

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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“Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Olerup SSP[®] HLA-C*03

Product number:	101.611-12 – including <i>Taq</i> polymerase 101.611-12u – without <i>Taq</i> polymerase
Lot number:	57N
Expiry date:	2014-September-01
Number of tests:	12
Number of wells per test:	48
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. 57N.

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

The HLA-C*03 kit is updated for new alleles to enable separation of:

- Confirmed¹ alleles as listed in the IMGT/HLA database
- Polymorphisms in exons outside of the region encoding the peptide binding domain
- Null and Alternatively expressed alleles

The Lot-specific information for HLA-C*03 including and without *Taq* polymerase is now described in one common Product Insert.

¹As described in section Uniquely Identified Alleles.

The HLA-C*03 specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup SSP[®]* HLA-C*03 lot was made (Lot No. 85K).

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

Well	5'-primer	3'-primer	rationale
12	Added	Added	Primer pair added for the C*03:113 allele.
21	Added	-	5'-primer moved from well 22.
22	Moved	Moved	Primer pair moved to wells 21 and 47, for decreased tendencies of primer oligomer formation.
23	Added	-	5'-primer added for the C*03:22Q allele.
24	-	Added	3'-primers added for the C*03:120 and C*03:121N alleles.
32	Modified	-	Improved specificity of primer pair.
36	Added	-	5'-primer added for the C*03:122 allele.
44	-	Added	3'-primer added for the C*03:120 allele.
47	Added	-	5'-primer moved from well 22, 5'-primer added for the C*03:109 allele.

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PRODUCT DESCRIPTION

HLA-C*03 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the HLA-C*03:02 to C*03:139 alleles.

PLATE LAYOUT

Each test consists of 48 PCR reactions in a 48 well cut PCR plate.

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

The 48 well cut PCR plate is marked with ‘HLA-C*03’ in silver/gray ink.

Well No. 1 is marked with the Lot Number ‘57N’.

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 heat-sealed with a PCR-compatible foil.

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

INTERPRETATION

The interpretation of HLA-C*03 SSP subtypings will be influenced by most C*01, the C*02, the C*04, four C*05, the C*06, most C*07, two C*08, six C*12, the C*14, the C*15, three C*16, the C*17 and C*18 alleles when present on the other haplotype. In addition, the B*07:93, 38:27 and 51:76 alleles are amplified by primer mix 7, the B*08:39 allele is amplified by primer mix 7 and 29, the B*15:01:17 allele is amplified by primer mix 28, the B*15:78:03 allele is amplified by primer mixes 13 and 28, the B*15:96 allele is amplified by primer mixes 2, 5, 6, 18, 26 and 43, the B*35:08:04 and 37:04:02 alleles are amplified by primer mix 12, the B*35:101:02 allele is amplified by primer mix 7 and 33, the B*35:178 allele is amplified by primer mix 25 and the B*55:30 allele is amplified by primer mix 42.

UNIQUELY IDENTIFIED ALLELES

All the HLA-C*03 alleles, i.e. **C*03:02 to C*03:139**, recognized by the HLA Nomenclature Committee in January 2012¹ will be amplified by the primers in the HLA-C*03 subtyping kit².

The HLA-C*03 kit enables separation of the confirmed HLA- C*03 alleles as listed in the IMGT/HLA database. An HLA allele is listed as confirmed by IMGT/HLA if

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it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA- C*03 alleles is listed below.

The HLA-C*03 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles.

The C*03:28 and 03:90 alleles and the C*03:49 and 03:103 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 23.

The C*03:44 and 03:123 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 31.

The C*03:50 and 03:122 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

The C*03:56 and 03:85 alleles and the C*03:64 and 03:82 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 35.

The C*03:70 and 03:78 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 42.

²The C*03:135 and C*15:43 give rise to identical amplification patterns with the HLA-C*03 subtyping kit. These two alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C*15 subtyping kits.

The HLA-C*03 subtyping kit cannot distinguish the following silent mutations: the C*03:02:01-03:02:08, the C*03:03:01-03:03:11, 03:03:13-03:03:14 and 03:03:16-03:03:18, the C*03:03:12 and 03:03:15, the C03:04:01:01-03:04:18 and 03:04:20-03:04:24 or the C*03:38:01-03:38:02 alleles.

¹HLA-C alleles listed on the IMGT/HLA web page 2012-January-12, release 3.7.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 192 alleles generate 116 amplification patterns that can be combined in 6786 homozygous and heterozygous combinations. 2748 of these genotypes do not give rise to unique amplification patterns. The different lengths of the specific PCR products were not considered in these calculations.

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ALLELE CONFIRMATION STATUS

Allele	Status	Allele	Status	Allele	Status	Allele	Status
C*03:02:01	Confirmed	C*03:04:23	Unconfirmed	C*03:48	Unconfirmed	C*03:98	Unconfirmed
C*03:02:02:01	Confirmed	C*03:04:24	Confirmed	C*03:49	Confirmed	C*03:99	Unconfirmed
C*03:02:02:02	Unconfirmed	C*03:04:25	Unconfirmed	C*03:50	Unconfirmed	C*03:100	Unconfirmed
C*03:02:03	Unconfirmed	C*03:05	Confirmed	C*03:51	Confirmed	C*03:101	Unconfirmed
C*03:02:04	Unconfirmed	C*03:06	Confirmed	C*03:52	Unconfirmed	C*03:102	Unconfirmed
C*03:02:05	Unconfirmed	C*03:07	Confirmed	C*03:53	Confirmed	C*03:103	Unconfirmed
C*03:02:06	Confirmed	C*03:08	Confirmed	C*03:54	Confirmed	C*03:104	Unconfirmed
C*03:02:07	Unconfirmed	C*03:09	Unconfirmed	C*03:55	Confirmed	C*03:105	Unconfirmed
C*03:02:08	Unconfirmed	C*03:10	Confirmed	C*03:56	Confirmed	C*03:106	Unconfirmed
C*03:03:01	Confirmed	C*03:11:01	Unconfirmed	C*03:57	Unconfirmed	C*03:107	Unconfirmed
C*03:03:02	Confirmed	C*03:11:02	Confirmed	C*03:58	Unconfirmed	C*03:108	Unconfirmed
C*03:03:03	Unconfirmed	C*03:12	Unconfirmed	C*03:59	Confirmed	C*03:109	Confirmed
C*03:03:04	Confirmed	C*03:13	Unconfirmed	C*03:60	Unconfirmed	C*03:110	Unconfirmed
C*03:03:05	Confirmed	C*03:14	Confirmed	C*03:61	Unconfirmed	C*03:111	Unconfirmed
C*03:03:06	Unconfirmed	C*03:15	Unconfirmed	C*03:62	Confirmed	C*03:112	Unconfirmed
C*03:03:07	Confirmed	C*03:16	Confirmed	C*03:63	Confirmed	C*03:113	Confirmed
C*03:03:08	Confirmed	C*03:17	Confirmed	C*03:64	Confirmed	C*03:114	Unconfirmed
C*03:03:09	Unconfirmed	C*03:18	Unconfirmed	C*03:65	Confirmed	C*03:115	Unconfirmed
C*03:03:10	Confirmed	C*03:19	Confirmed	C*03:66	Unconfirmed	C*03:116	Confirmed
C*03:03:11	Unconfirmed	C*03:20N	Unconfirmed	C*03:67	Unconfirmed	C*03:117	Unconfirmed
C*03:03:12	Confirmed	C*03:21	Confirmed	C*03:68	Unconfirmed	C*03:118	Unconfirmed
C*03:03:13	Unconfirmed	C*03:22Q	Unconfirmed	C*03:69	Confirmed	C*03:119	Unconfirmed
C*03:03:14	Unconfirmed	C*03:23	Confirmed	C*03:70	Unconfirmed	C*03:120	Confirmed
C*03:03:15	Unconfirmed	C*03:24	Unconfirmed	C*03:71	Unconfirmed	C*03:121N	Unconfirmed
C*03:03:16	Unconfirmed	C*03:25	Confirmed	C*03:72	Unconfirmed	C*03:122	Confirmed
C*03:03:17	Unconfirmed	C*03:26	Confirmed	C*03:73	Unconfirmed	C*03:123	Confirmed
C*03:03:18	Unconfirmed	C*03:27	Confirmed	C*03:74	Confirmed	C*03:124	Unconfirmed
C*03:04:01:01	Confirmed	C*03:28	Confirmed	C*03:75	Unconfirmed	C*03:125	Unconfirmed
C*03:04:01:02	Confirmed	C*03:29	Unconfirmed	C*03:76	Unconfirmed	C*03:126	Unconfirmed
C*03:04:02	Confirmed	C*03:30	Confirmed	C*03:77	Unconfirmed	C*03:127	Unconfirmed
C*03:04:03	Unconfirmed	C*03:31	Unconfirmed	C*03:78	Confirmed	C*03:128	Unconfirmed
C*03:04:04	Confirmed	C*03:32	Confirmed	C*03:79	Confirmed	C*03:129	Unconfirmed
C*03:04:05	Unconfirmed	C*03:33	Unconfirmed	C*03:80	Unconfirmed	C*03:130	Unconfirmed
C*03:04:06	Unconfirmed	C*03:34	Unconfirmed	C*03:81	Unconfirmed	C*03:131	Unconfirmed
C*03:04:07	Unconfirmed	C*03:35	Confirmed	C*03:82	Confirmed	C*03:132	Unconfirmed
C*03:04:08	Confirmed	C*03:36	Confirmed	C*03:83	Unconfirmed	C*03:133	Unconfirmed
C*03:04:09	Confirmed	C*03:37	Confirmed	C*03:84	Unconfirmed	C*03:134	Unconfirmed
C*03:04:10	Confirmed	C*03:38:01	Confirmed	C*03:85	Unconfirmed	C*03:135	Unconfirmed
C*03:04:11	Confirmed	C*03:38:02	Confirmed	C*03:86	Unconfirmed	C*03:136	Confirmed
C*03:04:12	Unconfirmed	C*03:39	Unconfirmed	C*03:87	Confirmed	C*03:137	Unconfirmed
C*03:04:13	Confirmed	C*03:40:01	Confirmed	C*03:88	Confirmed	C*03:138	Unconfirmed
C*03:04:14	Unconfirmed	C*03:40:02	Unconfirmed	C*03:89	Unconfirmed	C*03:139	Unconfirmed
C*03:04:15	Confirmed	C*03:41	Unconfirmed	C*03:90	Confirmed		
C*03:04:16	Confirmed	C*03:42	Confirmed	C*03:91	Unconfirmed		
C*03:04:17	Confirmed	C*03:43:01	Confirmed	C*03:92	Unconfirmed		
C*03:04:18	Confirmed	C*03:43:02	Unconfirmed	C*03:93	Unconfirmed		
C*03:04:19	Unconfirmed	C*03:44	Confirmed	C*03:94	Unconfirmed		
C*03:04:20	Unconfirmed	C*03:45	Unconfirmed	C*03:95	Confirmed		
C*03:04:21	Unconfirmed	C*03:46	Confirmed	C*03:96	Confirmed		
C*03:04:22	Confirmed	C*03:47	Confirmed	C*03:97	Unconfirmed		

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2012-January-12, release 3.7.0, www.ebi.ac.uk/imgt/hla.

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SPECIFICITY TABLE

HLA-C*03 SSP subtyping

Specificities and sizes of the PCR products of the 48 primer mixes used for
 HLA-C*03 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-C*03 alleles ³	Other amplified HLA Class I alleles ⁴
1	280 bp	800 bp	*03:02:01-03:02:08, 03:04:01:01-03:10, 03:14- 03:17, 03:19, 03:23-03:29, 03:32-03:38:02, 03:40:01- 03:42, 03:44-03:48, 03:51, 03:54, 03:57, 03:60, 03:63- 03:65, 03:70-03:74, 03:77- 03:78, 03:80, 03:82, 03:84, 03:87, 03:89-03:95, 03:98, 03:100-03:101, 03:104- 03:111, 03:113-03:115, 03:117-03:118, 03:121N, 03:123, 03:125, 03:128- 03:131, 03:134-03:136, 03:138-03:139	*02:02:01-02:02:03, 02:02:05-02:03, 02:04 ^W , 02:05-02:13, 02:14 ^W , 02:15-02:25Q, 02:26:02- 02:32, 02:34-02:40, 02:42- 02:55, 04:03, 04:06, 04:16, 04:80, 04:107, 05:58:01, 06:03, 07:02:10 ^W , 07:96, 07:127 ^W , 15:02:01-15:09, 15:10:02-15:11, 15:13, 15:15-15:22, 15:24-15:35, 15:37-15:56, 16:34
2	210 bp	1070 bp	*03:02:01-03:02:08, 03:14- 03:15, 03:33, 03:36, 03:40:01-03:40:02, 03:42- 03:43:02, 03:60, 03:71, 03:84, 03:89, 03:95, 03:108, 03:110, 03:119, 03:121N, 03:132, 03:139	*07:133, B*15:96
3	280 bp	800 bp	*03:03:01-03:03:18, 03:11:01-03:13, 03:20N- 03:22Q, 03:30-03:31, 03:43:01-03:43:02, 03:49- 03:50, 03:52-03:53, 03:55- 03:56, 03:58-03:59, 03:61- 03:62, 03:66, 03:67 ^W , 03:68-03:69, 03:75-03:76, 03:79, 03:81, 03:83, 03:85- 03:86, 03:88, 03:96-03:97, 03:102-03:103, 03:112, 03:116, 03:119-03:120, 03:122, 03:124, 03:126- 03:127, 03:132-03:133	*15:12

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4	275 bp	1070 bp	*03:03:01-03:04:25, 03:06-03:12, 03:14, 03:18-03:24, 03:26, 03:28-03:32, 03:34, 03:37-03:40:02, 03:42-03:57, 03:59, 03:61-03:70, 03:72-03:83, 03:85, 03:87-03:88, 03:90-03:93, 03:96, 03:98, 03:100-03:107, 03:109, 03:111-03:112, 03:114-03:120, 03:122-03:131, 03:133-03:134, 03:136-03:138	
5	275 bp	1070 bp	*03:05, 03:13, 03:17, 03:25, 03:27, 03:35, 03:71	*07:133, B*15:96
6 ^{5,9}	90 bp, 215 bp	800 bp	*03:06, 03:21	B*15:96
7 ^{5,6,10}	110 bp, 185 bp	1070 bp	*03:03:01-03:03:18, 03:08, 03:11:01-03:13, 03:18, 03:20N-03:22Q, 03:29-03:31, 03:39, 03:43:01-03:43:02, 03:49-03:50, 03:52-03:53, 03:55-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:69, 03:75-03:76, 03:79, 03:81, 03:83, 03:85-03:86, 03:88, 03:96-03:97, 03:102-03:103, 03:112, 03:116, 03:119-03:120, 03:122, 03:124, 03:126-03:127, 03:132-03:133	*01:51, 06:44, 06:53, 07:01:01-07:01:24, 07:06-07:07, 07:09, 07:16, 07:18-07:20, 07:22, 07:24, 07:26, 07:28, 07:30, 07:35-07:36, 07:40, 07:44, 07:52-07:53, 07:55N-07:56:01, 07:57-07:60, 07:65, 07:70-07:71, 07:73, 07:77-07:79, 07:81-07:83, 07:86, 07:89, 07:91-07:96, 07:98N, 07:103-07:104N, 07:106, 07:108-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131-07:132, 07:134, 07:140-07:141, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219, 18:05, B*07:93, B*08:39, B*35:101:02, B*38:27, B*51:76
8	255 bp	1070 bp	*03:09, 03:22Q, 03:42, 03:71, 03:89, 03:116, 03:119, 03:139	*07:133

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9	240 bp	1070 bp	*03:07, 03:15, 03:45, 03:130	*02:02:01-02:02:03, 02:02:05-02:02:11, 02:02:13-02:03, 02:04 ^w , 02:05-02:11, 02:13, 02:14 ^w , 02:15-02:25Q, 02:26:02-02:26:03, 02:28- 02:40, 02:42-02:55, 04:03, 04:06, 04:16, 04:80, 04:107, 05:58:01, 06:03, 15:02:01-15:06:03, 15:08- 15:09, 15:10:02-15:13, 15:15-15:20, 15:22, 15:24, 15:26-15:35, 15:37-15:42, 15:44-15:56
10	250 bp	800 bp	*03:07, 03:10, 03:15, 03:29, 03:45	*02:02:01 ^w , 02:02:02- 02:02:03, 02:02:05-02:03, 02:04 ^w , 02:05-02:13, 02:14 ^w , 02:15-02:25Q, 02:26:02-02:26:03, 02:28- 02:40, 02:42-02:55, 04:03, 04:06, 04:16, 04:80, 04:107, 05:58:01, 06:03, 15:02:01-15:06:03, 15:08- 15:09, 15:10:02-15:13, 15:15-15:22, 15:24, 15:26- 15:35, 15:37-15:42, 15:44- 15:56
11 ¹¹	145 bp, 415 bp	1070 bp	*03:08, 03:29, 03:31, 03:87	*05:36, 06:44, 12:08
12 ¹²	260 bp, 305 bp	1070 bp	*03:03:12, 03:03:15, 03:04:19, 03:11:01, 03:18, 03:39, 03:113	*01:51, 05:55, 06:53, 07:10, 07:43, 07:56:01, 07:60, 07:79, 07:109, 07:184, 07:196, 12:58, 15:12, B*35:08:04 , B*37:04:02
13 ^{5,13}	80 bp, 140 bp	1070 bp	*03:02:01-03:02:08, 03:15- 03:17, 03:33, 03:36, 03:40:01, 03:42-03:43:01, 03:60, 03:71, 03:84, 03:89, 03:95, 03:108, 03:110, 03:121N, 03:132, 03:139	*04:37, 04:54, 06:02:08, 12:03:20, 14:02:01, 14:02:03-14:16, 14:18- 14:34, 16:01:06, B*15:78:03
14	210 bp	1070 bp	*03:12, 03:19, 03:102	
15 ⁷	135 bp	1070 bp	*03:02:01-03:04:24, 03:05- 03:17, 03:19-03:38:02, 03:40:01-03:66, 03:67 ^w ,	*02:02:13, 06:03 ^w , 07:96, 15:43

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		03:68-03:98, 03:100-03:117, 03:119-03:136, 03:138-03:139		
16	150 bp	1070 bp	*03:07, 03:10, 03:15, 03:29, 03:45	*01:14, 02:02:13, 04:01:23, 05:01:12, 06:02:01:01-06:02:01:02, 06:02:03-06:04, 06:06-06:10, 06:12-06:69, 07:07, 07:09, 07:76, 12:04:01, 14:12, 17:01:01:01-17:01:03, 17:01:05-17:11, 18:01-18:05
17⁵	100 bp	1070 bp	*03:20N, 03:101	
18¹⁴	165 bp, 195 bp, 225 bp	1070 bp	*03:23, 03:83, 03:102	B*15:96
19^{5,15}	105 bp, 260 bp	800 bp	*03:24, 03:33	
20¹⁶	165 bp, 255 bp	1070 bp	*03:25, 03:47	
21¹⁷	210 bp, 240 bp	1070 bp	*03:26, 03:57, 03:88	
22	195 bp	800 bp	*03:15, 03:27, 03:38:01-03:38:02, 03:69, 03:130, 03:136	*02:12, 02:49, 02:55, 04:03, 04:06, 04:16, 04:80, 04:107, 07:20, 07:96, 07:127, 15:03, 15:16, 15:25
23^{5,18}	90 bp, 260 bp	1070 bp	*03:22Q, 03:28, 03:49, 03:90, 03:103, 03:117	
24¹⁹	160 bp, 200 bp	1070 bp	*03:30, 03:65, 03:79, 03:120-03:121N	
25²⁰	305 bp, 355 bp	1070 bp	*03:32, 03:38:01-03:38:02, 03:45, 03:69, 03:130, 03:136	*04:80, 04:100, 06:14, 07:10, 07:43, 07:196, 12:44, 15:03, 15:16, 15:25, B*35:178
26^{5,21}	70 bp, 105 bp, 265 bp	1070 bp	*03:13, 03:34-03:36, 03:77	*07:133, B*15:96
27^{5,22}	80 bp, 275 bp	1070 bp	*03:11:01-03:11:02, 03:15, 03:32, 03:37, 03:45, 03:60, 03:136	*02:42, 02:49, 04:03, 04:06, 04:16, 04:80, 06:03, 07:96, 15:25
28	170 bp	1070 bp	*03:16, 03:41, 03:113	*04:01:01:01-04:01:04, 04:01:06, 04:01:08, 04:01:10-04:01:17, 04:01:19-04:01:21,

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				04:01:23-04:01:25, 04:01:27-04:01:36, 04:03- 04:04:01, 04:05-04:20, 04:23-04:49, 04:51-04:63, 04:65-04:76, 04:78- 04:94:01, 04:95N-04:98, 04:100-04:107, 06:02:08, 12:03:20, 14:02:01, 14:02:03-14:16, 14:18- 14:31, 14:33-14:34, 16:01:06, 18:01-18:05, B*15:01:17, B*15:78:03
29 ²³	140 bp, 170 bp, 285 bp	1070 bp	*03:39, 03:51, 03:67, 03:96, 03:98	*04:64, 06:53, 07:56:01, 07:60, 07:79, 07:109, B*08:39
30 ²⁴	150 bp, 170 bp	1070 bp	*03:46, 03:61, 03:96	*04:64
31 ^{5,25}	100 bp, 210 bp	800 bp	*03:44, 03:59, 03:123	
32 ^{5,8,26}	90 bp, 180 bp	1070 bp	*03:48, 03:58, 03:84	*01:03, 01:24, 04:37
33 ^{5,27}	110 bp, 365 bp	1070 bp	*03:43:01-03:43:02, 03:62, 03:119, 03:132	*07:60, 07:79, 12:58, 14:10, B*35:101:02
34 ²⁸	130 bp, 240 bp	1070 bp	*03:53-03:54, 03:98	*12:17
35 ^{5,29}	70 bp, 120 bp, 210 bp	1070 bp	*03:56, 03:64, 03:79, 03:82, 03:85	*02:08, 15:10:02
36 ³⁰	165 bp, 245 bp	1070 bp	*03:50, 03:72, 03:122	
37	140 bp	1070 bp	*03:16, 03:21, 03:55, 03:80, 03:92, 03:113, 03:117	*04:01:01:01-04:01:04, 04:01:08, 04:01:10- 04:01:21, 04:01:23- 04:01:25, 04:01:27- 04:01:36, 04:03-04:04:01, 04:05-04:07, 04:09N- 04:20, 04:23-04:31, 04:33, 04:35-04:49, 04:51-04:58, 04:60-04:76, 04:78-04:84, 04:86-04:94:01, 04:95N- 04:98, 04:100-04:107, 06:02:08, 08:02:07, 08:33:02, 12:03:20, 14:02:01, 14:02:03-14:16, 14:18-14:19, 14:21N- 14:24, 14:26-14:31,

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Lot-specific information

				14:33-14:34, 16:01:06, 18:01-18:02, 18:04-18:05
38 ^{5,31}	100 bp, 265 bp	1070 bp	*03:52, 03:73, 03:95	*04:43
39 ^{5,32}	110 bp, 170 bp	1070 bp	*03:36, 03:63, 03:77	*04:34
40 ^{5,33}	70 bp, 260 bp	1070 bp	*03:66, 03:80	
41 ^{5,34}	120 bp, 195 bp	1070 bp	*03:68, 03:100	
42 ^{5,35}	120 bp, 205 bp	1070 bp	*03:70, 03:78, 03:127	B*55:30
43 ^{7,36}	220 bp, 275 bp	800 bp	*03:74, 03:81, 03:97	B*15:96
44 ^{5,37}	70 bp, 160 bp	1070 bp	*03:75, 03:91, 03:120	
45 ³⁸	140 bp, 295 bp	1070 bp	*03:76, 03:93	
46	210 bp	1070 bp	*03:58, 03:86, 03:94, 03:99	*01:02:01-01:03, 01:06- 01:08, 01:10-01:11, 01:13- 01:20, 01:23-01:33, 01:38- 01:48, 01:51-01:54, 01:56N-01:61, 04:37
47 ^{5,39}	70 bp, 195 bp, 240 bp	1070 bp	*03:14, 03:21, 03:55, 03:57, 03:92, 03:109, 03:117	*07:133
48	555 bp	1070 bp	*03:58, 03:86, 03:94, 03:99	*15:37, 16:18

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-C*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 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

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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-C*03 subtyping.

In addition, wells number 3, 6, 10, 19, 22, 31 and 43 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-C*03 alleles 1st and 4th exon or intron 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 and 4th exons or the introns are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-C alleles the primer pairs in wells 1 to 3, 5, 7 to 13, 15, 16, 22, 25 to 30, 32 to 35, 37 to 39 and 46 to 48 will amplify non-HLA-C*03 alleles. In addition, the B*07:93, 38:27 and 51:76 alleles are amplified by primer mix 7, the B*08:39 allele is amplified by primer mix 7 and 29, the B*15:01:17 allele is amplified by primer mix 28, the B*15:78:03 allele is amplified by primer mixes 13 and 28, the B*15:96 allele is amplified by primer mixes 2, 5, 6, 18, 26 and 43, the B*35:08:04 and 37:04:02 alleles are amplified by primer mix 12, the B*35:101:02 allele is amplified by primer mix 7 and 33, the B*35:178 allele is amplified by primer mix 25 and the B*55:30 allele is amplified by primer mix 42.

⁵Short specific PCR fragments are less intense and not as sharp as longer specific bands.

⁶Primer mix 7 may yield less specific PCR product than the other HLA-C*03 primer mixes.

⁷Primer mixes 15 and 43 may give rise to primer oligomer formation.

⁸Primer mix 32 may give rise to nonspecific amplifications.

⁹Primer mix 6: Specific PCR fragment of 90 bp in the C*03:21 and the B*15:96 alleles. Specific PCR fragment of 215 bp in the C*03:06 allele.

¹⁰Primer mix 7: Specific PCR fragment of 110 bp in the C*03:08 and 03:29 and the C*06:44, 07:01:01-07:01:24, 07:06-07:07, 07:09, 07:16, 07:18-07:20, 07:22, 07:24, 07:26, 07:28, 07:30, 07:35-07:36, 07:40, 07:44, 07:52-07:53, 07:55N, 07:57-07:59, 07:65, 07:70-07:71, 07:73, 07:77-07:78, 07:81-07:83, 07:86, 07:89, 07:91-07:96, 07:98N, 07:103-07:104N, 07:106, 07:108, 07:110-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131-07:132, 07:134, 07:140-07:141, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219 and 18:05 alleles. Specific PCR fragment of 185 bp in the C*03:03:01-03:03:18, 03:11:01-03:13, 03:18, 03:20N-03:22Q, 03:30, 03:39, 03:43:01-03:43:02, 03:49-03:50, 03:52-03:53, 03:55-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:69, 03:75-03:76, 03:79, 03:81, 03:83, 03:85-03:86, 03:88, 03:96-03:97, 03:102-03:103, 03:112, 03:116, 03:119-03:120, 03:122, 03:124, 03:126-03:127 and 03:132-03:133 and the C*01:51, 06:53, 07:56:01 and 07:79 and in the B*07:93, B*08:39, B*35:101:02, B*38:27, B*51:76 alleles. Specific PCR fragments of 110 and 185 bp in the C*03:31 and in the C*07:60 and 07:109 alleles.

¹¹Primer mix 11: Specific PCR fragment of 145 bp in the C*03:87 allele. Specific PCR fragment of 415 bp in the C*03:08, 03:29 and 03:31 and in the C*05:36, 06:44 and 12:08 alleles.

¹²Primer mix 12: Specific PCR fragment of 260 bp in the C*03:03:12, 03:03:15, 03:11:01, 03:18 and 03:39 and the C*01:51, 05:55, 06:53, 07:56:01, 07:60, 07:79, 07:109, 12:58 and 15:12 alleles. Specific PCR fragment of 305 bp in the C*03:04:19 and 03:113 and the C*07:10, 07:43, 07:184 and 07:196 and in the B*35:08:04 and B*37:04:02 alleles.

¹³Primer mix 13: Specific PCR fragment of 80 bp in the C*03:02:01-03:02:08, 03:15-03:16, 03:33, 03:36, 03:40:01, 03:42-03:43:01, 03:60, 03:84, 03:89, 03:95, 03:108, 03:110, 03:121N, 03:132 and 03:139 and the C*04:54, 14:08-14:09 and 14:28 and in the B*15:78:03 alleles. Specific PCR fragment of 140 bp in the C*03:17 and the C*04:37 and 14:26 alleles. Specific PCR fragments of 80 and 140 bp in the C*03:71 and in the C*06:02:08, 12:03:20, 14:02:01, 14:02:03-14:07N, 14:10-14:16, 14:18-14:25, 14:27, 14:29-14:34 and 16:01:06 alleles.

¹⁴Primer mix 18: Specific PCR fragment of 165 bp in the C*03:102 and in the B*15:96 alleles. Specific PCR fragment of 195 bp in the C*03:83 allele. Specific PCR fragment of 225 bp in the C*03:23 allele.

¹⁵Primer mix 19: Specific PCR fragment of 105 bp in the C*03:24 allele. Specific PCR fragment of 260 bp in the C*03:33 allele.

¹⁶Primer mix 20: Specific PCR fragment of 165 bp in the C*03:25 allele. Specific PCR fragment of 255 bp in the C*03:47 allele.

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¹⁷Primer mix 21: Specific PCR fragment of 210 bp in the C*03:26 allele. Specific PCR fragment of 240 bp in the C03:57 and 03:88 alleles.

¹⁸Primer mix 23: Specific PCR fragment of 90 bp in the C*03:28, 03:49 and 03:117 alleles. Specific PCR fragment of 260 bp in the C*03:22Q, 03:90 and 03:103 alleles.

¹⁹Primer mix 24: Specific PCR fragment of 160 bp in the C*03:120 allele. Specific PCR fragment of 200 bp in the C*03:30, 03:65, 03:79 and 03:121N alleles.

²⁰Primer mix 25: Specific PCR fragment of 305 bp in the C*03:32 and 03:45 and in the B*35:178 alleles. Specific PCR fragment of 355 bp in the C*03:38:01-03:38:02, 03:69 and 03:130 and the C*12:44, 15:03 and 15:16 alleles. Specific PCR fragments of 305 and 355 bp in the C*03:136 and the C*04:80, 04:100, 06:14, 07:10, 07:43, 07:196 and 15:25 alleles.

²¹Primer mix 26: Specific PCR fragment of 70 bp in the C*03:34 allele. Specific PCR fragment of 105 bp in the C*03:36 and 03:77 alleles. Specific PCR fragment of 265 bp in the C*03:13 and 03:35 and in the C*07:133 and the B*15:96 alleles.

²²Primer mix 27: Specific PCR fragment of 80 bp in the C*03:11:01-03:11:02 and 03:37 and the C*02:42 alleles. Specific PCR fragment of 275 bp in the C*03:15, 03:32, 03:45, 03:60 and 03:136 and the C*02:49, 04:03, 04:06, 04:16, 04:80, 07:96 and 15:25 alleles. Specific PCR fragment of 80 and 275 bp in the C*06:03 allele.

²³Primer mix 29: Specific PCR fragment of 140 bp in the C*03:98 allele. Specific PCR fragment of 170 bp in the C*03:51 and 03:96 and in the C*04:64 alleles. Specific PCR fragment of 285 bp in the C*03:39 and 03:67 and the C*06:53, 07:56:01, 07:60, 07:79 and 07:109 and in the B*08:39 alleles.

²⁴Primer mix 30: Specific PCR fragment of 150 bp in the C*03:61 allele. Specific PCR fragment of 170 bp in the C*03:46 and 03:96 and the C*04:64 alleles.

²⁵Primer mix 31: Specific PCR fragment of 100 bp in the C*03:59 and 03:123 alleles. Specific PCR fragment of 210 bp in the C*03:44 allele.

²⁶Primer mix 32: Specific PCR fragment of 90 bp in the C*03:58 and in the C*01:03, 01:24 and 04:37 alleles. Specific PCR fragment of 180 bp in the C*03:48 and 03:84 alleles.

²⁷Primer mix 33: Specific PCR fragment of 110 bp in the C*03:62 allele. Specific PCR fragment of 365 bp in the C*03:43:01-03:43:02, 03:119 and 03:132 and the C*07:60, 07:79, 12:58 and 14:10 and in the B*35:101:02 alleles.

²⁸Primer mix 34: Specific PCR fragment of 130 bp in the C*03:54 and 03:98 alleles. Specific PCR fragment of 240 bp in the C*03:53 and the C*12:17 alleles.

²⁹Primer mix 35: Specific PCR fragment of 70 bp in the C*03:64 and the C*02:08 and 15:10:02 alleles. Specific PCR fragment of 120 bp in the C*03:56 allele. Specific PCR fragment of 210 bp in the C*03:79, 03:82 and 03:85 alleles.

³⁰Primer mix 36: Specific PCR fragment of 165 bp in the C*03:122 allele. Specific PCR fragment of 245 bp in the C*03:50 and 03:72 alleles.

³¹Primer mix 38: Specific PCR fragment of 100 bp in the C*03:52 and 03:95 and in the C*04:43 alleles. Specific PCR fragment of 265 bp in the C*03:73 allele.

³²Primer mix 39: Specific PCR fragment of 110 bp in the C*03:36 and 03:77 and in the C*04:34 alleles. Specific PCR fragment of 170 bp in the C*03:63 allele.

³³Primer mix 40: Specific PCR fragment of 70 bp in the C*03:80 alleles. Specific PCR fragment of 260 bp in the C*03:66 allele.

³⁴Primer mix 41: Specific PCR fragment of 120 bp in the C*03:68 alleles. Specific PCR fragment of 195 bp in the C*03:100 allele.

³⁵Primer mix 42: Specific PCR fragment of 120 bp in the C*03:78 alleles. Specific PCR fragment of 205 bp in the C*03:70 and 03:127 and in the B*55:30 alleles.

³⁶Primer mix 43: Specific PCR fragment of 220 bp in the C*03:74 and 03:81 and in the B*15:96 alleles. Specific PCR fragment of 275 bp in the C*03:97 allele.

³⁷Primer mix 44: Specific PCR fragment of 70 bp in the C*03:91 allele. Specific PCR fragment of 160 bp in the C*03:75 and 03:120 alleles.

³⁸Primer mix 45: Specific PCR fragment of 140 bp in the C*03:93 alleles. Specific PCR fragment of 295 bp in the C*03:76 allele.

³⁹Primer mix 47: Specific PCR fragment of 70 bp in the C*03:14, 03:21, 03:55, 03:92 and 03:117 and the C*07:133 alleles. Specific PCR fragment of 195 bp in the C*03:109 allele. Specific PCR fragment of 240 bp in the C*03:57 allele.

‘w’, might be weakly amplified.

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Lot-specific information

INTERPRETATION TABLE																								
HLA-C*03 SSP subtyping																								
Amplification patterns of the C*03:02 to C*03:139 alleles																								
	Well ¹⁴																							
	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.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160
PCR product(s)						215	185				415	305	140					225	195	260	255	240	260	200
Length of int. pos. control ¹	800	1070	800	1070	1070	800	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	1070	800	1070	1070	800	1070	1070
5'-primer(s) ²	5'-gCT ^{3'} 105	5'-gTC ^{3'} 419	5'-gCT ^{3'} 105	5'-TCA ^{3'} 355	5'-CCC ^{3'} 355	5'-TgT ^{3'} 413	5'-CCg ^{3'} 201	5'-CTA ^{3'} 374	5'-gCT ^{3'} 105	5'-gCT ^{3'} 105	5'-TCA ^{3'} 28	5'-gga ^{3'} 126	5'-AgT ^{3'} 361	5'-TTA ^{3'} 420	5'-gCT ^{3'} 105	5'-CCg ^{3'} 201	5'-CCT ^{3'} 19	5'-gCA ^{3'} 406	5'-gCT ^{3'} 105	5'-CAA ^{3'} 86	5'-ACA ^{3'} 391	5'-CCA ^{3'} 134	5'-gTC ^{3'} 368	5'-TCA ^{3'} 355
3'-primer(s) ³	5'-C ^{3'} 343	5'-CTT ^{3'} 589	5'-T ^{3'} 343	5'-CTT ^{3'} 589	5'-CTT ^{3'} 589	5'-CTT ^{3'} 589	5'-TAG ^{3'} 270	5'-CTT ^{3'} 589	5'-ggT ^{3'} 302	5'-AgT ^{3'} 312	5'-TAG ^{3'} 270	5'-T ^{3'} 343	5'-AgA ^{3'} 459	5'-CTT ^{3'} 589	5'-CTC ^{3'} 201	5'-AgT ^{3'} 312	5'-ggC ^{3'} 70	5'-CTT ^{3'} 589	5'-ACC ^{3'} 167	5'-ggC ^{3'} 302	5'-CTT ^{3'} 589	5'-AgC ^{3'} 289	5'-CTT ^{3'} 589	5'-CgA ^{3'} 473
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



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Lot-specific information

INTERPRETATION TABLE																								
HLA-C*03 SSP subtyping																								
Amplification patterns of the C*03:02 to C*03:139 alleles																								
Well ¹⁴																								
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
																								Length of spec. PCR product(s)
																								Length of int. pos. control ¹
																								5'-primer(s) ²
																								3'-primer(s) ³
																								Well No.



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Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160	
PCR product(s)						215	185				415	305	140					225	195	260	255	240		200	
HLA-C* allele ^{4,5}																									
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	
*03:02:01-03:02:08, 03:108, 03:110	1	2											13		15										
*03:03:01-03:03:11, 03:03:13-03:03:14, 03:03:16-03:03:18, 03:112, 03:124, 03:126, 03:133			3	4			7								15										
*03:03:12, 03:03:15			3	4			7					12			15										
*03:04:01-03:04:18, 03:04:20-03:04:24, 03:104-03:107, 03:111, 03:114-03:115, 03:125, 03:128-03:129, 03:131, 03:134, 03:138	1			4											15										
*03:04:19	1			4								12			15										
*03:04:25, 03:118	1			4																					
*03:05	1				5										15										
*03:06	1			4		6									15										
*03:07	1			4					9	10					15	16									
*03:08	1			4			7				11				15										
*03:09	1			4				8							15										
*03:10	1			4						10					15	16									
*03:11:01			3	4			7					12			15										
*03:11:02			3	4			7								15										
*03:12			3	4			7							14	15										
*03:13			3		5		7								15										
*03:14	1	2		4											15										
*03:15	1	2							9	10			13		15	16						22			
*03:16	1												13		15										
*03:17	1				5								13		15										
*03:18				4			7					12													
*03:19	1			4										14	15										
*03:20N			3	4			7								15		17								
*03:21			3	4		6	7								15										
*03:22Q			3	4			7	8							15								23		
*03:23	1			4											15		18								
*03:24	1			4											15			19							
*03:25	1				5										15					20					
*03:26	1			4											15							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	

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Lot-specific information

																									Length of spec.
																									PCR product(s)
																									HLA-C* allele ^{4,5}
355	305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555	Well No.
265	275			285	170	170	210	180	365	240	120	245		265	170	260	195	205	275	160	295		195		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
																									*03:02:01-03:02:08, 03:108, 03:110
																									*03:03:01-03:03:11, 03:03:13-03:03:14, 03:03:16-03:03:18, 03:112, 03:124, 03:126, 03:133
																									*03:03:12, 03:03:15
																									*03:04:01:01-03:04:18, 03:04:20-03:04:24, 03:104-03:107, 03:111, 03:114-03:115, 03:125, 03:128-03:129, 03:131, 03:134, 03:138
																									*03:04:19
																									*03:04:25, 03:118
																									*03:05
																									*03:06
																									*03:07
																									*03:08
																									*03:09
																									*03:10
		27																							*03:11:01
		27																							*03:11:02
																									*03:12
		26																							*03:13
																						47			*03:14
			27																						*03:15
				28							37														*03:16
																									*03:17
																									*03:18
																									*03:19
																									*03:20N
												37											47		*03:21
																									*03:22Q
																									*03:23
																									*03:24
																									*03:25
																									*03:26
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		Well No.



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160	
PCR product(s)						215	185				415	305	140					225	195	260	255	240		200	
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	
*03:27	1				5										15							22			
*03:28, 03:90 ⁶	1			4											15								23		
*03:29	1			4			7			10	11				15	16									
*03:30			3	4			7								15									24	
*03:31			3	4			7				11				15										
*03:32	1			4											15										
*03:33	1	2											13		15				19						
*03:34	1			4											15										
*03:35	1				5										15										
*03:36	1	2											13		15										
*03:37	1			4											15										
*03:38:01-03:38:02	1			4											15							22			
*03:39				4			7					12													
*03:40:01	1	2		4									13		15										
*03:40:02	1	2		4											15										
*03:41	1														15										
*03:42	1	2		4				8					13		15										
*03:43:01		2	3	4			7						13		15										
*03:43:02		2	3	4			7								15										
*03:44, 03:123 ⁷	1			4											15										
*03:45	1			4					9	10					15	16									
*03:46	1			4											15										
*03:47	1			4											15					20					
*03:48	1			4											15										
*03:49, 03:103 ⁸			3	4			7								15								23		
*03:50, 03:122 ⁹			3	4			7								15										
*03:51	1			4											15										
*03:52			3	4			7								15										
*03:53			3	4			7								15										
*03:54	1			4											15										
*03:55			3	4			7								15										
*03:56, 03:85 ¹⁰			3	4			7								15										
*03:57	1			4											15							21			
*03:58			3				7								15										
*03:59			3	4			7								15										
*03:60	1	2											13		15										
*03:61			3	4			7								15										
*03:62			3	4			7								15										
*03:63	1			4											15										
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	

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

																									Length of spec.
																									PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	
																									*03:27
																									*03:28, 03:90 ⁶
																									*03:29
																									*03:30
																									*03:31
25		27																							*03:32
																									*03:33
	26																								*03:34
	26																								*03:35
	26													39											*03:36
		27																							*03:37
25																									*03:38:01-03:38:02
				29																					*03:39
																									*03:40:01
																									*03:40:02
			28																						*03:41
																									*03:42
								33																	*03:43:01
								33																	*03:43:02
						31																			*03:44, 03:123 ⁷
25		27																							*03:45
				30																					*03:46
																									*03:47
							32																		*03:48
																									*03:49, 03:103 ⁸
											36														*03:50, 03:122 ⁹
				29																					*03:51
													38												*03:52
								34																	*03:53
								34																	*03:54
											37											47			*03:55
										35															*03:56, 03:85 ¹⁰
																						47			*03:57
																						46	48		*03:58
						31																			*03:59
		27																							*03:60
				30																					*03:61
								33																	*03:62
														39											*03:63
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160	
PCR product(s)						215	185				415	305	140					225	195	260	255	240		200	
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	
*03:64, 03:82 ¹¹	1			4											15										
*03:65	1			4											15									24	
*03:66			3	4			7								15										
*03:67			w	4			7								w										
*03:68			3	4			7								15										
*03:69			3	4			7								15							22			
*03:70, 03:78 ¹²	1			4											15										
*03:71	1	2			5			8					13		15										
*03:72	1			4											15										
*03:73	1			4											15										
*03:74	1			4											15										
*03:75			3	4			7								15										
*03:76			3	4			7								15										
*03:77	1			4											15										
*03:79			3	4			7								15									24	
*03:80	1			4											15										
*03:81			3	4			7								15										
*03:83			3	4			7								15			18							
*03:84	1	2											13		15										
*03:86			3				7								15										
*03:87	1			4							11				15										
*03:88			3	4			7								15							21			
*03:89, 03:139	1	2						8					13		15										
*03:91	1			4											15										
*03:92	1			4											15										
*03:93	1			4											15										
*03:94	1														15										
*03:95	1	2											13		15										
*03:96			3	4			7								15										
*03:97			3				7								15										
*03:98	1			4											15										
*03:99																									
*03:100	1			4											15										
*03:101	1			4											15		17								
*03:102			3	4			7							14	15		18								
*03:109	1			4											15										
*03:113	1											12			15										
*03:116			3	4			7	8							15										
*03:117	1			4											15									23	
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	

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

																Length of spec.										
																PCR product(s)										
																Well No.										
355	305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555		
	265			285	170	170	210	180	365	240	210	245		265	170	260	195	205	275	160	295		195			
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48			
										35															*03:64, 03:82 ¹¹	
																									*03:65	
															40										*03:66	
				29																					*03:67	
																41									*03:68	
25																									*03:69	
																	42								*03:70, 03:78 ¹²	
											36														*03:71	
													38												*03:72	
																		43							*03:73	
																			44						*03:74	
																				45					*03:75	
	26														39										*03:76	
											35														*03:77	
												37			40										*03:79	
																		43							*03:80	
																									*03:81	
																									*03:83	
							32																		*03:84	
																					46		48		*03:86	
																									*03:87	
																									*03:88	
																									*03:89, 03:139	
																			44						*03:91	
												37										47			*03:92	
																				45					*03:93	
																					46		48		*03:94	
													38												*03:95	
					29	30																			*03:96	
																		43							*03:97	
					29					34															*03:98	
																					46		48		*03:99	
																41									*03:100	
																									*03:101	
																									*03:102	
																							47		*03:109	
			28									37													*03:113	
																									*03:116	
												37											47		*03:117	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		Well No.	



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	210	195	90	160
PCR product(s)						215	185				415	305	140					225	195	260	255	240		260	200
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	
*03:119		2	3	4			7	8							15										
*03:120			3	4			7								15										24
*03:121N	1	2											13		15										24
*03:127			3	4			7								15										
*03:130	1			4					9						15								22		
*03:132		2	3				7						13		15										
*03:135, 15:43 ¹³	1														15										
*03:136	1			4											15								22		
*03:137				4																					
*01:02:01-01:02:14, 01:06-01:08, 01:10-01:11, 01:13, 01:15-01:20, 01:23, 01:25-01:33, 01:38-01:48, 01:52-01:54, 01:56N-01:61																									
*01:03, 01:24																									
*01:14															16										
*01:51							7					12													
*02:02:01	1								9	w															
*02:02:02-02:02:03, 02:02:05-02:02:11, 02:02:14-02:03, 02:05-02:07, 02:09-02:11, 02:13, 02:15-02:25Q, 02:26:02-02:26:03, 02:28-02:32, 02:34-02:40, 02:43-02:48, 02:50-02:54, 05:58:01, 15:02:01-15:02:07, 15:04-15:06:03, 15:08-15:09, 15:11, 15:13, 15:15, 15:17-15:20, 15:22, 15:24, 15:26-15:35, 15:38-15:42, 15:44-15:56	1								9	10															
*02:02:12, 15:21	1									10															
*02:02:13	1								9	10					15	16									
*02:04, 02:14	w								w	w															
*02:08, 15:10:02	1								9	10															
*02:12	1									10														22	
*02:27:01-02:27:02, 15:07, 16:34	1																								
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	

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

				Lot-specific information																Length of spec.						
305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555	PCR product(s)		
355	105	275		285	170	210	180	365	240	210	245		265	170	260	195	205	275	160	295		195				
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.		
								33																		*03:119
																			44							*03:120
																										*03:121N
																	42									*03:127
25																										*03:130
								33																		*03:132
																										*03:135, 15:43 ¹³
25	27																									*03:136
																										*03:137
																					46					*01:02:01-01:02:14, 01:06-01:08, 01:10-01:11, 01:13, 01:15-01:20, 01:23, 01:25-01:33, 01:38-01:48, 01:52-01:54, 01:56N-01:61
							32														46					*01:03, 01:24
																					46					*01:14
																					46					*01:51
																										*02:02:01
																										*02:02:02-02:02:03, 02:02:05-02:02:11, 02:02:14-02:03, 02:05-02:07, 02:09-02:11, 02:13, 02:15-02:25Q, 02:26:02-02:26:03, 02:28-02:32, 02:34-02:40, 02:43-02:48, 02:50-02:54, 05:58:01, 15:02:01-15:02:07, 15:04-15:06:03, 15:08-15:09, 15:11, 15:13, 15:15, 15:17-15:20, 15:22, 15:24, 15:26-15:35, 15:38-15:42, 15:44-15:56
																										*02:02:12, 15:21
																										*02:02:13
																										*02:04, 02:14
										35																*02:08, 15:10:02
																										*02:12
																										*02:27:01-02:27:02, 15:07, 16:34
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.		



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160
PCR product(s)						215	185				415	305	140					225	195	260	255	240		200
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
*02:33									9	10														
*02:42	1								9	10														
*02:49	1								9	10												22		
*02:55	1								9	10												22		
*04:01:01:01-04:01:04, 04:01:08, 04:01:10- 04:01:17, 04:01:19- 04:01:21, 04:01:24- 04:01:25, 04:01:27- 04:01:36, 04:04:01, 04:05, 04:07, 04:09N-04:15:03, 04:17-04:20, 04:23-04:31, 04:33, 04:35-04:36, 04:38- 04:42, 04:44-04:49, 04:51- 04:53, 04:55-04:58, 04:60- 04:63, 04:65-04:76, 04:78- 04:79, 04:81-04:84, 04:86- 04:94:01, 04:95N-04:98, 04:101-04:106																								
*04:01:06, 04:08, 04:32, 04:59Q, 04:85, <i>B*15:01:17</i>																								
*04:01:18, 08:02:07, 08:33:02																								
*04:01:23, 18:01-18:02, 18:04																16								
*04:03, 04:06, 04:16	1								9	10												22		
*04:34																								
*04:37													13											
*04:43																								
*04:54, 12:03:20, 14:02:01, 14:02:03-14:09, 14:11, 14:13-14:16, 14:18- 14:19, 14:21N-14:24, 14:26-14:31, 14:33-14:34, 16:01:06													13											
*04:64																								
*04:80	1								9	10												22		
*04:100																								
*04:107	1								9	10												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

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

355	305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555	Length of spec.
355	105	275		170	170	210	180	365	240	120	245	140	265	170	260	195	205	275	160	295		195			PCR product(s)
	265			285						210												240			Well No.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
																									*02:33
		27																							*02:42
		27																							*02:49
																									*02:55
			28									37													*04:01:01:01-04:01:04, 04:01:08, 04:01:10- 04:01:17, 04:01:19- 04:01:21, 04:01:24- 04:01:25, 04:01:27- 04:01:36, 04:04:01, 04:05, 04:07, 04:09N-04:15:03, 04:17-04:20, 04:23-04:31, 04:33, 04:35-04:36, 04:38- 04:42, 04:44-04:49, 04:51- 04:53, 04:55-04:58, 04:60- 04:63, 04:65-04:76, 04:78- 04:79, 04:81-04:84, 04:86- 04:94:01, 04:95N-04:98, 04:101-04:106
			28																						*04:01:06, 04:08, 04:32, 04:59Q, 04:85, B*15:01:17
												37													*04:01:18, 08:02:07, 08:33:02
			28									37													*04:01:23, 18:01-18:02, 18:04
		27	28									37													*04:03, 04:06, 04:16
			28											39											*04:34
			28				32					37									46				*04:37
			28									37	38												*04:43
			28									37													*04:54, 12:03:20, 14:02:01, 14:02:03-14:09, 14:11, 14:13-14:16, 14:18- 14:19, 14:21N-14:24, 14:26-14:31, 14:33-14:34, 16:01:06
				29	30							37													*04:64
25		27	28									37													*04:80
25			28									37													*04:100
			28									37													*04:107
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160
PCR product(s)						215	185				415	305	140					225	195	260	255	240		200
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
*05:01:12, 06:02:01:01-06:02:01:02, 06:02:03-06:02:07, 06:02:09-06:02:19, 06:04, 06:06-06:10, 06:12-06:13, 06:15-06:43, 06:45-06:52, 06:54-06:69, 07:76, 12:04:01, 17:01:01:01-17:01:03, 17:01:05-17:11																16								
*05:36, 12:08											11													
*05:55, 07:184, B*35:08:04, B*37:04:02												12												
*06:02:08, 14:12													13			16								
*06:03	1								9	10					w	16								
*06:14																16								
*06:44							7				11					16								
*06:53							7					12				16								
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



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

355		305		70		80		170		140		150		100		90		110		130		70		165		140		100		110		70		120		120		220		70		140		210		70		555		Length of spec.
355		105		275						170		170		210		180		365		240		120		245		140		265		170		260		195		205		275		160		295		195				PCR product(s)		
265								285												210																				240						Well No.				
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48																											
																				*05:01:12, 06:02:01:01-06:02:01:02, 06:02:03-06:02:07, 06:02:09-06:02:19, 06:04, 06:06-06:10, 06:12-06:13, 06:15-06:43, 06:45-06:52, 06:54-06:69, 07:76, 12:04:01, 17:01:01:01-17:01:03, 17:01:05-17:11																														
																				*05:36, 12:08																														
																				*05:55, 07:184, B*35:08:04, B*37:04:02																														
																				*06:02:08, 14:12																														
																				*06:03																														
																				*06:14																														
																				*06:44																														
																				*06:53																														
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48																											
																				Well No.																														



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160
PCR product(s)						215	185				415	305	140					195	260	255	240		260	200
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
*07:01:01-07:01:24, 07:06, 07:16, 07:18- 07:19, 07:22, 07:24, 07:26, 07:28, 07:30, 07:35- 07:36, 07:40, 07:44, 07:52- 07:53, 07:55N, 07:57- 07:59, 07:65, 07:70- 07:71, 07:73, 07:77- 07:78, 07:81-07:83, 07:86, 07:89, 07:91- 07:95, 07:98N, 07:103- 07:104N, 07:106, 07:108, 07:110-07:113, 07:115- 07:116, 07:118-07:120, 07:122, 07:124, 07:128- 07:129, 07:131-07:132, 07:134, 07:140-07:141, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N- 07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219, <i>B*07:93</i> , <i>B*38:27</i> , <i>B*51:76</i>							7																	
*07:02:10	w																							
*07:07, 07:09							7									16								
*07:10, 07:43												12												
*07:20							7																22	
*07:56:01, 07:109							7					12												
*07:60, 07:79							7					12												
*07:96	1						7									15							22	
*07:127	w																						22	
*07:133		2			5			8																
*07:196							7					12												
*12:17																								
*12:44, <i>B*35:178</i>																								
*12:58												12												
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

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Lot No.: **57N**

Lot-specific information

355	305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555	Length of spec.
355	105	275		170	170	210	180	365	240	120	245	140	265	170	260	195	205	275	160	295		195		PCR product(s)	
265				285						210												240			Well No.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
																									*07:01:01-07:01:24, 07:06, 07:16, 07:18- 07:19, 07:22, 07:24, 07:26, 07:28, 07:30, 07:35- 07:36, 07:40, 07:44, 07:52- 07:53, 07:55N, 07:57- 07:59, 07:65, 07:70- 07:71, 07:73, 07:77- 07:78, 07:81-07:83, 07:86, 07:89, 07:91- 07:95, 07:98N, 07:103- 07:104N, 07:106, 07:108, 07:110-07:113, 07:115- 07:116, 07:118-07:120, 07:122, 07:124, 07:128- 07:129, 07:131-07:132, 07:134, 07:140-07:141, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N- 07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219, B*07:93, B*38:27, B*51:76
																									*07:02:10
																									*07:07, 07:09
25																									*07:10, 07:43
																									*07:20
				29																					*07:56:01, 07:109
				29				33																	*07:60, 07:79
		27																							*07:96
																									*07:127
	26																						47		*07:133
25																									*07:196
																									*12:17
25																									*12:44, B*35:178
								33																	*12:58
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	



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Lot No.: **57N**

Lot-specific information

Length of spec.	280	210	280	275	275	90	110	255	240	250	145	260	80	210	135	150	100	165	105	165	210	195	90	160	
PCR product(s)						215	185				415	305	140					225	195	260	255	240		260	200
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	
*14:10													13												
*14:20, 14:25, <i>B*15:78:03</i>													13												
*14:32													13												
*15:03, 15:16	1								9	10												22			
*15:12			3						9	10	12														
*15:25	1																					22			
*15:37	1								9	10															
*16:18																									
*18:03																16									
*18:05							7									16									
<i>B*08:39</i>							7																		
<i>B*15:96</i>		2			5	6												18							
<i>B*35:101:02</i>							7																		
<i>B*55:30</i>																									
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-C*03 subtyping.

In addition, wells number 3, 6, 10, 19, 22, 31 and 43 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 1st, 2nd or 3rd exons or the 3rd 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 the 1st, 2nd, 3rd or 4th exons, 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.

⁴The nucleotide sequence of the HLA-Cw*0301 allele has been shown to be identical to C*03:04:01:01.

⁵HLA-C*03 alleles in bold lettering are listed as confirmed alleles on the IMGT/HLA web page www.ebi.ac.uk/imgt/hla, release 3.7.0, January 2012.

⁶The C*03:28 and 03:90 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 23.

⁷The C*03:44 and 03:123 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 31.

⁸The C*03:49 and 03:103 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 23.

⁹The C*03:50 and 03:122 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

¹⁰The C*03:56 and 03:85 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 35.

¹¹The C*03:64 and 03:82 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 35.

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Lot No.: **57N**

Lot-specific information

355	305	70	80	170	140	150	100	90	110	130	70	165	140	100	110	70	120	120	220	70	140	210	70	555	Length of spec.
355	105	275			170	170	210	180	365	240	120	245		265	170	260	195	205	275	160	295		195		PCR product(s)
	265				285						210												240		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	
			28					33				37													*14:10
			28																						*14:20, 14:25, B*15:78:03
																									*14:32
25																									*15:03, 15:16
																									*15:12
25		27																							*15:25
																								48	*15:37
																								48	*16:18
			28																						*18:03
			28									37													*18:05
				29																					B*08:39
	26																	43							B*15:96
								33																	B*35:101:02
																	42								B*55:30
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Well No.	

¹²The C*03:70 and 03:78 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 42.

¹³The C*03:135 and C*15:43 give rise to identical amplification patterns with the HLA-C*03 subtyping kit. These two alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C*15 subtyping kits.

¹⁴Primer mix 6: Specific PCR fragment of 90 bp in the C*03:21 and the B*15:96 alleles. Specific PCR fragment of 215 bp in the C*03:06 allele.

Primer mix 7: Specific PCR fragment of 110 bp in the C*03:08 and 03:29 and the C*06:44, 07:01:01-07:01:24, 07:06-07:07, 07:09, 07:16, 07:18-07:20, 07:22, 07:24, 07:26, 07:28, 07:30, 07:35-07:36, 07:40, 07:44, 07:52-07:53, 07:55N, 07:57-07:59, 07:65, 07:70-07:71, 07:73, 07:77-07:78, 07:81-07:83, 07:86, 07:89, 07:91-07:96, 07:98N, 07:103-07:104N, 07:106, 07:108, 07:110-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131-07:132, 07:134, 07:140-07:141, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219 and 18:05 alleles. Specific PCR fragment of 185 bp in the C*03:03:01-03:03:18, 03:11:01-03:13, 03:18, 03:20N-03:22Q, 03:30, 03:39, 03:43:01-03:43:02, 03:49-03:50, 03:52-03:53, 03:55-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:69, 03:75-03:76, 03:79, 03:81, 03:83, 03:85-03:86, 03:88, 03:96-03:97, 03:102-03:103, 03:112, 03:116, 03:119-03:120, 03:122, 03:124, 03:126-03:127 and 03:132-03:133 and the C*01:51, 06:53, 07:56:01 and 07:79 and in the B*07:93, B*08:39, B*35:101:02, B*38:27, B*51:76 alleles. Specific PCR fragments of 110 and 185 bp in the C*03:31 and in the C*07:60 and 07:109 alleles.

Primer mix 11: Specific PCR fragment of 145 bp in the C*03:87 allele. Specific PCR fragment of 415 bp in the C*03:08, 03:29 and 03:31 and in the C*05:36, 06:44 and 12:08 alleles.

Primer mix 12: Specific PCR fragment of 260 bp in the C*03:03:12, 03:03:15, 03:11:01, 03:18 and 03:39 and the C*01:51, 05:55, 06:53, 07:56:01, 07:60, 07:79, 07:109, 12:58 and 15:12 alleles. Specific PCR fragment of 305 bp in the C*03:04:19 and 03:113 and the C*07:10, 07:43, 07:184 and 07:196 and in the B*35:08:04 and B*37:04:02 alleles.

Primer mix 13: Specific PCR fragment of 80 bp in the C*03:02:01-03:02:08, 03:15-03:16, 03:33, 03:36, 03:40:01, 03:42-03:43:01, 03:60, 03:84, 03:89, 03:95, 03:108, 03:110, 03:121N, 03:132 and 03:139 and the C*04:54, 14:08-14:09 and 14:28 and in the B*15:78:03 alleles. Specific PCR

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Lot No.: 57N**Lot-specific information**

fragment of 140 bp in the C*03:17 and the C*04:37 and 14:26 alleles. Specific PCR fragments of 80 and 140 bp in the C*03:71 and in the C*06:02:08, 12:03:20, 14:02:01, 14:02:03-14:07N, 14:10-14:16, 14:18-14:25, 14:27, 14:29-14:34 and 16:01:06 alleles.

Primer mix 18: Specific PCR fragment of 165 bp in the C*03:102 and in the B*15:96 alleles. Specific PCR fragment of 195 bp in the C*03:83 allele. Specific PCR fragment of 225 bp in the C*03:23 allele.

Primer mix 19: Specific PCR fragment of 105 bp in the C*03:24 allele. Specific PCR fragment of 260 bp in the C*03:33 allele.

Primer mix 20: Specific PCR fragment of 165 bp in the C*03:25 allele. Specific PCR fragment of 255 bp in the C*03:47 allele.

Primer mix 21: Specific PCR fragment of 210 bp in the C*03:26 allele. Specific PCR fragment of 240 bp in the C03:57 and 03:88 alleles.

Primer mix 23: Specific PCR fragment of 90 bp in the C*03:28, 03:49 and 03:117 alleles. Specific PCR fragment of 260 bp in the C*03:22Q, 03:90 and 03:103 alleles.

Primer mix 24: Specific PCR fragment of 160 bp in the C*03:120 allele. Specific PCR fragment of 200 bp in the C*03:30, 03:65, 03:79 and 03:121N alleles.

Primer mix 25: Specific PCR fragment of 305 bp in the C*03:32 and 03:45 and in the B*35:178 alleles. Specific PCR fragment of 355 bp in the C*03:38:01-03:38:02, 03:69 and 03:130 and the C*12:44, 15:03 and 15:16 alleles. Specific PCR fragments of 305 and 355 bp in the C*03:136 and the C*04:80, 04:100, 06:14, 07:10, 07:43, 07:196 and 15:25 alleles.

Primer mix 26: Specific PCR fragment of 70 bp in the C*03:34 allele. Specific PCR fragment of 105 bp in the C*03:36 and 03:77 alleles. Specific PCR fragment of 265 bp in the C*03:13 and 03:35 and in the C*07:133 and the B*15:96 alleles.

Primer mix 27: Specific PCR fragment of 80 bp in the C*03:11:01-03:11:02 and 03:37 and the C*02:42 alleles. Specific PCR fragment of 275 bp in the C*03:15, 03:32, 03:45, 03:60 and 03:136 and the C*02:49, 04:03, 04:06, 04:16, 04:80, 07:96 and 15:25 alleles. Specific PCR fragment of 80 and 275 bp in the C*06:03 allele.

Primer mix 29: Specific PCR fragment of 140 bp in the C*03:98 allele. Specific PCR fragment of 170 bp in the C*03:51 and 03:96 and in the C*04:64 alleles. Specific PCR fragment of 285 bp in the C*03:39 and 03:67 and the C*06:53, 07:56:01, 07:60, 07:79 and 07:109 and in the B*08:39 alleles.

Primer mix 30: Specific PCR fragment of 150 bp in the C*03:61 allele. Specific PCR fragment of 170 bp in the C*03:46 and 03:96 and the C*04:64 alleles.

Primer mix 31: Specific PCR fragment of 100 bp in the C*03:59 and 03:123 alleles. Specific PCR fragment of 210 bp in the C*03:44 allele.

Primer mix 32: Specific PCR fragment of 90 bp in the C*03:58 and in the C*01:03, 01:24 and 04:37 alleles. Specific PCR fragment of 180 bp in the C*03:48 and 03:84 alleles.

Primer mix 33: Specific PCR fragment of 110 bp in the C*03:62 allele. Specific PCR fragment of 365 bp in the C*03:43:01-03:43:02, 03:119 and 03:132 and the C*07:60, 07:79, 12:58 and 14:10 and in the B*35:101:02 alleles.

Primer mix 34: Specific PCR fragment of 130 bp in the C*03:54 and 03:98 alleles. Specific PCR fragment of 240 bp in the C* 03:53 and the C*12:17 alleles.

Primer mix 35: Specific PCR fragment of 70 bp in the C*03:64 and the C*02:08 and 15:10:02 alleles. Specific PCR fragment of 120 bp in the C*03:56 allele. Specific PCR fragment of 210 bp in the C*03:79, 03:82 and 03:85 alleles.

Primer mix 36: Specific PCR fragment of 165 bp in the C*03:122 allele. Specific PCR fragment of 245 bp in the C*03:50 and 03:72 alleles.

Primer mix 38: Specific PCR fragment of 100 bp in the C*03:52 and 03:95 and in the C*04:43 alleles. Specific PCR fragment of 265 bp in the C*03:73 allele.

Primer mix 39: Specific PCR fragment of 110 bp in the C*03:36 and 03:77 and in the C*04:34 alleles. Specific PCR fragment of 170 bp in the C*03:63 allele.

Primer mix 40: Specific PCR fragment of 70 bp in the C*03:80 alleles. Specific PCR fragment of 260 bp in the C*03:66 allele.

Primer mix 41: Specific PCR fragment of 120 bp in the C*03:68 alleles. Specific PCR fragment of 195 bp in the C*03:100 allele.

Primer mix 42: Specific PCR fragment of 120 bp in the C*03:78 alleles. Specific PCR fragment of 205 bp in the C*03:70 and 03:127 and in the B*55:30 alleles.

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Lot No.: 57N**Lot-specific information**

Primer mix 43: Specific PCR fragment of 220 bp in the C*03:74 and 03:81 and in the B*15:96 alleles. Specific PCR fragment of 275 bp in the C*03:97 allele.

Primer mix 44: Specific PCR fragment of 70 bp in the C*03:91 allele. Specific PCR fragment of 160 bp in the C*03:75 and 03:120 alleles.

Primer mix 45: Specific PCR fragment of 140 bp in the C*03:93 alleles. Specific PCR fragment of 295 bp in the C*03:76 allele.

Primer mix 47: Specific PCR fragment of 70 bp in the C*03:14, 03:21, 03:55, 03:92 and 03:117 and the C*07:133 alleles. Specific PCR fragment of 195 bp in the C*03:109 allele. Specific PCR fragment of 240 bp in the C*03:57 allele.

‘w’, might be weakly amplified.

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Lot No.: **57N**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-C*03 SSP subtyping kit																				
				Well																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	201299401	201299402	201299403	201299404	201299405	201299406	201299407	201299408	201299409	201299410	201299411	201299412	201299413	201299414	201299415	201299416
IHWC cell line		C*																		
1	9001	SA	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	+	-	-	-	-	-	-	+	-	+	+	-	-	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
6	9353	SM	*03:04	*07:02	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
15	9075	DKB	*03:04		+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
16	9037	SWEIG007	*02:02		+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	-	+	+	-	-	+	-	-	-	-	-	-	-	+	-
18	9257	32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
21	9064	AMALA	*03:03		-	-	+	+	-	-	+	-	-	-	-	-	-	-	+	-
22	9056	KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*07:01		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:05	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-
28	9320	BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
33	9098	MT14B	*03:04		+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
34	9104	DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	+	+	-	-	+	-	-	-	-	-	-	-	+	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	+	+	-	-	+	-	-	-	-	-	-	-	+	-
39	9315	CML	*02:02	*07:01	+	-	-	-	-	-	+	-	+	+	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
41	9055	H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-C*03 SSP subtyping kit																				
				Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
			Prod. No.:	201299417	201299418	201299419	201299420	201299421	201299422	201299423	201299424	201299425	201299426	201299427	201299428	201299429	201299430	201299431	201299432	
	IHWC cell line	C*																		
1	9001 SA	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*07:01	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
5	9009 KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
9	9026 YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*07:04	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
37	9065 HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*07:04	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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 “Instructions for Use” (IFU)

Lot No.: **57N**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-C*03 SSP subtyping kit																				
				Well																
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
			Prod. No.:	201299433	201299434	201299435	201299436	201299437	201299438	201299439	201299440	201299441	201299442	201299443	201299444	201299445	201299446	201299447	201299448	
	IHWC cell line		C*																	
1	9001 SA		*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707		*07:01	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373		*03:04	*04:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM		*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL		*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU		*04:01		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3		*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
11	9051 PITOUT		*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB		*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM		*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
14	9071 OLGA		*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
15	9075 DKB		*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007		*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540		*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367		*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
19	9038 BM16		*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA		*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL		*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
24	9035 JBUSH		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9		*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007		*07:04	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB		*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU		*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH		*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF		*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG		*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B		*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO		*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17		*03:03	*04:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB		*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL		*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML		*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199		*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
41	9055 H0301		*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089		*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
43	9076 T7526		*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
44	9057 TEM		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO		*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU		*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*07:04	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND		*04:01	*16:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-



101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
 101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP[®] HLA-C*03 SSP

Product number: **101.611-12 – including *Taq* polymerase
 101.611-12u – without *Taq* polymerase**

Lot number: **57N**

Expiry date: **2014-September-01**

Number of tests: **12**

Number of wells per test: **48**

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2012-994-01	17	2012-994-17	33	2012-994-33
2	2012-994-02	18	2012-994-18	34	2012-994-34
3	2012-994-03	19	2012-994-19	35	2012-994-35
4	2012-994-04	20	2012-994-20	36	2012-994-36
5	2012-994-05	21	2012-994-21	37	2012-994-37
6	2012-994-06	22	2012-994-22	38	2012-994-38
7	2012-994-07	23	2012-994-23	39	2012-994-39
8	2012-994-08	24	2012-994-24	40	2012-994-40
9	2012-994-09	25	2012-994-25	41	2012-994-41
10	2012-994-10	26	2012-994-26	42	2012-994-42
11	2012-994-11	27	2012-994-27	43	2012-994-43
12	2012-994-12	28	2012-994-28	44	2012-994-44
13	2012-994-13	29	2012-994-29	45	2012-994-45
14	2012-994-14	30	2012-994-30	46	2012-994-46
15	2012-994-15	31	2012-994-31	47	2012-994-47
16	2012-994-16	32	2012-994-32	48	2012-994-48

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 8, 11, 17 to 21, 23 to 26, 29, 31 to 36, 38 to 45, 47 and 48 were available. The specificities of the primers in primer solutions 8, 11, 17, 18, 21, 23, 25, 26, 29, 32, 33, 35, 39, 41 to 43, 47 and 48 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 20, 31, 36 and 45 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 19, 24, 34, 38, 40 and 44 it was only possible to test the 5'-primer, the 3'-primer was not possible to test. In primer solutions 8, 17, 18, 21, 23, 41, 43 and 47 it was not possible to test one or two of the 5'-primers and in primer solutions 17, 29, 30, 32, 33, 35, 39, 41 and 42 one, two or three 3'-primers were not possible to test. Finally, additional primers in primer solutions 6, 12 and 30 were tested by separately adding an additional 5'- or 3'-primer.

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

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

Date of approval: 2012-April-04

Approved by:

Production Quality Control

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

Declaration of Conformity

Product name: *Olerup* SSP® HLA-C*03
Product number: 101.611-12/12u
Lot number: 57N

Intended use: HLA-C*03 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 III, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Stockholm, Sweden
2012-April-04

Åsa Olausson
Production Quality Control

101.611-12 – including *Taq* polymerase, IFU-01 Rev. No. 03
101.611-12u – without *Taq* polymerase, IFU-02 Rev. No. 03

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Lot No.: **57N**

Lot-specific information

ADDRESSES:

Manufacturer:

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

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