:145, 40:148-40:149, 40:157, 42:07, 42:11, 44:103, 48:01:01-48:21, 48:23-48:24, 51:57, 51:103, 53:21
7^{6,13}	105 bp, 215 bp	1070 bp	*07:04, 07:25, 07:29, 07:52	*40:136, 41:08, 42:05:01-42:05:02

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

8¹⁴	160 bp, 235 bp	1070 bp	*07:05:01-07:06, 07:32, 07:34, 07:59, 07:69, 07:78, 07:80, 07:90, 07:97, 07:105, 07:112	*40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:16, 40:21-40:23, 40:25, 40:30, 40:34, 40:36, 40:38, 40:43, 40:45-40:49, 40:54-40:55, 40:61-40:63, 40:65-40:67, 40:69, 40:72:01- 40:74, 40:76-40:77, 40:79-40:81, 40:84, 40:87-40:88, 40:100- 40:102, 40:106, 40:108, 40:112- 40:114, 40:116-40:118N, 40:121, 40:123, 40:125-40:126, 40:128, 40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 40:158, 41:08, 42:05:01- 42:05:02, 44:31, 48:01:01- 48:01:03, 48:03:01-48:03:02, 48:05-48:07, 48:09-48:12, 48:14-48:16, 48:18-48:22, 81:01-81:05
9^{7,8,15}	240 bp, 355 bp	1070 bp	*07:05:01-07:05:06, 07:49N	*35:46, 37:07
10¹⁶	285 bp, 415 bp	800 bp	*07:07, 07:12, 07:14, 07:18:01-07:18:02, 07:47, 07:77, 07:81	*08:52, 15:138, 18:35, 40:01:01- 40:01:17, 40:07, 40:10:01- 40:10:02, 40:12, 40:14:01- 40:14:03, 40:21-40:23, 40:25, 40:33, 40:36, 40:38, 40:42- 40:43, 40:46-40:49, 40:52, 40:54-40:55, 40:59-40:63, 40:65-40:67, 40:69, 40:72:01- 40:74, 40:76-40:77, 40:79, 40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:109 [?] , 40:112-40:114, 40:116- 40:118N, 40:121, 40:123- 40:126, 40:128, 40:132, 40:134- 40:141, 40:146-40:147, 40:149- 40:156, 40:158, 41:08, 44:31, 46:06, 48:03:01-48:03:02, 48:17- 48:18, 48:23, C*02:23, C*04:77, C*07:38
11¹⁷	130 bp, 210 bp	1070 bp	*07:08, 07:10, 07:32, 07:38-07:39	*18:07:01-18:07:02, 18:29, 27:01-27:05:08, 27:05:10-27:11, 27:13-27:15, 27:17, 27:19-27:21, 27:23-27:28, 27:30-27:73, 35:50, 35:84, 37:21, 38:06-38:07, 39:58, 40:08, 40:13, 40:68,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				48:06, 51:57, 51:103, 53:21, 73:01-73:02
12	225 bp	1070 bp	*07:09, 07:11, 07:17	*15:138, 18:35, 35:66, 40:38, 40:52, 40:59-40:60, 40:158, 46:06, 48:14, 48:23, C*07:38
13^{6,18}	85 bp, 290 bp	1070 bp	*07:12, 07:14, 07:18:01-07:18:02, 07:31, 07:34, 07:43	*40:30, 40:34, 40:59, 40:137, 41:08, 42:05:01-42:05:02, 48:17, C*07:38
14⁹	215 bp	800 bp	*07:26, 07:34, 07:43, 07:48, 07:80	*08:13, 08:25, 14:05, 14:13, 15:55, 18:14, 18:22, 27:07, 27:11, 27:24, 27:32-27:34, 27:43, 35:05:01-35:05:02, 35:16-35:17, 35:22, 35:30-35:31, 35:51, 35:58, 35:72, 35:89, 35:97, 35:113-35:114, 35:125, 39:03, 39:14, 39:24, 40:02:01-40:03, 40:05, 40:08-40:09, 40:13, 40:18-40:19, 40:24, 40:27, 40:29, 40:31, 40:35, 40:37, 40:39-40:40, 40:45, 40:50, 40:56-40:58, 40:71, 40:78, 40:80, 40:82, 40:85, 40:89-40:91, 40:94, 40:97, 40:104-40:105, 40:107, 40:111, 40:115, 40:119, 40:122, 40:133Q, 40:142N-40:145, 40:157, 44:54, 44:110, 48:01:01-48:01:03, 48:04, 48:06-48:07, 48:09-48:16, 48:18, 48:20, 48:22, 48:24, 51:64, 51:81, 53:14, 55:04, 58:18, 58:27, 81:01-81:05, C*03:05, C*03:25, C*03:27, C*08:08
15¹⁹	385 bp, 415 bp	1070 bp	*07:11, 07:47, 07:54, 07:57, 07:75	*08:17, 08:47, 39:20, 45:06
16	230 bp	1070 bp	*07:16, 07:27, 07:37-07:38, 07:50, 07:75, 07:91	*13:14, 14:14, 15:68, 15:71, 15:175, 18:01:01, 18:01:03-18:02, 18:05-18:15, 18:17N-18:24, 18:26-18:52, 27:01, 27:18, 27:23, 27:29, 27:44, 35:50, 35:84, 37:01:01-37:25, 38:01:01-38:02:03, 38:04, 38:06-38:12, 38:15-38:25, 39:05:01-39:05:02, 39:07-39:08, 39:11, 39:13:01-39:13:02, 39:20, 39:37, 39:49, 39:55-39:56, 40:02:01-40:06:03, 40:08-40:09, 40:11:01-40:11:02, 40:13, 40:18-40:20, 40:24, 40:26-40:29,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				40:35, 40:37, 40:39-40:40, 40:44, 40:56, 40:64, 40:68, 40:70-40:71, 40:74-40:75, 40:78, 40:82-40:83, 40:85-40:86, 40:89-40:91, 40:93-40:99, 40:103-40:105, 40:107, 40:109, 40:111, 40:115, 40:119-40:120, 40:122, 40:127, 40:131, 40:133Q, 40:142N-40:145, 40:148-40:149, 40:157, 42:11, 44:103, 48:01:01-48:21, 48:23-48:24, 51:57, 51:103, 53:21, 57:10
17²⁰	345 bp, 425 bp	1070 bp	*07:11, 07:27, 07:46, 07:57, 07:75	*08:17, 08:47, 38:17, 39:20
18	265 bp	1070 bp	*07:12, 07:78, 07:84	*35:66, 40:59-40:60, 40:125, 48:17, C*02:23, C*04:77, C*07:38
19²¹	205 bp, 250 bp, 295 bp	800 bp	*07:20, 07:35	*15:14, 15:91, 15:131, 15:161, 35:45, 35:71, 40:132, 44:10, 44:14, 44:17, 44:31, 44:43:01-44:43:02, 44:45, 44:51, 44:54, 44:62, 44:77, 44:82, 44:106-44:107, 45:09, 46:17, 51:23, 52:15, 53:22, 57:07, 58:07, 82:01-82:03
20²²	160 bp, 205 bp, 275 bp	1070 bp	*07:21, 07:51, 07:59	C*08:08
21^{6,23}	100 bp, 165 bp	1070 bp	*07:22:01-07:22:02, 07:52	
22	385 bp	1070 bp	*07:23	*40:79, 41:14
23⁶	85 bp	1070 bp	*07:20, 07:24	*40:63
24^{6,7}	125 bp	800 bp	*07:25, 07:39, 07:48	*18:35, 27:36, 35:66, 40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:14:03, 40:21-40:22N, 40:25, 40:30-40:31, 40:33-40:34, 40:36, 40:38, 40:42-40:43, 40:45-40:49, 40:52, 40:54-40:55, 40:59-40:63, 40:65-40:66, 40:69, 40:72:01-40:74, 40:76-40:77, 40:79-40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:112-40:114, 40:116-40:118N, 40:121, 40:123-40:126, 40:128,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 41:08, 42:05:01-42:05:02, 44:31, 46:06, 48:01:01-48:01:03, 48:03:01-48:03:02, 48:06-48:07, 48:09-48:12, 48:14, 48:16-48:23, 81:01-81:05
25 ^{10,24}	305 bp, 425 bp	1070 bp	*07:27, 07:117	*38:17
26 ^{6,9,11,25}	95 bp, 205 bp, 235 bp, 290 bp	800 bp	*07:20, 07:24, 07:28, 07:42, 07:51, 07:60, 07:100	*08:14, 08:21, 08:25, 15:07:01-15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 27:32, 35:05:01-35:05:02, 35:22, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 40:05, 40:71, 44:54, 44:106, 46:12, 51:64, 53:14, 58:18, C*03:05, C*03:25, C*03:27, C*08:08
27 ²⁶	165 bp, 215 bp	800 bp	*07:29, 07:41	
28 ^{6,9}	110 bp	1070 bp	*07:30	
29 ^{6,7,9,27}	85 bp, 200 bp	800 bp	*07:31, 07:34, 07:43-07:44	*41:08, 42:05:01-42:05:02, C*07:38
30	190 bp	800 bp	*07:05:01-07:06, 07:32, 07:40, 07:53, 07:69, 07:78, 07:80, 07:90, 07:97, 07:105, 07:112	*08:40, 13:01:01-13:01:02, 13:01:04-13:02:09, 13:07N-13:09, 13:11, 13:13-13:23, 13:25, 13:27-13:33, 13:36-13:40, 27:07, 27:11, 27:20, 27:24, 27:27, 27:33, 27:43, 35:31, 35:88, 39:47, 39:50, 40:01:01-40:02:09, 40:02:11, 40:04, 40:06:01:01-40:08, 40:10:01-40:16, 40:19, 40:21-40:23, 40:25, 40:27, 40:29-40:30, 40:34-40:38, 40:40, 40:43, 40:45-40:50, 40:53-40:58, 40:61-40:62, 40:64-40:70, 40:72:01-40:88, 40:90-40:91, 40:93-40:97, 40:99-40:119, 40:121-40:123, 40:125-40:130, 40:132, 40:134-40:158, 44:31, 48:01:01-48:01:03, 48:03:01-48:07, 48:09-48:16, 48:18-48:22, 48:24, 51:10, 51:16, 51:31, 51:34, 51:81-51:82, 51:93, 52:08, 55:09, 55:22, 55:24, 58:27, 81:01-81:05

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

31²⁸	215 bp, 280 bp	800 bp	*07:19, 07:33, 07:53, 07:55, 07:60, 07:100	*14:05, 14:13, 15:07:01- 15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 18:14, 27:07, 27:11, 27:24, 27:32-27:34, 27:43, 35:05:01-35:05:02, 35:22, 35:31, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 37:09, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:02:01-40:03, 40:05, 40:08-40:09, 40:13, 40:18-40:19, 40:24, 40:27, 40:29, 40:35, 40:37, 40:39- 40:40, 40:50, 40:56-40:58, 40:71, 40:78, 40:82, 40:85, 40:89-40:91, 40:94, 40:97, 40:104-40:105, 40:107, 40:111, 40:115, 40:119, 40:122, 40:133Q, 40:142N-40:145, 40:157, 42:08, 44:54, 44:106, 46:12, 48:04, 48:13, 48:19, 48:24, 51:64, 51:81, 53:14, 55:04, 58:18, 58:27, C*03:05, C*03:25, C*03:27, C*08:08
32¹²	190 bp	1070 bp	*07:34	*08:01:01-08:05, 08:08N-08:10, 08:12:01-08:13, 08:15-08:20, 08:22-08:24, 08:26-08:27, 08:29-08:36, 08:38-08:39, 08:41-08:48, 08:50-08:66, 13:06, 14:13, 15:42, 15:83, 15:86, 15:188, 18:26, 35:60, 35:87, 37:12, 38:01:01, 38:01:03-38:07, 38:09-38:21, 38:23-38:26, 39:01:01:01-39:01:01:02L, 39:01:03-39:06:02, 39:08-39:14, 39:16, 39:18-39:20, 39:22-39:24, 39:26-39:28, 39:30-39:31, 39:34-39:37, 39:39, 39:41-39:42, 39:44-39:46, 39:48, 39:51-39:54, 39:56-39:62, 40:39, 40:51, 41:01-41:03:02, 41:05-41:09, 41:11-41:16, 42:01:01-42:02, 42:04-42:08, 42:10-42:14, 46:18, 51:21, 51:36, 51:101, 54:01- 54:02, 54:04-54:05N, 54:07- 54:08N, 54:10-54:13, 54:17- 54:23, 55:01:01-55:05, 55:07, 55:10-55:13, 55:15-55:21, 55:25-55:26, 55:28-55:40,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				55:42-55:45, 55:47-55:48, 56:10, 56:12, 56:23, 58:20, 59:01-59:03, 59:05, 67:01:01-67:03, 78:07, C*15:24
33	350 bp	1070 bp	*07:61	
34	155 bp	1070 bp	*07:62, 07:90	
35⁶	105 bp	1070 bp	*07:63	
36	250 bp	1070 bp	*07:64	
37	210 bp	1070 bp	*07:65	*18:04, 35:42:02, 35:43:02, 40:01:11, 40:58, 56:05:01, 56:06, 78:01, 78:02:02-78:03, 78:07
38²⁹	190 bp, 215 bp	1070 bp	*07:66, 07:103, 07:113	*08:64
39⁸	425 bp	1070 bp	*07:05:01-07:06, 07:34, 07:40, 07:53, 07:80, 07:90, 07:97, 07:105, 07:112	*42:01:01-42:02, 42:04-42:05:02, 42:07-42:08, 42:10, 42:12-42:14, 54:04, 54:11, 55:04, 55:08, 55:17, 55:20, 55:28, 56:05:01-56:06, 56:12, 56:15, 56:21, 81:01-81:04N
40^{9,30}	265 bp, 395 bp	1070 bp	*07:56, 07:72, 07:83	*08:26, 08:56, 40:10:01 [?] -40:10:02 [?] , 40:21 [?] , 40:58 [?] , 40:137 [?] , 41:12, 49:03
41	400 bp	1070 bp	*07:58	
42³¹	195 bp, 225 bp	1070 bp	*07:67N, 07:71	
43⁷	140 bp	1070 bp	*07:68:01-07:68:02, 07:100	*14:05, 14:13, 15:07:01-15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 18:14, 27:32, 35:05:01-35:05:02, 35:22, 35:51, 35:58, 35:66, 35:72, 35:89, 35:97, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:35, 40:71, 42:10, 44:54, 44:106, 46:12, 48:12, 48:14, 51:64, 53:14, 58:18
44	150 bp	1070 bp	*07:10	*73:01 ^w -73:02 ^w
45⁶	105 bp	1070 bp	*07:27, 07:50	*08:04, 08:17, 08:54, 15:03:01-15:03:03, 15:47, 15:54, 15:61-15:62, 15:64, 15:68-15:69, 15:91, 15:98, 15:103, 15:123, 15:127, 15:131-15:132, 15:151, 15:156, 15:158, 15:173, 18:37, 27:18, 27:29, 38:03, 39:02:01-39:02:02, 39:08, 39:13:01-

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				39:13:02, 39:23, 39:39, 39:49, 40:12, 40:46, 40:93, 42:11, 44:40, 44:44, 48:01:01-48:05, 48:07-48:24, 52:16, 55:18
46	425 bp	1070 bp	*07:13, 07:15, 07:92	*08:15, 39:27, 40:73, 67:02, 73:01 ^w -73:02 ^w
47	215 bp	800 bp	*07:04, 07:19, 07:25	*08:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26-08:39, 08:41-08:48, 08:50-08:54, 08:56-08:59, 08:61-08:66, 35:87, 37:09, 41:02:01-41:02:03, 41:04, 41:10-41:11, 41:13, 41:15, 42:01:01-42:02, 42:05:01-42:12, 42:14, 44:106
48 ³²	200 bp, 280 bp	1070 bp	*07:76-07:77	*40:60, C*07:38
49	200 bp	1070 bp	*07:82	
50 ^{6,33}	75 bp, 165 bp	1070 bp	*07:74, 07:87	
51 ³⁴	345 bp, 470 bp	1070 bp	*07:93, 07:97	*08:39
52	290 bp	800 bp	*07:95	
53 ⁹	235 bp	800 bp	*07:14, 07:17, 07:28, 07:96:01-07:96:02, 07:115	*27:36, 40:42, 40:60, 40:124:01-40:124:02, 48:17, C*04:77, C*07:38
54 ^{7,35}	190 bp, 405 bp	1070 bp	*07:98, 07:116	
55	260 bp	1070 bp	*07:99	
56 ^{7,9,11}	230 bp	1070 bp	*07:20, 07:24, 07:45, 07:60, 07:100	*08:21, 08:25, 15:07:01-15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 35:05:01-35:05:02, 35:22, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 40:05, 40:71, 44:54, 44:106, 46:12, 51:64, 53:14, 58:18, C*03:05, 03:25, 03:27
57 ³⁶	150 bp, 215 bp	1070 bp	*07:70, 07:109	
58 ³⁷	245 bp, 440 bp	1070 bp	*07:79, 07:112	
59 ^{6,38}	95 bp, 190 bp	800 bp	*07:89, 07:113, 07:115	*08:64, 14:05, 38:19, 39:03, 39:24, 39:37, 42:06, 48:07,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

				C*08:08
60	145 bp	1070 bp	*07:73	*44:90, 45:06
61³⁹	205 bp, 420 bp	1070 bp	*07:88, 07:105	
62	415 bp	800 bp	*07:16, 07:27, 07:37- 07:38, 07:50, 07:75, 07:91	*08:03, 08:23, 08:54, 14:14, 14:18, 15:68, 38:01:01-38:02:03, 38:04-38:12, 38:15-38:25, 39:05:01-39:05:02, 39:07-39:08, 39:11, 39:13:01-39:13:02, 39:20, 39:37, 39:49, 39:55-39:56, 40:01:01-40:01:17, 40:07, 40:09 [?] -40:11:02 [?] , 40:14:01 [?] - 40:15 [?] , 40:16, 40:18 [?] -40:19 [?] , 40:21 [?] -40:22N [?] , 40:23, 40:24 [?] - 40:38 [?] , 40:42 [?] , 40:44 [?] -40:49 [?] , 40:51, 40:52 [?] -40:58 [?] , 40:59- 40:60, 40:61 [?] -40:65 [?] , 40:67 [?] - 40:69 [?] , 40:71 [?] , 40:72:01-40:73, 40:74 [?] -40:76 [?] , 40:77, 40:78 [?] , 40:79, 40:80 [?] -40:88 [?] , 40:90 [?] - 40:93 [?] , 40:95 [?] -40:96 [?] , 40:98 [?] - 40:121 [?] , 40:123 [?] , 40:124:01, 40:124:02 [?] -40:137 [?] , 40:138- 40:140, 40:141 [?] , 40:145 [?] , 40:146, 40:148 [?] -40:149 [?] , 40:150, 40:151 [?] , 40:152-40:153, 40:154 [?] , 40:155N, 40:156 [?] - 40:158 [?] , 41:01-41:16, 42:11, 44:18, 45:01-45:05, 45:07-45:13, 48:01:01-48:24, 49:01:01-49:15, 50:01:01, 50:01:02 [?] , 50:02, 50:04-50:12
63⁶	65 bp	1070 bp	*07:94	C*04:49, C*05:15
64	210 bp	1070 bp	*07:69, 07:85	*14:01:01-14:01:02, 14:07N- 14:08, 14:10, 14:12, 14:14, 14:19, 18:33, 27:12, 27:16, 38:01:01-38:02:03, 38:04, 38:08- 38:25, 39:01:01:01- 39:01:01:02L, 39:01:03- 39:01:12, 39:03, 39:05:01-39:07, 39:09, 39:11, 39:14-39:15, 39:18-39:19:02, 39:22, 39:24- 39:38Q, 39:40N-39:48, 39:50- 39:51, 39:53-39:57, 39:59-39:62, 40:75
65⁴⁰	385 bp,	1070 bp	*07:54, 07:111N	*45:06

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

	450 bp			
66	435 bp	1070 bp	*07:36, 07:38, 07:81	*08:03, 08:52, 38:01:01-38:01:04, 38:05-38:07, 38:09-38:14, 38:16, 38:19-38:22, 38:24-38:26, 40:19 [?] , 40:109 [?] , 40:117 [?] , 44:18, 48:18, 49:01:01-49:01:02, 49:03-49:15
67⁸	230 bp	1070 bp	*07:29, 07:72, 07:86, 07:114	*08:01:01-08:05, 08:07-08:56, 08:58-08:66, 14:11, 39:04, 40:01:01-40:01:17, 40:07, 40:10:01 [?] -40:10:02 [?] , 40:14:01 [?] -40:15 [?] , 40:16, 40:21 [?] -40:22N [?] , 40:23, 40:25 [?] , 40:30 [?] -40:34 [?] , 40:36 [?] , 40:38 [?] , 40:42 [?] -40:43 [?] , 40:45 [?] -40:49 [?] , 40:51, 40:52 [?] -40:55 [?] , 40:58 [?] , 40:59-40:60, 40:61 [?] -40:63 [?] , 40:65 [?] , 40:66, 40:67 [?] , 40:69 [?] , 40:72:01-40:73, 40:76 [?] , 40:77, 40:79, 40:80 [?] -40:81 [?] , 40:84 [?] , 40:87 [?] -40:88 [?] , 40:92 [?] , 40:100 [?] -40:102 [?] , 40:106 [?] , 40:108 [?] , 40:110 [?] , 40:112 [?] -40:114 [?] , 40:116 [?] -40:118N [?] , 40:121 [?] , 40:123 [?] , 40:124:01, 40:124:02 [?] -40:126 [?] , 40:128 [?] -40:130 [?] , 40:132 [?] , 40:134 [?] -40:137 [?] , 40:138-40:140, 40:141 [?] , 40:146-40:147, 40:150, 40:151 [?] , 40:152-40:153, 40:154 [?] , 40:155N, 40:156 [?] , 40:158 [?] , 41:01-41:16, 44:18, 45:01-45:13, 48:22, 49:01:01-49:15, 50:01:01, 50:01:02 [?] , 50:02, 50:04-50:12
68⁴¹	365 bp, 415 bp	1070 bp	*07:13, 07:15, 07:101	*08:16, 67:02
69⁴²	190 bp, 245 bp, 465 bp	1070 bp	*07:102, 07:106, 07:108	*08:18, 73:01-73:02
70^{6,45}	125 bp, 205 bp	800 bp	*07:104, 07:114	
71⁴⁴	245 bp, 280 bp	1070 bp	*07:107-07:108	
72	165 bp	1070 bp	*07:13, 07:110	*38:11, 54:02, 67:02, C*07:102^w

¹ Alleles 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-B*07 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

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

base pairs are not given. For high resolution SSP kits the respective lengths 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-B*07 subtyping.

In addition, wells number 4, 10, 14, 19, 24, 26, 27, 29 to 31, 47, 52, 53, 59, 62 and 70 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.

³For several HLA-B alleles 1st exon nucleotide sequences are not available. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. We assume that unknown sequences in the 1st exon are conserved within allelic groups.

⁴The B*07:98 and B*07:116 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 54.

The B*07:102 and 07:106 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 69.

The B*07:50 and B*48:08 alleles will give rise to identical amplification patterns. These alleles can e.g. be distinguished by the HLA-B low resolution primer set.

⁵Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B*07 alleles will be amplified by primer mixes 1 to 19, 22 to 26, 29 to 32, 37 to 40, 43 to 48, 51, 53, 56, 59, 60, 62, 64 to 69 and 72. In addition, the C*02:23 allele will be amplified by primer mixes 3, 10 and 18, the C*03:05, C*03:25 and C*03:27 alleles will be amplified by primer mixes 14, 26, 31 and 56, the C*04:49 and C*05:15 alleles will be amplified by primer mix 63, the C*04:77 allele will be amplified by primer mixes 4, 10, 18 and 53, the C*07:38 allele will be amplified by primer mixes 10, 12, 13, 18, 29, 48 and 53, the C*07:102 allele will be weakly amplified by primer mixes 5 and 72, the C*08:08 allele will be amplified by primer mixes 14, 20, 26, 31 and 59 and the C*15:24 allele will be amplified by primer mix 32.

⁶Specific PCR fragments shorter than 125 base pairs are less intense and not as sharp as longer specific bands.

⁷Primer mixes 5, 9, 24, 29, 43, 54 and 56 have tendencies of giving rise to primer dimer artefacts.

⁸Primer mixes 9, 39 and 67 may yield less specific PCR product than the other HLA-B*07 primer mixes.

⁹Primer mixes 14, 26, 28, 29, 40, 53 and 56 may have tendencies of non-specific amplification, most pronounced in primer mixes 29 and 53.

¹⁰Primer mix 25 may give rise to non-specific amplification in B*73 alleles.

¹¹In primer mixes 26 and 56, the positive control band may be weaker than for other HLA-B*07 primer mixes.

¹²Primer mix 32 may give rise to a faint band in the B*14:01-14:12, 14:14-14:18, B*37:01:01-37:01:07, B*37:03N-37:06, 37:08, 37:10, 37:11, 37:13-37:25 and 39:17 alleles and in the C*01:03, C*01:24, C*01:34, C*04:01:01:01-04:01:05, C*04:01:07-04:01:15, C*04:01:17-C*04:01:26, C*04:03-04:07, C*04:09N-04:20, C*04:24-04:31, C*04:33, C*04:35-04:71, 04:73-04:76, C*04:78-04:81, C*05:01:01-05:01:15, C*05:03, C*05:05-05:18, C*05:20, C*05:21, C*05:23-05:26, C*05:28-05:38, C*05:40-05:50, C*06:09, C*08:01:01-08:05, C*08:07, C*08:08, C*08:10, C*08:12-08:30, C*08:32-08:40, C*08:42-08:44, C*18:01, 18:02 and C*18:04 alleles..

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

¹³Primer mix 7: Specific PCR fragment of 105 bp in the B*07:04, 07:25 and 07:52 and the B*40:136, 41:08 and 42:05:01-42:05:02 alleles. Specific PCR fragment of 215 bp in the B*07:29 allele.

¹⁴Primer mix 8: Specific PCR fragment of 160 bp in the B*07:59 allele. Specific PCR fragment of 235 bp in the B*07:05:01-07:06, 07:32, 07:34, 07:69, 07:78, 07:80, 07:90, 07:97, 07:105 and 07:112 and in the B*40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:16, 40:21-40:23, 40:25, 40:30, 40:34, 40:36, 40:38, 40:43, 40:45-40:49, 40:54-40:55, 40:61-40:63, 40:65-40:67, 40:69, 40:72:01-40:74, 40:76-40:77, 40:79-40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:112-40:114, 40:116-40:118N, 40:121, 40:123, 40:125-40:126, 40:128, 40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 40:158, 41:08, 42:05:01-42:05:02, 44:31, 48:01:01-48:01:03, 48:03:01-48:03:02, 48:05-48:07, 48:09-48:12, 48:14-48:16, 48:18-48:22 and 81:01-81:05 alleles.

¹⁵Primer mix 9: Specific PCR fragment of 240 bp in B*07:49N allele. Specific PCR fragment of 355 bp in the B*07:05:01-07:05:06 and the B*35:46 and 37:07 alleles.

¹⁶Primer mix 10: Specific PCR fragment of 285 bp in the B*07:07, 07:12, 07:14, 07:18:01-07:18:02 and 07:77 and in the B*15:138, 18:35, 40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:14:03, 40:21-40:23, 40:25, 40:33, 40:36, 40:38, 40:42-40:43, 40:46-40:49, 40:52, 40:54-40:55, 40:59-40:63, 40:65-40:67, 40:69, 40:72:01-40:74, 40:76-40:77, 40:79, 40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:112-40:114, 40:116-40:118N, 40:121, 40:123-40:126, 40:128, 40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 40:158, 41:08, 44:31, 46:06, 48:03:01-48:03:02, 48:17 and 48:23 and the C*02:23, C*04:77 and C*07:38 alleles. Specific PCR fragment of 415 bp in B*07:47 and 07:81 and in the B*08:52, 40:109² and 48:18 alleles.

¹⁷Primer mix 11: Specific PCR fragment of 130 bp in B*07:39 allele. Specific PCR fragment of 210 bp in the B*07:08, 07:10, 07:32 and 07:38 and in the B*18:07:01-18:07:02, 18:29, 27:01-27:05:08, 27:05:10-27:11, 27:13-27:15, 27:17, 27:19-27:21, 27:23-27:28, 27:30-27:73, 35:50, 35:84, 37:21, 38:06-38:07, 39:58, 40:08, 40:13, 40:68, 48:06, 51:57, 51:103, 53:21 and 73:01-73:02 alleles.

¹⁸Primer mix 13: Specific PCR fragment of 85 bp in the B*07:31, 07:34 and 07:43 and in the B*41:08 and 42:05:01-42:05:02 and the C*07:38 alleles. Specific PCR fragment of 290 bp in the B*07:12, 07:14 and 07:18:01-07:18:02 and in the B*40:30, 40:34, 40:59, 40:137 and 48:17 alleles.

¹⁹Primer mix 15: Specific PCR fragment of 385 bp in the B*07:54 and the B*45:06 alleles. Specific PCR fragment of 415 bp in the B*07:11, 07:47, 07:57 and 07:75 and the B*08:17, 08:47 and 39:20 alleles.

²⁰Primer mix 17: Specific PCR fragment of 345 bp in the B*07:46 allele. Specific PCR fragment of 425 bp in the the B*07:11, 07:27, 07:57 and 07:75 and in the B*08:17, 08:47, 38:17 and 39:20 alleles.

²¹Primer mix 19: Specific PCR fragment of 205 bp in the B*15:14, 15:91, 15:131, 15:161, 35:45, 35:71, 40:132, 44:10, 44:14, 44:17, 44:31, 44:43:01-44:43:02, 44:45, 44:51, 44:62, 44:77, 44:82, 44:107, 45:09, 46:17, 51:23, 52:15, 53:22, 57:07, 58:07 and 82:01-82:03 alleles. Specific PCR fragment of 250 bp in the B*44:54 and 44:106 alleles. Specific PCR fragment of 205 and 250 bp in the B*07:20 allele. Specific PCR fragment of 250 and 295 bp in the B*07:35 allele.

²²Primer mix 20: Specific PCR fragment of 160 bp in the B*07:59 allele. Specific PCR fragment of 205 bp in the B*07:51 and the C*08:08 alleles. Specific PCR fragment of 275 bp in the B*07:21 allele.

²³Primer mix 21: Specific PCR fragment of 100 bp in the B*07:52 allele. Specific PCR fragment of 165 bp in the B*07:22:01-07:22:02 alleles.

²⁴Primer mix 25: Specific PCR fragment of 305 bp in the B*07:117 allele. Specific PCR fragment of 425 bp in the B*07:27 and 38:17 alleles.

²⁵Primer mix 26: Specific PCR fragment of 95 bp in the B*07:28 and the B*08:14 and 27:32 alleles. Specific PCR fragment of 205 bp in the B*07:51 and C*08:08 alleles. Specific PCR fragment of 235 bp in the B*07:20, 07:24, 07:60 and 07:100 and the B*08:21, 08:25, 15:07:01-15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 35:05:01-35:05:02, 35:22, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 40:05, 40:71, 46:12, 51:64, 53:14 and 58:18 and the C*03:05, C*03:25 and C*03:27 alleles. Specific PCR fragment of 290 bp in the B*07:42 allele. Specific PCR fragments of 95 and 220 bp in the B*44:54 and 44:106 alleles.

²⁶Primer mix 27: Specific PCR fragment of 165 bp in the B*07:41 allele . Specific PCR fragment of 215 bp in the B*07:29 allele.

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

²⁷Primer mix 29: Specific PCR fragment of 85 bp in the B*07:31, 07:34 and 07:43 and in the B*41:08 and 42:05:01-42:05:02 and the C*07:38 alleles. Specific PCR fragment of 200 bp in the B*07:44 allele.

²⁸Primer mix 31: Specific PCR fragment of 215 bp in the B*07:55 and the B*48:19 alleles. Specific PCR fragment of 280 bp in the B*07:19, 07:33, 07:53, 07:60, 14:05, 14:13, 15:55, 18:14, 27:07, 27:11, 27:24, 27:32-27:34, 27:43, 35:05:01-35:05:02, 35:22, 35:31, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 37:09, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:02:01-40:03, 40:05, 40:08-40:09, 40:13, 40:18-40:19, 40:24, 40:27, 40:29, 40:35, 40:37, 40:39-40:40, 40:50, 40:56-40:58, 40:71, 40:78, 40:82, 40:85, 40:89-40:91, 40:94, 40:97, 40:104-40:105, 40:107, 40:111, 40:115, 40:119, 40:122, 40:133Q, 40:142N-40:145, 40:157, 42:08, 44:54, 44:106, 48:04, 48:13, 48:24, 51:64, 51:81, 53:14, 55:04, 58:18, 58:27, C*03:05, 03:25, 03:27, C*08:08 alleles. Specific PCR fragments of 215 and 280 bp in the B*07:100 and the B*15:07:01-15:07:02, 15:45, 15:68, 15:126, 15:207 and 46:12 alleles.

²⁹Primer mix 38: Specific PCR fragment of 190 bp in the B*07:103 and 07:113 and the B*08:64 alleles. Specific PCR fragment of 215 bp in the B*07:66 allele.

³⁰Primer mix 40: Specific PCR fragment of 265 bp in the B*07:56 and 07:72 and in the B*08:26, 08:56, 40:10:01[?]-40:10:02[?], 40:21[?], 40:58[?], 40:137[?], 41:12 and 49:03 alleles. Specific PCR fragment of 395 bp in the B*07:83 allele.

³¹Primer mix 42: Specific PCR fragment of 195 bp in the B*07:67N allele. Specific PCR fragment of 225 bp in the B*07:71 allele.

³²Primer mix 48: Specific PCR fragment of 200 bp in the B*07:76 allele. Specific PCR fragment of 280 bp in the B*07:77 and the B*40:60 and C*07:38 alleles.

³³Primer mix 50: Specific PCR fragment of 75 bp in the B*07:74 allele. Specific PCR fragment of 165 bp in the B*07:87 allele.

³⁴Primer mix 51: Specific PCR fragment of 345 bp in the B*07:97 allele. Specific PCR fragment of 470 bp in the B*07:93 and the B*08:39 alleles.

³⁵Primer mix 54: Specific PCR fragment of 190 bp in the B*07:98 allele. Specific PCR fragment of 405 bp in the B*07:116 allele.

³⁶Primer mix 57: Specific PCR fragment of 150 bp in the B*07:109 allele. Specific PCR fragment of 215 bp in the B*07:70 allele.

³⁷Primer mix 58: Specific PCR fragment of 245 bp in the B*07:112 allele. Specific PCR fragment of 440 bp in the B*07:79 and 07:112 alleles.

³⁸Primer mix 59: Specific PCR fragment of 95 bp in the B*07:115 and the B*14:05, 38:19, 39:03, 39:24, 39:37, 42:06 and 48:07 and C*08:08 alleles. Specific PCR fragment of 190 bp in the B*07:89 and 07:113 and the B*08:64 alleles.

³⁹Primer mix 61: Specific PCR fragment of 205 bp in the B*07:88 allele. Specific PCR fragment of 420 bp in the B*07:105 allele.

⁴⁰Primer mix 65: Specific PCR fragment of 385 bp in the B*07:54 and the B*45:06 alleles. Specific PCR fragment of 450 bp in the B*07:111N allele.

⁴¹Primer mix 68: Specific PCR fragment of 365 bp in the B*07:101 allele. Specific PCR fragment of 415 bp in the B*07:13 and 07:15 and the B*08:16 and 67:02 alleles.

⁴²Primer mix 69: Specific PCR fragment of 190 bp in the B*07:106 allele. Specific PCR fragment of 245 bp in the B*07:108 allele. Specific PCR fragment of 465 bp in the B*07:102 and the B*08:18 and 73:01-73:02 alleles.

⁴³Primer mix 70: Specific PCR fragment of 125 bp in the B*07:104 allele. Specific PCR fragment of 205 bp in the B*07:114 allele.

⁴⁴Primer mix 71: Specific PCR fragment of 245 bp in the B*07:108 allele. Specific PCR fragment of 280 bp in the B*07:107 allele.

‘w’, might be weakly amplified.

‘?’, nucleotide sequence information not available for the primer matching sequence.

INTERPRETATION TABLE																																																																											
HLA-B*07 SSP subtyping																																																																											
Amplification patterns of the B*07:02 to B*07:117 alleles																																																																											
Well ⁶																																																																											
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72																																								
210	190	425	265	400	195	140	150	105	425	215	280	200	200	75	345	290	235	190	260	230	150	245	95	145	205	415	65	210	385	435	230	365	190	125	245	165																																							
																																Length of spec.																																											
																																PCR product(s)																																											
1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070	800	800	1070	1070	1070	1070	1070	800	1070	1070	800	1070	1070	1070	1070	1070	1070	800	1070	1070	1070																																							
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72																																								
Well No. HLA-B allele ²																																																																											
*07:02:01-07:02:20																																																																											
*07:03																																																																											
*07:04																																																																											
*07:05:01-07:05:06																																																																											
*07:06																																																																											
*07:07																																																																											
*07:08																																																																											
*07:09																																																																											
*07:10																																																																											
*07:11																																																																											
*07:12																																																																											
*07:13																																																																											
*07:14																																																																											
*07:15																																																																											
*07:16																																																																											
*07:17																																																																											
*07:18:01-07:18:02																																																																											
*07:19																																																																											
*07:20																																																																											
*07:21																																																																											
*07:22:01-07:22:02																																																																											
*07:23																																																																											
*07:24																																																																											
*07:25																																																																											
*07:26																																																																											
*07:27																																																																											
*07:28																																																																											
*07:29																																																																											
*07:30																																																																											
*07:31																																																																											
*07:32																																																																											
*07:33																																																																											
*07:34																																																																											
*07:35																																																																											
*07:36																																																																											
*07:37																																																																											
*07:38																																																																											
*07:39																																																																											
*07:40																																																																											
*07:41																																																																											
*07:42																																																																											
*07:43																																																																											
*07:44																																																																											
*07:45																																																																											
*07:46																																																																											
*07:47																																																																											
*07:48																																																																											
*07:49N																																																																											
*07:50, 48:08 ³																																																																											
*07:51																																																																											
*07:52																																																																											
*07:53																																																																											
*07:54																																																																											
*07:55																																																																											
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	Well No.																																							

www.olerup-ssp.com

April 2013
Rev. No.: 02u



For *In Vitro* Diagnostic Use.

www.olerup-ssp.com

CE
0088

Lot No.: 03L

Lot-specific Information

www.olerup-ssp.com

Length of spec.																																				
PCR product(s)																																				
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	25	26	27	28	29	30	31	32	33	34	35	36
*08:03																																				
*08:04																																				
*08:07, 08:11, 08:28, 08:37																																				
*08:09, 08:12:01-08:12:03, 08:20, 08:55, 08:60, 39:04																																				
*08:13														14																						
*08:14																											26									
*08:15																																				
*08:16																																				
*08:17															15		17																			
*08:18																																				
*08:21																											26									
*08:23, 41:02:01-41:02:03, 41:11, 41:13, 41:15																																				
*08:25														14													26									
*08:26, 08:56																																				
*08:39																																				
*08:40																														30						
*08:47															15		17																			
*08:49, 14:11																																				
*08:52										10																										
*08:54																																				
*08:57, 35:87																																				
*08:64																																				
*13:01:01-13:01:02, 13:01:04-13:02:09, 13:07N-13:09, 13:11, 13:13, 13:15-13:23, 13:25, 13:27-13:33, 13:36-13:40, 35:88, 51:10, 51:16, 51:31																																				

www.olerup-ssp.com

CE
0088

Lot No.: 03L

Lot-specific Information

www.olerup-ssp.com

[illegible]

Lot No.: 03L

Lot-specific Information

www.olerup-ssp.com

[illegible]

www.olerup-ssp.com

CE
0088

www.olerup-ssp.com

CE
0088

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

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-B*07 subtyping.

In addition, wells number 4, 10, 14, 19, 24, 26, 27, 29 to 31, 47, 52, 53, 59, 62 and 70 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.

²The sequence of B*07:01 has been shown to be in error.

³The B*07:50 and B*48:08 alleles will give rise to identical amplification pattern with the HLA-B*07 subtyping kit. These two alleles can be distinguished e.g with the HLA-B low resolution kit.

⁴The B*07:98 and B*07:116 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 54.

⁵The B*07:102 and 07:106 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 69.

⁶Primer mix 7: Specific PCR fragment of 105 bp in the B*07:04, 07:25 and 07:52 and the B*40:136, 41:08 and 42:05:01-42:05:02 alleles. Specific PCR fragment of 215 bp in the B*07:29 allele.

Primer mix 8: Specific PCR fragment of 160 bp in the B*07:59 allele. Specific PCR fragment of 235 bp in the B*07:05:01-07:06, 07:32, 07:34, 07:69, 07:78, 07:80, 07:90, 07:97, 07:105 and 07:112 and in the B*40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:16, 40:21-40:23, 40:25, 40:30, 40:34, 40:36, 40:38, 40:43, 40:45-40:49, 40:54-40:55, 40:61-40:63, 40:65-40:67, 40:69, 40:72:01-40:74, 40:76-40:77, 40:79-40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:112-40:114, 40:116-40:118N, 40:121, 40:123, 40:125-40:126, 40:128, 40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 40:158, 41:08, 42:05:01-42:05:02, 44:31, 48:01:01-48:01:03, 48:03:01-48:03:02, 48:05-48:07, 48:09-48:12, 48:14-48:16, 48:18-48:22 and 81:01-81:05 alleles.

Primer mix 9: Specific PCR fragment of 240 bp in B*07:49N allele. Specific PCR fragment of 355 bp in the B*07:05:01-07:05:06 and the B*35:46 and 37:07 alleles.

Primer mix 10: Specific PCR fragment of 285 bp in the B*07:07, 07:12, 07:14, 07:18:01-07:18:02 and 07:77 and in the B*15:138, 18:35, 40:01:01-40:01:17, 40:07, 40:10:01-40:10:02, 40:12, 40:14:01-40:14:03, 40:21-40:23, 40:25, 40:33, 40:36, 40:38, 40:42-40:43, 40:46-40:49, 40:52, 40:54-40:55, 40:59-40:63, 40:65-40:67, 40:69, 40:72:01-40:74, 40:76-40:77, 40:79, 40:81, 40:84, 40:87-40:88, 40:100-40:102, 40:106, 40:108, 40:112-40:114, 40:116-40:118N, 40:121, 40:123-40:126, 40:128, 40:132, 40:134-40:141, 40:146-40:147, 40:149-40:156, 40:158, 41:08, 44:31, 46:06, 48:03:01-48:03:02, 48:17 and 48:23 and the C*02:23, C*04:77 and C*07:38 alleles. Specific PCR fragment of 415 bp in B*07:47 and 07:81 and in the B*08:52, 40:109⁷ and 48:18 alleles.

Primer mix 11: Specific PCR fragment of 130 bp in B*07:39 allele. Specific PCR fragment of 210 bp in the B*07:08, 07:10, 07:32 and 07:38 and in the B*18:07:01-18:07:02, 18:29, 27:01-27:05:08, 27:05:10-27:11, 27:13-27:15, 27:17, 27:19-27:21, 27:23-27:28, 27:30-27:73, 35:50, 35:84, 37:21, 38:06-38:07, 39:58, 40:08, 40:13, 40:68, 48:06, 51:57, 51:103, 53:21 and 73:01-73:02 alleles.

Primer mix 13: Specific PCR fragment of 85 bp in the B*07:31, 07:34 and 07:43 and in the B*41:08 and 42:05:01-42:05:02 and the C*07:38 alleles. Specific PCR fragment of 290 bp in the B*07:12, 07:14 and 07:18:01-07:18:02 and in the B*40:30, 40:34, 40:59, 40:137 and 48:17 alleles.

Primer mix 15: Specific PCR fragment of 385 bp in the B*07:54 and the B*45:06 alleles. Specific PCR fragment of 415 bp in the B*07:11, 07:47, 07:57 and 07:75 and the B*08:17, 08:47 and 39:20 alleles.

Primer mix 17: Specific PCR fragment of 345 bp in the B*07:46 allele. Specific PCR fragment of 425 bp in the the B*07:11, 07:27, 07:57 and 07:75 and in the B*08:17, 08:47, 38:17 and 39:20 alleles.

Primer mix 19: Specific PCR fragment of 205 bp in the B*15:14, 15:91, 15:131, 15:161, 35:45, 35:71, 40:132, 44:10, 44:14, 44:17, 44:31, 44:43:01-44:43:02, 44:45, 44:51, 44:62, 44:77, 44:82, 44:107, 45:09, 46:17, 51:23, 52:15, 53:22, 57:07, 58:07 and 82:01-82:03 alleles. Specific PCR fragment of 250 bp in the B*44:54 and 44:106 alleles. Specific PCR fragment of 205 and 250 bp in the B*07:20 allele. Specific PCR fragment of 250 and 295 bp in the B*07:35 allele.

Primer mix 20: Specific PCR fragment of 160 bp in the B*07:59 allele. Specific PCR fragment of 205 bp in the B*07:51 and the C*08:08 alleles. Specific PCR fragment of 275 bp in the B*07:21 allele.

Primer mix 21: Specific PCR fragment of 100 bp in the B*07:52 allele. Specific PCR fragment of 165 bp in the B*07:22:01-07:22:02 alleles.

Primer mix 25: Specific PCR fragment of 305 bp in the B*07:117 allele. Specific PCR fragment of 425 bp in the B*07:27 and 38:17 alleles.

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

Primer mix 26: Specific PCR fragment of 95 bp in the B*07:28 and the B*08:14 and 27:32 alleles. Specific PCR fragment of 205 bp in the B*07:51 and C*08:08 alleles. Specific PCR fragment of 235 bp in the B*07:20, 07:24, 07:60 and 07:100 and the B*08:21, 08:25, 15:07:01-15:07:02, 15:45, 15:55, 15:68, 15:126, 15:207, 35:05:01-35:05:02, 35:22, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 40:05, 40:71, 46:12, 51:64, 53:14 and 58:18 and the C*03:05, C*03:25 and C*03:27 alleles. Specific PCR fragment of 290 bp in the B*07:42 allele. Specific PCR fragments of 95 and 220 bp in the B*44:54 and 44:106 alleles.

Primer mix 27: Specific PCR fragment of 165 bp in the B*07:41 allele. Specific PCR fragment of 215 bp in the B*07:29 allele.

Primer mix 29: Specific PCR fragment of 85 bp in the B*07:31, 07:34 and 07:43 and in the B*41:08 and 42:05:01-42:05:02 and the C*07:38 alleles. Specific PCR fragment of 200 bp in the B*07:44 allele.

Primer mix 31: Specific PCR fragment of 215 bp in the B*07:55 and the B*48:19 alleles. Specific PCR fragment of 280 bp in the B*07:19, 07:33, 07:53, 07:60, 14:05, 14:13, 15:55, 18:14, 27:07, 27:11, 27:24, 27:32-27:34, 27:43, 35:05:01-35:05:02, 35:22, 35:31, 35:51, 35:58, 35:72, 35:89, 35:97, 35:114, 37:09, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:02:01-40:03, 40:05, 40:08-40:09, 40:13, 40:18-40:19, 40:24, 40:27, 40:29, 40:35, 40:37, 40:39-40:40, 40:50, 40:56-40:58, 40:71, 40:78, 40:82, 40:85, 40:89-40:91, 40:94, 40:97, 40:104-40:105, 40:107, 40:111, 40:115, 40:119, 40:122, 40:133Q, 40:142N-40:145, 40:157, 42:08, 44:54, 44:106, 48:04, 48:13, 48:24, 51:64, 51:81, 53:14, 55:04, 58:18, 58:27, C*03:05, 03:25, 03:27, C*08:08 alleles. Specific PCR fragments of 215 and 280 bp in the B*07:100 and the B*15:07:01-15:07:02, 15:45, 15:68, 15:126, 15:207 and 46:12 alleles.

Primer mix 38: Specific PCR fragment of 190 bp in the B*07:103 and 07:113 and the B*08:64 alleles. Specific PCR fragment of 215 bp in the B*07:66 allele.

Primer mix 40: Specific PCR fragment of 265 bp in the B*07:56 and 07:72 and in the B*08:26, 08:56, 40:10:01[?]-40:10:02[?], 40:21[?], 40:58[?], 40:137[?], 41:12 and 49:03 alleles. Specific PCR fragment of 395 bp in the B*07:83 allele.

Primer mix 42: Specific PCR fragment of 195 bp in the B*07:67N allele. Specific PCR fragment of 225 bp in the B*07:71 allele.

Primer mix 48: Specific PCR fragment of 200 bp in the B*07:76 allele. Specific PCR fragment of 280 bp in the B*07:77 and the B*40:60 and C*07:38 alleles.

Primer mix 50: Specific PCR fragment of 75 bp in the B*07:74 allele. Specific PCR fragment of 165 bp in the B*07:87 allele.

Primer mix 51: Specific PCR fragment of 345 bp in the B*07:97 allele. Specific PCR fragment of 470 bp in the B*07:93 and the B*08:39 alleles.

Primer mix 54: Specific PCR fragment of 190 bp in the B*07:98 allele. Specific PCR fragment of 405 bp in the B*07:116 allele.

Primer mix 57: Specific PCR fragment of 150 bp in the B*07:109 allele. Specific PCR fragment of 215 bp in the B*07:70 allele.

Primer mix 58: Specific PCR fragment of 245 bp in the B*07:112 allele. Specific PCR fragment of 440 bp in the B*07:79 and 07:112 alleles.

Primer mix 59: Specific PCR fragment of 95 bp in the B*07:115 and the B*14:05, 38:19, 39:03, 39:24, 39:37, 42:06 and 48:07 and C*08:08 alleles. Specific PCR fragment of 190 bp in the B*07:89 and 07:113 and the B*08:64 alleles.

Primer mix 61: Specific PCR fragment of 205 bp in the B*07:88 allele. Specific PCR fragment of 420 bp in the B*07:105 allele.

Primer mix 65: Specific PCR fragment of 385 bp in the B*07:54 and the B*45:06 alleles. Specific PCR fragment of 450 bp in the B*07:111N allele.

Primer mix 68: Specific PCR fragment of 365 bp in the B*07:101 allele. Specific PCR fragment of 415 bp in the B*07:13 and 07:15 and the B*08:16 and 67:02 alleles.

Primer mix 69: Specific PCR fragment of 190 bp in the B*07:106 allele. Specific PCR fragment of 245 bp in the B*07:108 allele. Specific PCR fragment of 465 bp in the B*07:102 and the B*08:18 and 73:01-73:02 alleles.

Primer mix 70: Specific PCR fragment of 125 bp in the B*07:104 allele. Specific PCR fragment of 205 bp in the B*07:114 allele.

Primer mix 71: Specific PCR fragment of 245 bp in the B*07:108 allele. Specific PCR fragment of 280 bp in the B*07:107 allele.

‘w’, might be weakly amplified.

‘?’, nucleotide sequence information not available for the primer matching sequence.

Primers

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
5'-primer(s) ¹	44	363	412	540	103	103	97	412	693	44	103	419
	5'-ggC 3'	5'-AgC 3'	5'-ATg 3'	5'-Cgg 3'	5'-CCT 3'	5'-CCT 3'	5'-TCg 3'	5'-ATA 3'	5'-ggT 3'	5'-ggC 3'	5'-CCT 3'	5'-gTC 3'
					103	103	540	636		363	103	
					5'-CCT 3'	5'-CCT 3'	5'-gAC 3'	5'-CAC 3'		5'-Agg 3'	5'-CCT 3'	
3'-primer(s) ²	272	605	605	605	282	277	272	605	893	287	191	605
	5'-TgT 3'	5'-gCT 3'	5'-gCT 3'	5'-gCT 3'	5'-gCC 3'	5'-ggT 3'	5'-TgT 3'	5'-gCT 3'	5'-CCT 3'	5'-TCC 3'	5'-CgA 3'	5'-gCT 3'
							605	754	916	302	272	
							5'-gCT 3'	5'-AgA 3'	5'-gAT 3'	5'-ggC 3'	5'-TgC 3'	
										605	272	
										5'-gCT 3'	5'-TgA 3'	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
5'-primer(s) ¹	355	363	44	103	44	379	363	25	481	322	560	103
	5'-TCA 3'	5'-AgC 3'	5'-ggC 3'	5'-CCT 3'	5'-ggC 3'	5'-ACC 3'	5'-AgC 3'	5'-CCg 3'	5'-CgA 3'	5'-gCC 3'	5'-CCT 3'	5'-CCT 3'
	560	363		103			409	363	545			103
	5'-CAC 3'	5'-AgC 3'		5'-CCT 3'			5'-ggC 3'	5'-AgC 3'	5'-AgT 3'			5'-CCT 3'
3'-primer(s) ²	605	539	259	292	218	605	572	131	605	419	605	191
	5'-gCT 3'	5'-TCA 3'	5'-CTC 3'	5'-gTA 3'	5'-gCA 3'	5'-gCT 3'	5'-gCg 3'	5'-ggA 3'	5'-gCT 3'	5'-CgT 3'	5'-gCT 3'	5'-CgA 3'
			287	292	301		616	527				605
			5'-TCC 3'	5'-gTA 3'	5'-gTC 3'		5'-AgA 3'	5'-CCg 3'				5'-gCT 3'
			302	292	302			754				
			5'-ggT 3'	5'-gTA 3'	5'-ggT 3'			5'-AgA 3'				
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
5'-primer(s) ¹	44	363	97	215	560	412	363	412	756	483	207	363
	5'-ggC 3'	5'-AgC 3'	5'-TCg 3'	5'-gCC 3'	5'-CAC 3'	5'-ATA 3'	5'-AgC 3'	5'-ATA 3'	5'-ACT 3'	5'-gAA 3'	5'-gAC 3'	5'-AgC 3'
			148		852					503		
			5'-TgC 3'		5'-CAg 3'					5'-CCg 3'		
3'-primer(s) ²	181	418	272	282	605	559	538	559	973	605	272	570
	5'-gTT 3'	5'-gTC 3'	5'-TgT 3'	5'-gCC 3'	5'-gCT 3'	5'-CTC 3'	5'-CCA 3'	5'-CgT 3'	5'-TCT 3'	5'-gCT 3'	5'-TgT 3'	5'-CCg 3'
	301	527			916		603					
	5'-gTC 3'	5'-CCg 3'			5'-gAC 3'		5'-gTC 3'					
		559										
		5'-CAg 3'										
		613										
		5'-gCT 3'										
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47	48
5'-primer(s) ¹	141	363	272	44	650	89	363	165	206	44	363	113
	5'-ATT 3'	5'-AgC 3'	5'-CTA 3'	5'-ggC 3'	5'-CCT 3'	5'-gAC 3'	5'-AgC 3'	5'-ACC 3'	5'-AgA 3'	5'-ggC 3'	5'-AgC 3'	5'-CCA 3'
						118						368
						5'-C.g 3'						5'-gTC 3'
3'-primer(s) ²	311	506	412	142	916	272	463	272	272	299	538	272
	5'-ggT 3'	5'-Tgg 3'	5'-gTT 3'	5'-TgC 3'	5'-gAC 3'	5'-TgT 3'	5'-gCT 3'	5'-TgC 3'	5'-Tgg 3'	5'-TCA 3'	5'-gTC 3'	5'-TgT 3'
		516		272								605
		5'-gCg 3'		5'-TgA 3'								5'-gCT 3'
		539										
		5'-TCT 3'										
Well No.	37	38	39	40	41	42	43	44	45	46	47	48

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

Well No.	49	50	51	52	53	54	55	56	57	58	59	60
5'-primer(s) ¹	341	363	44	355	409	44	386	363	98	44	363	167
	5'-ggg 3'	5'-AgC 3'	5'-ggC 3'	5'-CCT 3'	5'-ggT 3'	5'-ggC 3'	5'-gCA 3'	5'-AgC 3'	5'-CTg 3'	5'-ggC 3'	5'-AgC 3'	5'-gCT 3'
						363			161			
						5'-AgC 3'			5'-Cgg 3'			
3'-primer(s) ²	2 nd I	398	221	605	605	278	605	544	272	121	419	272
	5'-TCg 3'	5'-ggC 3'	5'-ACC 3'	5'-gCT 3'	5'-gCT 3'	5'-ggA 3'	5'-gCT 3'	5'-ggT 3'	5'-TgT 3'	5'-gCC 3'	5'-CgA 3'	5'-TgT 3'
		488	343			513		559		317	506	
		5'-CCA 3'	5'-T 3'			5'-TCA 3'		5'-CAg 3'		5'-ggC 3'	5'-Tgg 3'	
											514	
											5'-CTT 3'	
Well No.	49	50	51	52	53	54	55	56	57	58	59	60

Well No.	61	62	63	64	65	66	67	68	69	70	71	72
5'-primer(s) ¹	44	44	256	103	44	44	44	44	44	106	44	103
	5'-ggC 3'	5'-ggC 3'	5'-ACT 3'	5'-CCT 3'	5'-ggC 3'	5'-ggC 3'	5'-ggC 3'	5'-ggC 3'	5'-ggC 3'	5'-CCA 3'	5'-ggC 3'	5'-CCT 3'
				103						363	188	363
				5'-CCT 3'						5'-AgC 3'	5'-Cgg 3'	5'-AgC 3'
												5'-CCT 3'
3'-primer(s) ²	82	292	282	272	259	309	106	241	119	272	119	226
	5'-ggC 3'	5'-gTA 3'	5'-gCC 3'	5'-TgC 3'	5'-CTC 3'	5'-ATC 3'	5'-CAT 3'	5'-CgA 3'	5'-ggT 3'	5'-TgT 3'	5'-ggT 3'	5'-CAC 3'
	293	292			327			289	341		603	
	5'-ggA 3'	5'-gTA 3'			5'-TTT 3'			5'-AgC 3'	5'-CgT 3'		5'-TTC 3'	
		292							511			
		5'-gTA 3'							5'-CCg 3'			
Well No.	61	62	63	64	65	66	67	68	69	70	71	72

¹The nucleotide position, in the 1st, 2nd, 3rd or 4th exon, 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.

²The nucleotide position, in 2nd, 3rd or 4th 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.

CELL LINE VALIDATION SHEET															
HLA-B*07 SSP subtyping kit															
Well															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
200967501	200967502	200967503	200967504	200967505	200967506	200967507	200967508	200967509	200967510	200967511	200967512	200967513	201182114	200967515	200967516
IHWC cell line				B*											
1	9001	SA	*07:02												
2	9280	LK707	*52:01	*73:01	-	-	-	-	+	-	-	-	-	-	-
3	9011	E4181324	*52:01		-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*15:10	*53:01	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*37:01		-	-	-	-	-	-	-	-	-	-	+
6	9353	SM	*39:01	*51:01	-	-	-	-	-	+	-	-	-	-	-
7	9020	QBL	*18:01		-	-	-	-	-	+	-	-	-	-	+
8	9025	DEU	*35:01		-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*38:01		-	-	-	-	-	+	-	-	-	-	+
10	9107	LKT3	*54:01		-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*44:03		-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*57:01		-	-	-	-	-	-	-	-	-	-	-
13	9025	JESTHOM	*27:05		-	-	-	-	+	-	-	-	-	-	-
14	9071	OLGA	*15:01	*15:20	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*40:01		-	-	-	-	-	-	+	-	-	-	-
16	9037	SWEIG007	*40:02		-	-	-	-	-	+	-	-	-	+	+
17	9282	CTM3953540	*08:01	*55:01	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*14:01	*56:01	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*18:01		-	-	-	-	-	+	-	-	-	-	+
20	9059	SLE005	*40:01		-	-	-	-	-	-	+	-	-	-	-
21	9064	AMALA	*15:01		-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*35:03		-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*40:02	*56:02	-	-	-	-	-	+	-	-	-	+	+
24	9035	JBUSH	*38:01		-	-	-	-	-	+	-	-	-	-	+
25	9049	IBW9	*14:02		-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*58:01		-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:05	*51:01	+	+	-	+	+	-	-	+	-	-	-
28	9320	BEL5GB	*44:02	*44:03	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*44:03		-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*42:01		+	-	-	-	+	-	-	-	-	-	-
31	9019	DUCAF	*18:01		-	-	-	-	-	+	-	-	-	-	+
32	9297	HAG	*41:02		-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*40:01		-	-	-	-	-	-	+	-	-	-	-
34	9104	DHIF	*38:01		-	-	-	-	-	+	-	-	-	-	+
35	9302	SSTO	*44:02		-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*15:01	*35:01	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		+	+	+	+	+	-	-	-	-	-	-
38	9099	LZL	*15:01		-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*08:01	*27:05	-	-	-	-	+	-	-	-	-	-	-
40	9134	WHONP199	*13:02	*46:01	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*14:02		-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*46:01		-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*46:01		-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*38:01		-	-	-	-	-	+	-	-	-	-	+
45	9239	SHJO	*42:01	*50:01	+	-	-	-	+	-	-	-	-	-	-
46	9013	SCHU	*07:02		+	+	+	+	+	-	-	-	-	-	-
47	9045	TUBO	*51:01		-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*35:01	*44:03	-	-	-	-	-	-	-	-	-	-	-

CELL LINE VALIDATION SHEET																												
HLA-B*07 SSP subtyping kit																												
				Well																								
						49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64							
					Prod. No.:	200967549	200967550	200967551	201182152	200967553	201182154	200967555	200967556	201182157	201182158	201182159	200967560	201182161	200967562	200967563	200967564							
	IHCW cell line		B*																									
1	9001	SA	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*52:01	*73:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*52:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*15:10	*53:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*37:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*39:01	*51:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
7	9020	QBL	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*35:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-	-
10	9107	LKT3	*54:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*44:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*57:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9025	JESTHOM	*27:05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*15:01	*15:20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*40:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*08:01	*55:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*14:01	*56:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
19	9038	BM16	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*35:03																									

CELL LINE VALIDATION SHEET													
HLA-B*07 SSP subtyping kit													
					Well								
					65	66	67	68	69	70	71	72	
				Prod. No.:	201182165	200967566	200967567	201182168	201182169	201182170	201182171	201182172	
	IHWC cell line		B*										
1	9001	SA	*07:02		-	-	-	-	-	-	-	-	
2	9280	LK707	*52:01		*73:01	-	-	-	-	-	-	-	
3	9011	E4181324	*52:01			-	-	-	-	-	-	-	
4	9275	GU373	*15:10		*53:01	-	-	-	-	-	-	-	
5	9009	KAS011	*37:01			-	-	-	-	-	-	-	
6	9353	SM	*39:01		*51:01	-	-	-	-	-	-	-	
7	9020	QBL	*18:01			-	-	-	-	-	-	-	
8	9025	DEU	*35:01			-	-	-	-	-	-	-	
9	9026	YAR	*38:01			-	+	-	-	-	-	-	
10	9107	LKT3	*54:01			-	-	-	-	-	-	-	
11	9051	PITOUT	*44:03			-	-	-	-	-	-	-	
12	9052	DBB	*57:01			-	-	-	-	-	-	-	
13	9025	JESTHOM	*27:05			-	-	-	-	-	-	-	
14	9071	OLGA	*15:01		*15:20	-	-	-	-	-	-	-	
15	9075	DKB	*40:01			-	-	+	-	-	-	-	
16	9037	SWEIG007	*40:02			-	-	-	-	-	-	-	
17	9282	CTM3953540	*08:01		*55:01	-	-	+	-	-	-	-	
18	9257	32367	*14:01		*56:01	-	-	-	-	-	-	-	
19	9038	BM16	*18:01			-	-	-	-	-	-	-	
20	9059	SLE005	*40:01			-	-	+	-	-	-	-	
21	9064	AMALA	*15:01			-	-	-	-	-	-	-	
22	9056	KOSE	*35:03			-	-	-	-	-	-	-	
23	9124	IHL	*40:02		*56:02	-	-	-	-	-	-	-	
24	9035	JBUSH	*38:01			-	+	-	-	-	-	-	
25	9049	IBW9	*14:02			-	-	-	-	-	-	-	
26	9285	WT49	*58:01			-	-	-	-	-	-	-	
27	9191	CH1007	*07:05		*51:01	-	-	-	-	-	-	-	
28	9320	BEL5GB	*44:02		*44:03	-	-	-	-	-	-	-	
29	9050	MOU	*44:03			-	-	-	-	-	-	-	
30	9021	RSH	*42:01			-	-	-	-	-	-	-	
31	9019	DUCAF	*18:01			-	-	-	-	-	-	-	
32	9297	HAG	*41:02			-	-	+	-	-	-	-	
33	9098	MT14B	*40:01			-	-	+	-	-	-	-	
34	9104	DHIF	*38:01			-	+	-	-	-	-	-	
35	9302	SSTO	*44:02			-	-	-	-	-	-	-	
36	9024	KT17	*15:01		*35:01	-	-	-	-	-	-	-	
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	
38	9099	LZL	*15:01			-	-	-	-	-	-	-	
39	9315	CML	*08:01		*27:05	-	-	+	-	-	-	-	
40	9134	WHONP199	*13:02		*46:01	-	-	-	-	-	-	-	
41	9055	H0301	*14:02			-	-	-	-	-	-	-	
42	9066	TAB089	*46:01			-	-	-	-	-	-	-	
43	9076	T7526	*46:01			-	-	-	-	-	-	-	
44	9057	TEM	*38:01			-	+	-	-	-	-	-	
45	9239	SHJO	*42:01		*50:01	-	-	+	-	-	-	-	
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	
47	9045	TUBO	*51:01			-	-	-	-	-	-	-	
48	9303	TER-ND	*35:01		*44:03	-	-	-	-	-	-	-	

CERTIFICATE OF ANALYSIS**Olerup SSP® HLA-B*07 SSP**

Product number: 101.512-24u/03u – without *Taq* pol.
Lot number: 03L
Expiry date: 2013-August-01
Number of tests: 24 tests – Product No. 101.512-24u
 3 tests – Product No. 101.512-03u
Number of wells per test: 72

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2009-675-01	25	2011-821-25	49	2009-675-49
2	2009-675-02	26	2009-675-26	50	2009-675-50
3	2009-675-03	27	2011-821-27	51	2009-675-51
4	2009-675-04	28	2009-675-28	52	2011-821-52
5	2009-675-05	29	2011-821-29	53	2009-675-53
6	2009-675-06	30	2009-675-30	54	2011-821-54
7	2009-675-07	31	2009-675-31	55	2009-675-55
8	2009-675-08	32	2009-675-32	56	2009-675-56
9	2009-675-09	33	2009-675-33	57	2011-821-57
10	2009-675-10	34	2009-675-34	58	2011-821-58
11	2009-675-11	35	2009-675-35	59	2011-821-59
12	2009-675-12	36	2009-675-36	60	2009-675-60
13	2009-675-13	37	2009-675-37	61	2011-821-61
14	2011-821-14	38	2011-821-38	62	2009-675-62
15	2009-675-15	39	2009-675-39	63	2009-675-63
16	2009-675-16	40	2009-675-40	64	2009-675-64
17	2009-675-17	41	2009-675-41	65	2011-821-65
18	2009-675-18	42	2009-675-42	66	2009-675-66
19	2009-675-19	43	2009-675-43	67	2009-675-67
20	2009-675-20	44	2009-675-44	68	2011-821-68
21	2009-675-21	45	2009-675-45	69	2011-821-69
22	2009-675-22	46	2009-675-46	70	2011-821-70
23	2009-675-23	47	2009-675-47	71	2011-821-71
24	2009-675-24	48	2009-675-48	72	2011-821-72

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

No DNAs carrying the alleles to be amplified by primer solutions 7, 12, 13, 15, 17, 18, 20 to 23, 25, 27 to 29, 33 to 36, 38, 40 to 42, 48 to 55, 57 to 61, 63, 65, 68 and 70 to 72 were available.

The specificities of the primers in primer solutions 7, 12, 13, 15, 17, 18, 20, 23, 25, 27, 29, 36, 38, 40, 48, 51, 53, 57, 59, 60, 68, 70 and 72 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 33, 50, 54, 58, 61, 65 and 71 it was only possible to test the 5'-primer, the 3'-primer were not possible to test. In primer solutions 21, 22, 28, 34, 35, 41, 42, 49, 52, 55 and 63 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 7, 27, 29,

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

48 and 57 one or two 5'-primers were not possible to test, and in primer solutions 8 to 11, 15, 17, 19, 20, 24 to 26, 38, 40, 51, 56, 59, 68 and 69 one or two 3'-primers were not possible to test. Additional primers in primer solutions 8, 10, 11, 19, 24, 26, 31 and 69 were tested by separately adding one additional 5'-primer, or one additional 3'-primer.

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

Date of approval: 2011-February-24

Approved by:

Production Quality Control

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

Declaration of Conformity

Product name: *Olerup* SSP® HLA-B*07
Product number: 101.512-24u/03u
Lot number: 03L

Intended use: HLA-B*07 high resolution histocompatibility testing

Manufacturer: *Olerup* SSP AB
Franzengatan 5
SE-112 51 Stockholm, 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 9001:2008 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, 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.)

Stockholm, Sweden
2013-April-22

Ann-Cathrin Jareman
Head of QA and Regulatory Affairs

Lot No.: **03L**

Lot-specific Information

www.olerup-ssp.com

ADDRESSES:

Manufacturer:

Olerup SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Tel: +46-8-717 88 27

Fax: +46-8-717 88 18

E-mail: info-ssp@olerup.com

Web page: <http://www.olerup-ssp.com>

Distributed by:

Olerup GmbH, Löwengasse 47 / 6, AT-1030 Vienna, Austria.

Tel: +43-1-710 15 00

Fax: +43-1-710 15 00 10

E-mail: support-at@olerup.com

Web page: <http://www.olerup.com>

Olerup Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

Tel: 1-877-OLERUP1

Fax: 610-344-7989

E-mail: info.us@olerup.com

Web page: <http://www.olerup.com>

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