101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

Visit www.olerup-ssp.com for **"Instructions for Use" (IFU)**

Lot No.: 63Y **Lot-specific information**

Olerup SSP® HLA-C*03

Product number:	**101.611-12 – including *Taq* polymerase** **101.611-12u – without *Taq* polymerase**
Lot number:	**63Y**
Expiry date:	**2018-January-01**
Number of tests:	**12**
Number of wells per test:	**47+1**
Storage - pre-aliquoted primers:	**dark at -20ºC**
- PCR Master Mix:	**-20ºC**
- Adhesive PCR seals	**RT**
- Product Insert	**RT**

This Product Description is only valid for Lot No. 63Y.

Complete product documentation consists of generic Instructions for Use (IFU), lot specific Product Insert, Worksheet and Certificate.

CHANGES COMPARED TO THE PREVIOUS *OLERUP* SSP® HLA-C*03 LOT (64V).

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

- Confirmed[1] 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

A well containing Negative Control primer pairs has been added.

The format of the Product Insert and Worksheet have been changed.

[1]As described in section Uniquely Identified Alleles.

The HLA-C*03 primer set, 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. 64V)**. The kit design is based on IMGT/HLA database 3.20.0.

101.611-12 – including *Taq* polymerase, IFU-01
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Lot No.: 63Y **Lot-specific information**

As of lot series V, the Specificity Table is included in the lot-specific Product Insert, and the Interpretation Table is included in the Worksheet.

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

Well	5'-primer	3'-primer	rationale
7	Added	-	5'-primer added for the C*03:03:26 allele.
10	-	Added	3'-primer added for the C*03:115 allele.
11	-	Added	3'-primer added for the C*03:126 allele.
12	-	Added	3'-primers added for the C*03:214 and 03:265N alleles.
16	Added	-	5'-primers added for the C*03:252 allele.
19	-	Added	3'-primers added for the C*03:115 allele.
20	Added	Added	Primer pair added for the C*03:252 allele.
22	-	Added	3'-primers added for the C*03:237 and C*03:227N alleles.
23	Added	-	5'-primers added for the C*03:153 allele.
24	-	Added	3'-primer added for the C*03:184 allele.
25	-	Modified	5'-primer modified for improved HLA-specific amplification.
26	Added	-	5'-primer added for the C*03:176 allele.
27	-	Added	3'-primer added for the C*03:18:02 allele.
28	-	Added	3'-primers added for the C*03:41:02, 03:147 and 03:258 alleles.
29	-	Added	3'-primer added for the C*03:165 allele.
30	-	Added	3'-primer added for the C*03:221 allele.
32	-	Added	3'-primer added for the C*03:174 allele.
33	-	Added	3'-primer added for the C*03:167 allele.
34	-	Added	3'-primer added for the C*03:192 allele.
35	-	Added	3'-primers added for the C*03:214 and C*03:244Q alleles.
36	-	Added	3'-primer added for the C*03:212 allele.
38	-	Added	3'-primer added for the C*03:184 allele.
39	-	Added	3'-primer added for the C*03:174 allele.
40	-	Added	3'-primer added for the C*03:126 allele.
42	-	Added	3'-primers added for the C*03:192 and C*03:277N alleles.
43	Added	-	5'-primers added for the C*03:137 and C*03:153 alleles.
44	-	Added	3'-primer added for the C*03:244Q allele.
47	Added	-	5'-primer added for the C*03:176 allele.
48	-	-	Updated negative control.

Change in revision R01 compared to R00:

1. Primer mix 11 does not amplify the C*15:88-15:95N, 15:97-15:103 and 15:106 alleles. This has been corrected in the Specificity and Interpretation Tables.

101.611-12 – including *Taq* polymerase, IFU-01
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Lot No.: 63Y **Lot-specific information**

Well **48** contains Negative Control primer pairs, that will amplify more than 95% of the *Olerup* SSP® HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene.

HLA-specific PCR product sizes range from 75 to 200 base pairs.
The PCR product generated by the positive control primer pair is 430 base pairs.

Length of PCR product	**105**	**200**	**105**	**80**	**75**	**80**	**85**
5'-primer[1]	**164**	**340**	**440**	**45**	**45**	**43**	**36**
	5'-CAC3'	**5'-Agg3'**	**5'-TTA3'**	**5'-Tgg3'**	**5'-Tgg3'**	**5'-Tgg3'**	**5'-TAC3'**
							36
							5'-TAT3'
3'-primer[2]	**231**	**2nd I**	**507**	**59**	**58**	**57**	**47**
	5'-TgC3'	**5'-AAA3'**	**5'-TTg3'**	**5'-CTC3'**	**5'-ggC3'**	**5'-CTC3'**	**5'-ACA3'**
							48
							5'-gCA3'
							48
							5'-gCC3'
							52
							5'-TgT3'
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

[1]The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codonnumbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.
[2]The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon or the 2nd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

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*03:284 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**	**NC**

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 '63Y'.
Wells 1 to 47 – HLA-C*03 high resolution primers.
Well 48 – Negative Control (NC).
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

Due to the sharing of sequence motifs between HLA-C alleles, non-HLA-C*03 alleles will be amplified by primer mixes 1 to 3, 5, 7 to 16, 19, 20, 22, 23, 25 to 39, 41 and 45 to 47 . In addition, a few HLA-B alleles will be amplified by primer mixes 1, 2, 5 to 8, 12 to 14, 16, 18, 20, 25, 26, 28, 29, 33, 35, 39, 40, 42, 43 and 46.
For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All the HLA-C*03 alleles, i.e. **C*03:02 to C*03:284**, recognized by the HLA Nomenclature Committee in April 2015[1,2] will be amplified by the primers in the HLA-C*03 subtyping kit[3].

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 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 following HLA-C*03 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
C*03:04:19, 03:265N	12	C*03:50, 03:122	36
C*03:24, 03:236	19	C*03:56, 03:85	35
C*03:28, 03:90	23	C*03:68, 03:205	41
C*03:37:01-03:37:02, 03:208N	27	C*03:70, 03:78, 03:179	42
C*03:44, 03:123, 03:209	31	C*03:171, 03:207	25
C*03:49, 03:103	23		

The HLA-C*03 subtyping kit cannot distinguish the following silent mutations: the C*03:02:01-03:02:09 and 03:02:11-03:02:14, the C*03:03:01-03:03:11, 03:03:13-03:03:14, 03:03:16-03:03:20 and 03:03:22-03:03:28, the C*03:03:12, 03:03:15 and 03:03:29, the C*03:04:01:01-03:04:18, 03:04:20-03:04:24 and 03:04:27-03:04:47, the C*03:06:01-03:06:02, the C*03:13:01-03:13:02, the 03:37:01-03:37:02, the 03:40:01 and 03:40:03-03:40:04, the C*03:41:01-03:41:02, the C*03:87:01-03:87:02, the 03:116:01-03:116:02, the 03:186:01-03:186:02 or the C*03:211:01-03:211:02 alleles.

[1]HLA-C alleles listed on the IMGT/HLA web page 2015-April-17, release 3.20.0, www.ebi.ac.uk/imgt/hla.
[2]Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page http://hla.alleles.org/alleles/deleted.html.
[3]The C*03:99 and C*05:107 alleles give rise to identical amplification patterns with the HLA-C*03 subtyping kit. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C*05 subtyping kits.
The C*03:135, C*03:154, 03:260 and C*15:43 give rise to identical amplification patterns with the HLA-C*03 subtyping kit. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C*15 subtyping kits.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in HLA-C*03 homo- and heterozygotes is available upon request.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

Allele Confirmation Status

Allele	Status[1]	Allele	Status[1]	Allele	Status[1]	Allele	Status[1]
C*03:02:01	**Confirmed**	C*03:04:05	Unconfirmed	C*03:11:01	Unconfirmed	C*03:52	Unconfirmed
C*03:02:02:01	**Confirmed**	C*03:04:06	Unconfirmed	**C*03:11:02**	**Confirmed**	**C*03:53**	**Confirmed**
C*03:02:02:02	Unconfirmed	C*03:04:07	Unconfirmed	C*03:13:01	Unconfirmed	**C*03:54**	**Confirmed**
C*03:02:02:03	Unconfirmed	**C*03:04:08**	**Confirmed**	C*03:13:02	Unconfirmed	**C*03:55**	**Confirmed**
C*03:02:03	Unconfirmed	**C*03:04:09**	**Confirmed**	**C*03:14**	**Confirmed**	**C*03:56**	**Confirmed**
C*03:02:04	Unconfirmed	**C*03:04:10**	**Confirmed**	C*03:15	Unconfirmed	C*03:57	Unconfirmed
C*03:02:05	Unconfirmed	**C*03:04:11**	**Confirmed**	**C*03:16**	**Confirmed**	C*03:58	Unconfirmed
C*03:02:06	**Confirmed**	C*03:04:12	Unconfirmed	**C*03:17**	**Confirmed**	**C*03:59**	**Confirmed**
C*03:02:07	Unconfirmed	**C*03:04:13**	**Confirmed**	C*03:18:01	Unconfirmed	C*03:60	Unconfirmed
C*03:02:08	Unconfirmed	C*03:04:14	Unconfirmed	C*03:18:02	Unconfirmed	C*03:61	Unconfirmed
C*03:02:09	**Confirmed**	**C*03:04:15**	**Confirmed**	**C*03:19**	**Confirmed**	**C*03:62**	**Confirmed**
C*03:02:10	**Confirmed**	**C*03:04:16**	**Confirmed**	C*03:20N	Unconfirmed	**C*03:63**	**Confirmed**
C*03:02:11	Unconfirmed	**C*03:04:17**	**Confirmed**	**C*03:21**	**Confirmed**	**C*03:64:01**	**Confirmed**
C*03:02:12	Unconfirmed	**C*03:04:18**	**Confirmed**	C*03:22Q	Unconfirmed	C*03:64:02	Unconfirmed
C*03:02:13	Unconfirmed	**C*03:04:19**	**Confirmed**	**C*03:23**	**Confirmed**	**C*03:65**	**Confirmed**
C*03:02:14	Unconfirmed	C*03:04:20	Unconfirmed	C*03:24	Unconfirmed	C*03:66	Unconfirmed
C*03:03:01	**Confirmed**	**C*03:04:21**	**Confirmed**	**C*03:25**	**Confirmed**	C*03:67	Unconfirmed
C*03:03:02	**Confirmed**	**C*03:04:22**	**Confirmed**	**C*03:26**	**Confirmed**	C*03:68	Unconfirmed
C*03:03:03	Unconfirmed	**C*03:04:23**	**Confirmed**	**C*03:27**	**Confirmed**	**C*03:69**	**Confirmed**
C*03:03:04	**Confirmed**	**C*03:04:24**	**Confirmed**	**C*03:28**	**Confirmed**	**C*03:70**	**Confirmed**
C*03:03:05	**Confirmed**	C*03:04:25	Unconfirmed	**C*03:29**	**Confirmed**	C*03:71	Unconfirmed
C*03:03:06	Unconfirmed	C*03:04:26	Unconfirmed	**C*03:30**	**Confirmed**	C*03:72	Unconfirmed
C*03:03:07	**Confirmed**	C*03:04:27	Unconfirmed	C*03:31	Unconfirmed	C*03:73	Unconfirmed
C*03:03:08	**Confirmed**	**C*03:04:28**	**Confirmed**	**C*03:32**	**Confirmed**	**C*03:74**	**Confirmed**
C*03:03:09	Unconfirmed	C*03:04:29	Unconfirmed	C*03:33	Unconfirmed	**C*03:75**	**Confirmed**
C*03:03:10	**Confirmed**	**C*03:04:30**	**Confirmed**	**C*03:34**	**Confirmed**	**C*03:76**	**Confirmed**
C*03:03:11	Unconfirmed	C*03:04:31	Unconfirmed	**C*03:35**	**Confirmed**	C*03:77	Unconfirmed
C*03:03:12	**Confirmed**	C*03:04:32	Unconfirmed	**C*03:36**	**Confirmed**	**C*03:78**	**Confirmed**
C*03:03:13	Unconfirmed	C*03:04:33	Unconfirmed	**C*03:37:01**	**Confirmed**	**C*03:79**	**Confirmed**
C*03:03:14	Unconfirmed	C*03:04:34	Unconfirmed	**C*03:37:02**	**Confirmed**	C*03:80	Unconfirmed
C*03:03:15	Unconfirmed	C*03:04:35	Unconfirmed	**C*03:38:01**	**Confirmed**	**C*03:81**	**Confirmed**
C*03:03:16	**Confirmed**	C*03:04:36	Unconfirmed	**C*03:38:02**	**Confirmed**	**C*03:82**	**Confirmed**
C*03:03:17	Unconfirmed	C*03:04:37	Unconfirmed	C*03:39	Unconfirmed	C*03:83	Unconfirmed
C*03:03:18	Unconfirmed	C*03:04:38	Unconfirmed	**C*03:40:01**	**Confirmed**	C*03:84	Unconfirmed
C*03:03:19	**Confirmed**	**C*03:04:39**	**Confirmed**	C*03:40:02	Unconfirmed	**C*03:85**	**Confirmed**
C*03:03:20	Unconfirmed	C*03:04:40	Unconfirmed	C*03:40:03	Unconfirmed	**C*03:86**	**Confirmed**
C*03:03:21	Unconfirmed	**C*03:04:41**	**Confirmed**	C*03:40:04	Unconfirmed	**C*03:87:01**	**Confirmed**
C*03:03:22	**Confirmed**	C*03:04:42	Unconfirmed	**C*03:41:01**	**Confirmed**	C*03:87:02	Unconfirmed
C*03:03:23	Unconfirmed	C*03:04:43	Unconfirmed	**C*03:41:02**	**Confirmed**	**C*03:88**	**Confirmed**
C*03:03:24	Unconfirmed	C*03:04:44	Unconfirmed	**C*03:42**	**Confirmed**	C*03:89	Unconfirmed
C*03:03:25	Unconfirmed	C*03:04:45	Unconfirmed	**C*03:43:01**	**Confirmed**	**C*03:90**	**Confirmed**
C*03:03:26	Unconfirmed	C*03:04:46	Unconfirmed	C*03:43:02	Unconfirmed	C*03:91:01	Unconfirmed
C*03:03:27	Unconfirmed	C*03:04:47	Unconfirmed	**C*03:44**	**Confirmed**	C*03:91:02	Unconfirmed
C*03:03:28	Unconfirmed	**C*03:05**	**Confirmed**	C*03:45	Unconfirmed	C*03:92	Unconfirmed
C*03:03:29	Unconfirmed	**C*03:06:01**	**Confirmed**	**C*03:46**	**Confirmed**	C*03:93	Unconfirmed
C*03:04:01:01	**Confirmed**	C*03:06:02	Unconfirmed	**C*03:47**	**Confirmed**	C*03:94	Unconfirmed
C*03:04:01:02	**Confirmed**	**C*03:07**	**Confirmed**	C*03:48	Unconfirmed	**C*03:95**	**Confirmed**
C*03:04:02	**Confirmed**	**C*03:08**	**Confirmed**	**C*03:49**	**Confirmed**	**C*03:96**	**Confirmed**
C*03:04:03	Unconfirmed	**C*03:09**	**Confirmed**	C*03:50	Unconfirmed	C*03:97	Unconfirmed
C*03:04:04	**Confirmed**	**C*03:10**	**Confirmed**	**C*03:51**	**Confirmed**	C*03:98	Unconfirmed

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

Allele	Status[1]	Allele	Status[1]	Allele	Status[1]	Allele	Status[1]
C*03:99	Unconfirmed	C*03:148	Unconfirmed	C*03:197	Unconfirmed	C*03:246	Unconfirmed
C*03:100	**Confirmed**	C*03:149	Unconfirmed	**C*03:198**	**Confirmed**	C*03:247	Unconfirmed
C*03:101	**Confirmed**	C*03:150	Unconfirmed	C*03:199	Unconfirmed	C*03:248	Unconfirmed
C*03:102	Unconfirmed	C*03:151	Unconfirmed	C*03:200	Unconfirmed	C*03:249	Unconfirmed
C*03:103	Unconfirmed	C*03:152	Unconfirmed	C*03:201N	Unconfirmed	C*03:250	Unconfirmed
C*03:104	Unconfirmed	**C*03:153**	**Confirmed**	C*03:202	Unconfirmed	C*03:251	Unconfirmed
C*03:105	Unconfirmed	C*03:154	Unconfirmed	C*03:203	Unconfirmed	C*03:252	Unconfirmed
C*03:106	Unconfirmed	**C*03:155**	**Confirmed**	C*03:204	Unconfirmed	C*03:253	Unconfirmed
C*03:107	Unconfirmed	C*03:156	Unconfirmed	C*03:205	Unconfirmed	C*03:254	Unconfirmed
C*03:108	Unconfirmed	C*03:157	Unconfirmed	**C*03:206**	**Confirmed**	C*03:255	Unconfirmed
C*03:109	**Confirmed**	C*03:158	Unconfirmed	C*03:207	Unconfirmed	C*03:256	Unconfirmed
C*03:110	Unconfirmed	C*03:159	Unconfirmed	C*03:208N	Unconfirmed	C*03:257	Unconfirmed
C*03:111	Unconfirmed	C*03:160	Unconfirmed	**C*03:209**	**Confirmed**	**C*03:258**	**Confirmed**
C*03:112	Unconfirmed	C*03:161	Unconfirmed	C*03:210	Unconfirmed	C*03:259	Unconfirmed
C*03:113	**Confirmed**	C*03:162	Unconfirmed	C*03:211:01	Unconfirmed	C*03:260	Unconfirmed
C*03:114	Unconfirmed	C*03:163	Unconfirmed	C*03:211:02	Unconfirmed	C*03:261	Unconfirmed
C*03:115	**Confirmed**	C*03:164	Unconfirmed	**C*03:212**	**Confirmed**	C*03:262	Unconfirmed
C*03:116:01	**Confirmed**	**C*03:165**	**Confirmed**	C*03:213	Unconfirmed	C*03:263	Unconfirmed
C*03:116:02	Unconfirmed	C*03:166	Unconfirmed	**C*03:214**	**Confirmed**	C*03:264	Unconfirmed
C*03:117	Unconfirmed	**C*03:167**	**Confirmed**	C*03:215	Unconfirmed	C*03:265N	Unconfirmed
C*03:118	Unconfirmed	C*03:168	Unconfirmed	C*03:216	Unconfirmed	C*03:266	Unconfirmed
C*03:119	Unconfirmed	C*03:169Q	Unconfirmed	C*03:217	Unconfirmed	C*03:267	Unconfirmed
C*03:120	**Confirmed**	C*03:170	Unconfirmed	C*03:218	Unconfirmed	C*03:268	Unconfirmed
C*03:121N	Unconfirmed	C*03:171	Unconfirmed	C*03:219	Unconfirmed	C*03:269	Unconfirmed
C*03:122	**Confirmed**	C*03:172	Unconfirmed	C*03:220	Unconfirmed	C*03:270	Unconfirmed
C*03:123	**Confirmed**	C*03:173	Unconfirmed	**C*03:221**	**Confirmed**	C*03:271	Unconfirmed
C*03:124	Unconfirmed	**C*03:174**	**Confirmed**	C*03:222	Unconfirmed	C*03:272	Unconfirmed
C*03:125	Unconfirmed	C*03:175	Unconfirmed	C*03:223	Unconfirmed	C*03:273	Unconfirmed
C*03:126	**Confirmed**	**C*03:176**	**Confirmed**	C*03:224N	Unconfirmed	C*03:274	Unconfirmed
C*03:127	Unconfirmed	C*03:177	Unconfirmed	C*03:225	Unconfirmed	C*03:275	Unconfirmed
C*03:128	Unconfirmed	C*03:178	Unconfirmed	C*03:226	Unconfirmed	C*03:276	Unconfirmed
C*03:129	Unconfirmed	C*03:179	Unconfirmed	C*03:227	Unconfirmed	C*03:277N	Unconfirmed
C*03:130	Unconfirmed	C*03:180	Unconfirmed	C*03:228	Unconfirmed	C*03:278	Unconfirmed
C*03:131	Unconfirmed	C*03:181	Unconfirmed	C*03:229N	Unconfirmed	C*03:279	Unconfirmed
C*03:132	Unconfirmed	C*03:182	Unconfirmed	C*03:230	Unconfirmed	C*03:280	Unconfirmed
C*03:133	Unconfirmed	C*03:183	Unconfirmed	C*03:231	Unconfirmed	C*03:282	Unconfirmed
C*03:134	Unconfirmed	**C*03:184**	**Confirmed**	C*03:232	Unconfirmed	C*03:283	Unconfirmed
C*03:135	Unconfirmed	C*03:185	Unconfirmed	C*03:233	Unconfirmed	C*03:284	Unconfirmed
C*03:136	**Confirmed**	C*03:186:01	Unconfirmed	C*03:234	Unconfirmed		
C*03:137	**Confirmed**	C*03:186:02	Unconfirmed	C*03:235	Unconfirmed		
C*03:138	Unconfirmed	C*03:187	Unconfirmed	C*03:236	Unconfirmed		
C*03:139	**Confirmed**	C*03:188	Unconfirmed	C*03:237	Unconfirmed		
C*03:140	**Confirmed**	C*03:189N	Unconfirmed	C*03:238	Unconfirmed		
C*03:141	Unconfirmed	C*03:190	Unconfirmed	C*03:239	Unconfirmed		
C*03:142	Unconfirmed	C*03:191	Unconfirmed	C*03:240	Unconfirmed		
C*03:143	Unconfirmed	**C*03:192**	**Confirmed**	C*03:241	Unconfirmed		
C*03:144	Unconfirmed	C*03:193	Unconfirmed	C*03:242	Unconfirmed		
C*03:145	**Confirmed**	C*03:194	Unconfirmed	**C*03:243**	**Confirmed**		
C*03:146	Unconfirmed	C*03:195	Unconfirmed	C*03:244Q	Unconfirmed		
C*03:147	**Confirmed**	C*03:196	Unconfirmed	C*03:245	Unconfirmed		

[1]Allele status "confirmed" or "unconfirmed" as listed on the IMGT/HLA web page 2015-April-17, release 3.20.0, www.ebi.ac.uk/imgt/hla.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

Visit www.olerup-ssp.com for **"Instructions for Use" (IFU)**

Lot No.: 63Y **Lot-specific information**

SPECIFICITY TABLE

HLA-C*03 SSP subtyping

Specificities and sizes of the PCR products of the 47+1 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**	*03:02:01-03:02:09, 03:02:11-03:02:14, 03:04:01:01-03:04:25, 03:04:27-03:10, 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, 03:63-03:64:01, 03:65, 03:70-03:74, 03:77-03:78, 03:80, 03:82, 03:84, 03:87:01-03:87:02, 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, 03:138-03:140, 03:143, 03:145-03:149, 03:153-03:155, 03:157, 03:159, 03:162-03:164, 03:169Q, 03:172-03:174, 03:178-03:181, 03:183-03:184, 03:186:01-03:186:02, 03:190-03:191, 03:193-03:194, 03:197-03:201N, 03:208N-03:213, 03:215-03:216, 03:218-03:219, 03:221-03:222, 03:224N-03:226, 03:232-03:236, 03:238-03:240, 03:244Q-03:250, 03:252, 03:255-03:261, 03:263, 03:265N-03:266, 03:269-03:270, 03:277N, 03:278[w], 03:279-03:280, 03:282-03:283	*02:02:01-02:02:03, 02:02:05-02:02:29, 02:03, 02:04[w], 02:05:01-02:13, 02:14:01[w], 02:15-02:25Q, 02:26:02-02:32, 02:34-02:40:02, 02:42-02:86, 02:88-02:100, 04:03:01-04:03:02, 04:06, 04:16, 04:80, 04:107, 04:147, 04:160, 04:171, 05:58:01, 06:03:01, 06:132:01-06:132:02, 07:02:10[w], 07:96:01-07:96:02, 07:127[w], 07:314:02, 12:03:23, 15:02:01:01-15:02:20, 15:02:22-15:05:08, 15:05:10-15:09, 15:10:02-15:11, 15:13, 15:15-15:19, 15:21-15:22, 15:24-15:35, 15:37-15:60, 15:62, 15:64-15:106, 15:108-15:113, 16:34, 16:70, **B*40:164**
2	210 bp	1070 bp	*03:02:01-03:02:14, 03:14-03:15, 03:33, 03:36, 03:40:01-03:40:04, 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, 03:146, 03:169Q, 03:175, 03:190, 03:194, 03:197-03:201N, 03:216, 03:221-03:222, 03:224N-03:226, 03:238, 03:240, 03:245, 03:248, 03:258, 03:264, 03:271, 03:279	*07:133, 07:242, 07:330, **B*15:96**
3	280 bp	**800 bp**	*03:03:01-03:03:20, 03:03:22-03:03:29, 03:11:01-03:11:02, 03:13:01-03:13:02, 03:18:02, 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,	*15:12

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4	275 bp	1070 bp	*03:03:01-03:04:47, 03:06:01-03:11:02, 03:14, 03:18:01-03:24, 03:26, 03:28-03:32, 03:34, 03:37:01-03:40:04, 03:42-03:57, 03:59, 03:61-03:70, 03:72-03:83, 03:85, 03:87:01-03:88, 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, 03:140-03:145, 03:147-03:150, 03:152-03:153, 03:155-03:164, 03:166, 03:168, 03:170-03:176, 03:179-03:189N, 03:191-03:193, 03:195-03:196, 03:202-03:215, 03:217-03:220, 03:223, 03:227-03:237, 03:239-03:244Q, 03:246-03:247, 03:250, 03:252-03:257, 03:259, 03:261, 03:262?, 03:263, 03:265N-03:266, 03:268-03:270, 03:272-03:280, 03:282-03:284	
5	275 bp	1070 bp	*03:05, 03:13:01-03:13:02, 03:17, 03:25, 03:27, 03:35, 03:71, 03:167, 03:178, 03:198, 03:249, 03:267, 03:271	*01:65, 05:86, 07:133, 07:242, 07:330, **B*15:96**
6[5]	90 bp 215 bp	**800 bp**	*03:21, 03:142 *03:06:01-03:06:02	**B*15:96**
7[5,6]	110 bp	1070 bp	*03:08, 03:29, 03:31, 03:246	*06:44, 07:01:01:01-07:01:24, 07:01:26-07:01:48, 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, 07:57-07:60, 07:65, 07:70-07:71, 07:73, 07:77-07:78, 07:81-07:83, 07:86, 07:89, 07:91-07:96:02, 07:98N, 07:103-07:104N, 07:106, 07:108:01-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131:01-07:132, 07:134, 07:140-07:141:02, 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, 07:222-07:224, 07:227N-07:228, 07:230-07:231, 07:235Q-07:237, 07:246-07:250, 07:253-07:257:03, 07:263, 07:266-07:269, 07:276-07:282, 07:292-07:293, 07:296-07:301, 07:303-07:304, 07:310-07:311, 07:313, 07:317, 07:330-07:332, 07:337, 07:343, 07:353, 07:362, 07:366, 07:369-07:371, 07:377, 07:385-07:387, 07:404, 07:407-07:408, 07:410, 07:412, 07:417, 07:419, 15:02:10, 15:02:17, 15:99, 18:05
	185 bp		*03:03:01-03:03:29, 03:11:01-03:11:02, 03:13:01-03:13:02, 03:18:01-03:18:02, 03:20N-03:22Q, 03:30-03:31, 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, 03:116:01-03:116:02, 03:119-03:120, 03:122, 03:124, 03:126-03:127, 03:132-03:133, 03:141-03:142, 03:144, 03:150-03:152, 03:158, 03:160-03:161, 03:165, 03:167-03:168, 03:171, 03:175-03:177, 03:182, 03:185, 03:187-03:189N, 03:192, 03:195-03:196, 03:202-03:207, 03:214, 03:217, 03:220, 03:223, 03:227-03:231, 03:237, 03:241-03:243, 03:251, 03:253-03:254, 03:262, 03:267-03:268, 03:271-03:276, 03:284	*01:51, 06:53:01, 07:56:01, 07:60, 07:79, 07:109, 17:26, **B*07:93, B*08:39, B*35:101:02, B*35:195, B*35:211, B*38:27, B*51:76, B*54:34**
8	255 bp	1070 bp	*03:09, 03:22Q, 03:42, 03:71, 03:89, 03:116:01-03:116:02, 03:119, 03:139, 03:169Q, 03:199, 03:240, 03:249, 03:267	*05:86, 07:133, 07:242, 07:330, **B*56:37**
9	240 bp	1070 bp	*03:07, 03:15, 03:45, 03:130, 03:140, 03:163, 03:243, 03:268	*02:02:01-02:02:03, 02:02:05-02:02:11, 02:02:13-02:02:29, 02:03, 02:04^{w}, 02:05:01-02:11, 02:13, 02:14:01^{w}, 02:15-02:25Q, 02:26:02-02:26:03, 02:28-02:40:02, 02:42-02:86, 02:88-02:100, 04:03:01-04:03:02, 04:06, 04:16, 04:80, 04:107,

				04:147, 04:160, 04:171, 05:58:01, 06:03:01, 06:132:01-06:132:02, 15:02:01:01-15:02:20, 15:02:22-15:05:08, 15:05:10, 15:06:01-15:06:03, 15:08-15:09, 15:10:02-15:13, 15:15-15:19, 15:22, 15:24, 15:26-15:35, 15:37-15:42, 15:44-15:60, 15:62, 15:64-15:106, 15:108-15:113, 16:70
10	245 bp	**800 bp**	*03:07, 03:10, 03:15, 03:29, 03:45, 03:115, 03:163, 03:268	*02:02:01ʷ, 02:02:02:01-02:02:03, 02:02:05-02:02:29, 02:03, 02:04ʷ, 02:05:01-02:13, 02:14:01ʷ, 02:15-02:25Q, 02:26:02-02:26:03, 02:28-02:40:02, 02:42-02:64, 02:66-02:86, 02:88-02:100, 04:03:01-04:03:02, 04:06, 04:16, 04:80, 04:107, 04:147, 04:160, 04:171, 05:58:01, 06:03:01, 06:132:01-06:132:02, 15:02:01:01-15:02:20, 15:02:22-15:05:08, 15:05:10-15:06:03, 15:08-15:09, 15:10:02-15:13, 15:15-15:19, 15:21-15:22, 15:24, 15:26-15:35, 15:37-15:42, 15:44-15:60, 15:62, 15:64-15:84Q, 15:86-15:106, 15:108-15:113, 16:70
11	145 bp 230 bp 415 bp	1070 bp	*03:87:01-03:87:02 *03:126 *03:08, 03:29, 03:31, 03:246	*05:86 *04:112, 04:169, 05:36, 06:44, 12:08, 12:81, 16:64, 16:70
12[5]	110 bp 140 bp 260 bp 305 bp 590 bp	1070 bp	*03:265N *03:214 *03:03:12, 03:03:15, 03:11:01, 03:18:01, 03:39	**B*44:198N** *01:51, 05:55, 06:53:01, 07:56:01, 07:60, 07:79, 07:109, 12:58, 15:12, 17:26 *07:104N, 12:46N
13[5]	80 bp	1070 bp	*03:02:01-03:02:14, 03:15-03:16, 03:33, 03:36, 03:40:01, 03:40:03-03:40:04, 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, 03:146, 03:169Q, 03:175, 03:194, 03:197-03:201N, 03:216, 03:221-03:222, 03:224N-03:226, 03:238, 03:240, 03:245, 03:248, 03:258, 03:264, 03:271, 03:279	*01:97, 04:54, 06:02:08, 07:02:32, 07:242, 12:03:20, 14:02:01, 14:02:03-14:16, 14:18-14:24:01, 14:25, 14:27-14:53, 14:56-14:69, 15:77, 16:01:06, **B*15:78:03**
	140 bp		*03:17, 03:71, 03:249, 03:271	*01:97, 04:37, 06:02:08, 12:03:20, 14:02:01, 14:02:03-14:07N, 14:10-14:16, 14:18-14:27, 14:29-14:53, 14:55-14:69, 16:01:06
14[5]	70 bp	1070 bp	*03:02:10, 03:03:21, 03:04:26	*02:26:01, 05:58:02, 06:70:01, 07:20, 07:390, 08:105, 12:140, 15:23, **B*15:315, B*44:85,**

	210 bp		*03:19, 03:102	**B*55:30** **B*56:37[w]**
15[7]	135 bp	1070 bp	*03:02:01-03:02:09, 03:02:11-03:03:20, 03:03:22-03:04:24, 03:04:27-03:11:02, 03:13:01-03:17, 03:18:02-03:38:02, 03:40:01-03:64:01, 03:65-03:66, 03:67[w], 03:68-03:98, 03:100-03:117, 03:119-03:136, 03:138-03:143, 03:146-03:155, 03:157-03:165, 03:167-03:169Q, 03:171, 03:173-03:181, 03:183-03:194, 03:196-03:230, 03:232-03:247, 03:249-03:263, 03:265N-03:277N, 03:278[w], 03:279-03:280, 03:282-03:284	*02:02:13, 02:02:29, 06:03:01[w], 06:132:01-06:132:02, 07:96:01-07:96:02, 07:314:02, 15:02:10, 15:02:17, 15:43
16	150 bp	1070 bp	*03:07, 03:10, 03:15, 03:29, 03:45, 03:163, 03:226, 03:268	*01:14, 02:02:13, 02:02:29, 04:01:23, 05:01:12, 05:29:02, 06:02:01:01-06:02:01:03, 06:02:03-06:04, 06:06-06:10, 06:12-06:76:01, 06:77-06:81, 06:83-06:146, 06:148-06:152N, 07:07, 07:09, 07:76:01-07:76:02, 07:315, 07:328, 07:406, 12:04:01, 14:12, 14:49, 15:02:10, 15:02:17, 15:99, 17:01:01:01-17:01:03, 17:01:05-17:21, 17:23-17:29, 18:01-18:09, **B*15:277, B*35:222**
	250 bp		*03:218, 03:252	
17[5]	100 bp 135 bp	1070 bp	*03:20N, 03:101 *03:05, 03:25, 03:27, 03:167	
18	165 bp 195 bp 225 bp	1070 bp	*03:102, 03:263 *03:83 *03:23	**B*15:96, B*56:37**
19[5]	105 bp 250 bp	**800 bp**	*03:24 *03:33, 03:115, 03:236	*15:90 *04:106, 08:78
20	160 bp 250 bp 455 bp	1070 bp	*03:25, 03:155 *03:47, 03:227, 03:252 *03:227	*08:95, **B*35:252** ***12:126**
21	210 bp 240 bp	1070 bp	*03:26 *03:57, 03:88	
22	200 bp	**800 bp**	*03:15, 03:27, 03:38:01-03:38:02, 03:69, 03:130, 03:136, 03:163, 03:237, 03:246, 03:274, 03:277N	*02:12, 02:49, 02:55, 04:03:01, 04:06, 04:16, 04:80, 04:107, 04:147, 04:160, 04:171, 04:190, 06:70:01, 06:132:01-06:132:02, 07:20, 07:96:01-07:96:02, 07:127, 07:263, 07:390, 12:140, 15:03, 15:16, 15:25
	255 bp		*03:213	
23[5]	90 bp 260 bp	1070 bp	*03:28, 03:49, 03:117 *03:22Q, 03:90, 03:103, 03:153 03:169Q	*01:65, 05:86
24	165 bp 200 bp	1070 bp	*03:120, 03:184, 03:200, 03:229N *03:30, 03:65, 03:79, 03:121N	

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25	260 bp	1070 bp	*03:207	
	305 bp		*03:32, 03:45, 03:136	*04:80, 04:100, 04:110[w], 04:178, 06:143, 07:10, 07:43, 07:196, 15:25, 15:62, **B*35:178, B*35:282**
	355 bp		*03:38:02, 03:69, 03:130, 03:136, 03:163, 03:246, 03:274	*04:80, 04:100, 04:110[w], 04:178, 06:143, 07:10, 07:43, 07:196, 07:367, 12:44, 15:03, 15:16, 15:25
	470 bp		*03:171, 03:211:01-03:211:02	*04:144, 05:03, 05:93, 06:73, 08:20, 08:40, 12:109
26[5,7]	70 bp	1070 bp	*03:34, 03:142, 03:261, 03:272	
	105 bp		*03:36, 03:77, 03:187	
	255 bp		*03:13:01-03:13:02, 03:35, 03:125, 03:176, 03:178, 03:198, 03:267	*05:86, 07:133, 07:242, 07:330, **B*15:96**
27[5]	75 bp	1070 bp	*03:11:01-03:11:02, 03:18:02, 03:37:01-03:37:02, 03:64:01	*02:08, 02:42, 06:03:01, 07:314:02, 12:03:23, 15:10:02-15:10:03, 15:113
	210 bp		*03:208N	
	275 bp		*03:15, 03:32, 03:45, 03:60, 03:136	*02:49, 02:75, 04:03:01-04:03:02, 04:06, 04:16, 04:80, 04:147, 04:160, 04:171, 06:03:01, 06:132:01-06:132:02, 07:96:01-07:96:02, 07:314:02, 15:25, 15:62
28[5,8]	90 bp	1070 bp	*03:258	
	165 bp		*03:16, 03:41:01-03:41:02, 03:113, 03:147, 03:151	*01:97, 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, 04:01:23-04:01:25, 04:01:27-04:01:67, 04:03:01-04:04:01, 04:05-04:20, 04:23-04:49, 04:51-04:63, 04:65-04:76, 04:78-04:94:01, 04:95N-04:98:02, 04:100-04:119, 04:121-04:155, 04:157-04:159, 04:161-04:174, 04:176-04:177, 04:179, 04:181-04:197, 06:02:08, 07:02:32, 12:03:20, 14:02:01, 14:02:03-14:02:10, 14:02:12-14:16, 14:18-14:31, 14:33-14:43, 14:45-14:67, 14:69, 15:77, 16:01:06, 18:01-18:09, **B*13:13:02, B*15:01:17, B*15:78:03**
29	140 bp	1070 bp	*03:98	
	170 bp		*03:51, 03:96, 03:161, 03:165, 03:194	*04:64:01
	285 bp		*03:39, 03:67	*06:53:01, 07:56:01, 07:60, 07:79, 07:109, **B*08:39**
30[7]	150 bp	1070 bp	*03:61	
	175 bp		*03:46, 03:61, 03:96, 03:194, 03:221	*04:64:01
31[5]	100 bp	**800 bp**	*03:59, 03:123	
	210 bp		*03:44	
	555 bp		*03:58, 03:86, 03:94, 03:99, 03:209	*05:85, 05:107, 15:37, 15:102, 16:18

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32[5,8]	90 bp	1070 bp	*03:58, 03:189N	*01:03, 01:24, 01:78, 04:37, 05:85, 07:364
	185 bp		*03:48, 03:84, 03:174	
33[5]	110 bp	1070 bp	*03:62	
	180 bp		*03:224N	
	310 bp		*03:167	**B*07:93, B*08:39**
	365 bp		*03:43:01-03:43:02, 03:119, 03:132, 03:175, 03:271	*07:60, 07:79, 12:58, 14:10, **B*35:101:02**
34	130 bp	1070 bp	*03:54, 03:98	
	195 bp		*03:192	
	240 bp		*03:53	*12:17
35[5,7]	70 bp	1070 bp	*03:18:02, 03:64:01	*02:08, 12:03:23, 15:10:02-15:10:03
	130 bp		*03:56, 03:214	**B*44:208**
	155 bp		*03:229N	
	210 bp		*03:79, 03:82, 03:85	
	250 bp		*03:244Q	
36	160 bp	1070 bp	*03:122, 03:206, 03:212, 03:219	*04:84, 07:167
	240 bp		*03:50, 03:72	
37	140 bp	1070 bp	*03:16, 03:21, 03:55, 03:80, 03:92, 03:113, 03:117, 03:161, 03:251	*01:97, 04:01:01:01-04:01:04, 04:01:08, 04:01:10-04:01:21, 04:01:23-04:01:25, 04:01:27-04:01:67, 04:03:01-04:04:01, 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-04:98:02, 04:100-04:146, 04:148-04:159, 04:161-04:174, 04:176, 04:179, 04:181-04:197, 06:02:08, 07:02:32, 08:01:07, 08:02:07, 08:33:02, 12:03:20, 14:02:01, 14:02:03-14:02:11, 14:02:13-14:16, 14:18-14:19, 14:21N-14:24:02, 14:26-14:31, 14:33-14:37, 14:39-14:69, 16:01:06, 18:01-18:02, 18:04-18:07N, 18:09
38[5,8]	70 bp	1070 bp	*03:184	
	100 bp		*03:52, 03:95	*04:43, 04:143, 04:171
	155 bp		*03:145	
	265 bp		*03:73	
39[5]	110 bp	1070 bp	*03:36, 03:77, 03:187	*04:34, 04:122, 14:53, **B*13:13:02**
	160 bp		*03:63, 03:145	
	195 bp		*03:174	
40[5]	70 bp	1070 bp	*03:80	**A*68:118, B*08:115**
	230 bp		*03:126	
	260 bp		*03:66	
41[5,6]	120 bp	1070 bp	*03:68	
	190 bp		*03:100, 03:146	*02:83, 06:02:03, 06:46N, 08:01:09, 08:24, 17:01:01:01-17:01:01:03, 17:02-17:03, 17:05

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

	295 bp		*03:205	*04:161[w]
42[5]	120 bp 165 bp 200 bp	1070 bp	*03:78 *03:201N *03:70, 03:127, 03:179, 03:192, 03:274, 03:277N	**B*07:234, B*15:315, B*55:30**
43[7]	230 bp 270 bp	**800 bp**	*03:74, 03:81, 03:137, 03:175, 03:199, 03:223, 03:245 *03:97, 03:153	**B*15:96, B*56:37**
44[5]	70 bp 160 bp 250 bp	1070 bp	*03:91:01 *03:75, 03:120, 03:229N *03:244Q	
45	150 bp 295 bp	1070 bp	*03:93, 03:206, 03:212 *03:76	*04:84, 07:167
46	150 bp 210 bp	1070 bp	*03:155 *03:58, 03:86, 03:94, 03:99	*08:95, **B*35:252** *01:02:01-01:02:31, 01:02:33-01:03, 01:06-01:07:01, 01:08, 01:10-01:11, 01:13-01:20, 01:23-01:33, 01:38-01:48, 01:51-01:54, 01:56N-01:76, 01:78, 01:80-01:90, 01:92-01:96, 01:98N-01:100, 01:103-01:107, 04:37, 05:85, 05:107, 14:45, 15:102
47[5]	70 bp 195 bp 240 bp	1070 bp	*03:14, 03:21, 03:55, 03:92, 03:117, 03:161 *03:109 *03:57, 03:125, 03:176	*01:65, 05:86, 07:133, 07:330
48[9]			**Negative Control**	

[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-C*03 SSP typings.
When the primers in a primer mix can give rise to HLA-specific PCR products of more than one length this is indicated if the size difference is more than 20 base pairs. Size differences of 20 base pairs or less are not given. For high resolution SSP kits, the alleles listed are specified according to amplicon length.
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 inherit 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.

[2]The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

[3]For several HLA Class I alleles 1st and/or 4th exon(s) and beyond, as well as 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. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

[4]Due to the sharing of sequence motifs between HLA-C alleles, non-HLA-C*03 alleles will be amplified by primer mixes 1 to 3, 5, 7 to 16, 19, 20, 22, 23, 25 to 39, 41 and 45 to 47 . In addition, a few HLA-B alleles will be amplified by primer mixes 1, 2, 5 to 8, 12 to 14, 16, 18, 20, 25, 26, 28, 29, 33, 35, 39, 40, 42, 43 and 46.

[5]HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

[6]Primer mix 7 and 41 may give rise to a lower yield of HLA-specific PCR product than the other HLA-C*03 primer mixes.

[7]Primer mixes 15, 26, 30, 35 and 43 have a tendency to giving rise to primer oligomer formation.

[8]Primer mixes 28, 32 and 38 may have tendencies of unspecific amplifications.

[9]Primer mix 48 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.

'w', might be weakly amplified.

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

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y

Lot-specific information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	280	210	280	275	275	90	110	255	240	245	145	110
PCR product						215	185				230	140
											415	260
												305
												590
Length of int. pos. control[1]	800	1070	800	1070	1070	800	1070	1070	1070	800	1070	1070
5'-primer(s)[2]	105	419	105	355	355	413	201	374	105	105	28	126
	5' -gCT 3'	5' -gTC 3'	5' -gCT 3'	5' -TCA 3'	5' -CCC 3'	5' -TgT 3'	5' -CCg 3'	5' -CTA 3'	5' -gCT 3'	5' -gCT 3'	5' -TCA 3'	5' -ggA 3'
						539	201	379			485	355
						5' -gTg 3'	5' -CCg 3'	5' -ACC 3'			5' -CAA 3'	5' -TCA 3'
								379				
								5' -ACT 3'				
3'-primer(s)[3]	343	589	343	589	589	589	270	589	302	307	85	343
	5' -C 3'	5' -CTT 3'	5' -T 3'	5' -CTT 3'	5' -CTT 3'	5' -CTT 3'	5' -TAg 3'	5' -CTT 3'	5' -ggT 3'	5' -CCA 3'	5' -CAg 3'	5' -T 3'
				589			343			312	270	426
				5' -CTT 3'			5' -T 3'			5' -AgT 3'	5' -TAg 3'	5' -TCC 3'
											589	452
											5' -CTT 3'	5' -Cgg 3'
												618
												5' -CT 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
Length of spec.	80	70	135	150	100	165	105	160	210	200	90	165
PCR product	140	210		250	135	195	250	250	240	255	260	200
						225		455				
Length of int. pos. control[1]	1070	1070	1070	1070	1070	1070	800	1070	1070	800	1070	1070
5'-primer(s)[2]	361	105	105	201	19	406	105	19	391	134	367	355
	5' -AgT 3'	5' -gCC 3'	5' -gCT 3'	5' -CCg 3'	5' -CCT 3'	5' -gCA 3'	5' -gCT 3'	5' -CCg 3'	5' -ACA 3'	5' -CCA 3'	5' -TgC 3'	5' -TCA 3'
	419	420		637	363	436	3rd I	86	395	134	368	355
	5' -gTC 3'	5' -TTA 3'		5' -ACT 3'	5' -AgC 3'	5' -AgA 3'	5' -Cgg 3'	5' -CAA 3'	5' -gCA 3'	5' -CCA 3'	5' -gTC 3'	5' -TCC 3'
				637	3rd I	463		194	420	3rd I	374	
				5' -ACA 3'	5' -Cgg 3'	5' -TgA 3'		5' -CgT 3'	5' -TTC 3'	5' -Cgg 3'	5' -CTA 3'	
				730				467			539	
				5' -ggA 3'				5' -CTT 3'			5' -gCg 3'	
								637				
								5' -ACA 3'				
3'-primer(s)[3]	459	134	201	312	70	589	167	97	589	289	589	470
	5' -AgA 3'	5' -AgT 3'	5' -CTC 3'	5' -AgT 3'	5' -ggC 3'	5' -CTT 3'	5' -ACC 3'	5' -gTA 3'	5' -CTT 3'	5' -AgC 3'	5' -CTT 3'	5' -TCT 3'
		589		846	459		307	302		289		473
		5' -CTT 3'		5' -CAC 3'	5' -AgA 3'		5' -CCA 3'	5' -ggC 3'		5' -AgC 3'		5' -CgA 3'
					662		323	589		295		487
					5' -CAC 3'		5' -AgC 3'	5' -CTT 3'		5' -TCA 3'		5' -CgT 3'
							787	846		749		513
							5' -TCT 3'	5' -CAC 3'		5' -CCg 3'		5' -TCT 3'
										806		514
										5' -CTA 3'		5' -CTT 3'
												515
												5' -CCC 3'
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec.	260	70	75	90	140	150	100	90	110	130	70	160
PCR product	305	105	210	165	170	175	210	185	180	195	130	240
	355	255	275		285		555		310	240	155	
	470								365		210	
											250	
Length of int.	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070
pos. control[1]												
5'-primer(s)[2]	289	363	105	459	97	105	98	105	343	98	105	133
	5' -Agg 3'	5' -Agg 3'	5' -gCT 3'	5' -gAT 3'	5' -TCg 3'	5' -gCT 3'	5' -CTA 3'	5' -gCT 3'	5' -CCA 3'	5' -CTA 3'	5' -gCT 3'	5' -CCT 3'
	341	385			459	459	421	368	3rd I	459	355	394
	5' -ggA 3'	5' -ggT 3'			5' -gAT 3'	5' -gAT 3'	5' -ACC 3'	5' -gTg 3'	5' -Cgg 3'	5' -gAT 3'	5' -TCA 3'	5' -ggg 3'
	652	527					530					464
	5' -CCA 3'	5' -TgT 3'					5' -ggT 3'					5' -gCC 3'
	652	560										3rd I
	5' -CCA 3'	5' -CgA 3'										5' -Cgg 3'
	863											
	5' -Cgg 3'											
3'-primer(s)[3]	353	589	134	506	343	231	361	153	363	295	134	343
	5' -TgA 3'	5' -CTT 3'	5' -AgC 3'	5' -Tgg 3'	5' -T 3'	5' -..C 3'	5' -CCA 3'	5' -ACC 3'	5' -ATg 3'	5' -TCC 3'	5' -AgC 3'	5' -T 3'
	956		142	578	559	235	589	242	419	544	276	589
	5' -CAg 3'		5' -TgA 3'	5' -TgA 3'	5' -Cgg 3'	5' -CTT 3'	5' -CTT 3'	5' -CCA 3'	5' -Cgg 3'	5' -ggg 3'	5' -Cgg 3'	5' -CTT 3'
			273	589	583	566		242	662	559	282	704
			5' -TTT 3'	5' -CTC 3'	5' -gTg 3'	5' -CCT 3'		5' -CCT 3'	5' -CAg 3'	5' -Cgg 3'	5' -gAC 3'	5' -CCA 3'
			341	589	594	595		257	728	613	434	719
			5' -CgT 3'	5' -CTC 3'	5' -CCC 3'	5' -CCT 3'		5' -CCT 3'	5' -CCT 3'	5' -gCT 3'	5' -CCA 3'	5' -AgA 3'
					595			419			452	
					5' -CCT 3'			5' -CgA 3'			5' -Cgg 3'	
											470	
											5' -TCT 3'	
											515	
											5' -CCC 3'	
											563	
											5' -CgA 3'	
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

Well No.	37	38	39	40	41	42	43	44	45	46	47
Length of spec.	140	70	110	70	120	120	230	70	150	150	70
PCR product		100	160	230	190	165	270	160	295	210	195
		155	195	260	295	200		250			240
		265									
Length of int.	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070
pos. control[1]											
5'-primer(s)[2]	459	105	105	28	265	134	104	355	91	194	385
	5' -gAT 3'	5' -gCT 3'	5' -gCT 3'	5' -TCA 3'	5' -CgA 3'	5' -CCA 3'	5' -CTT 3'	5' -TCA 3'	5' -ggC 3'	5' -CgT 3'	5' -ggT 3'
		459	459	560	3rd I	459	116		490	368	391
		5' -gAT 3'	5' -gAT 3'	5' -CAC 3'	5' -Cgg 3'	5' -gAT 3'	5' -gCT 3'		5' -CgA 3'	5' -gTg 3'	5' -ACA 3'
							355		3rd I		434
							5' -TCT 3'		5' -Cgg 3'		5' -CAg 3'
							367				560
							5' -TgC 3'				5' -CAC 3'
							409				
							5' -ggC 3'				
3'-primer(s)[3]	559	221	221	85	343	295	302	382	343	302	589
	5' -CgT 3'	5' -ACA 3'	5' -ACA 3'	5' -CAg 3'	5' -T 3'	5' -TCA 3'	5' -ggC 3'	5' -CCT 3'	5' -T 3'	5' -ggC 3'	5' -CTT 3'
		328	233	118	727	299	589	470	589	538	
		5' -gTC 3'	5' -CCA 3'	5' -gCA 3'	5' -CCg 3'	5' -TCT 3'	5' -CTT 3'	5' -TCT 3'	5' -CTT 3'	5' -CCg 3'	
		487	257	589	746	538		473	704		
		5' -CgT 3'	5' -CCT 3'	5' -CTT 3'	5' -gAA 3'	5' -CAT 3'		5' -CgA 3'	5' -CCA 3'		
		518	527		845	585		476			
		5' -CCA 3'	5' -CCA 3'		5' -ACT 3'	5' -AgC 3'		5' -CgA 3'			
		523				613		563			
		5' -ACA 3'				5' -gCT 3'		5' -CgA 3'			
Well No.	37	38	39	40	41	42	43	44	45	46	47

[1]The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

[2]The nucleotide position 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.

[3]The nucleotide position 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.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*03 SSP subtyping kit[2]

					Well													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				Prod. No.:	201299401	201554602	201299403	201299404	201299405	201299406	201554607	201554608	201299409	201554610	201554611	201554612	201299413	201314314	201299415	201554616
	IHWC cell line[1]		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
101.611-12u – without *Taq* polymerase, IFU-02

Visit www.olerup-ssp.com for **"Instructions for Use" (IFU)**

Lot No.: 63Y **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*03 SSP subtyping kit[2]

					Well															
					17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
				Prod. No.:	201434017	201434018	201554619	201554620	201299421	201554622	201554623	201554624	201554625	201554626	201554627	201554628	201554629	201554630	201434031	201554632
	IHWC cell line[1]		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
101.611-12u – without *Taq* polymerase, IFU-02

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"Instructions for Use" (IFU)

Lot No.: 63Y **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*03 SSP subtyping kit[2]

					Well													
					33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
				Prod. No.:	201554633	201554634	201554635	201554636	201299437	201554638	201554639	201554640	201434041	201554642	201554643	201554644	201434045	201314346	201554647
	IHWC cell line[1]		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
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

[1]The provided cell line HLA specificities are retrieved from the http://www.ihwg.org/hla web site. The specificity of an individual cell line may thus be subject to change.

[2]The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional 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 40, 42 to 45 and 47 were available. The specificities of the primers in primer solutions 8, 11, 17 to 19, 21, 23, 25, 26, 29, 31 to 33, 35, 36, 39, 42, 43, 45 and 47 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solution 20 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 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 7, 8, 16 to 18, 21, 23, 25, 31, 36, 41, 43 and 45 to 47 it was not possible to test one to four of the 5'-primers and in primer solutions 10 to 12, 17, 19, 22, 27 to 30, 32, 33, 35, 36, 39, 41, 42 and 45 one to four 3'-primers were not possible to test. Additional primers in primer solutions 6, 12, 14, 16, 22, 27, 30, 41 and 46 were tested by separately adding an additional 5'- or 3'-primer.

101.611-12 – including *Taq* polymerase, IFU-01
101.611-12u – without *Taq* polymerase, IFU-02

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Lot No.: 63Y **Lot-specific information**

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

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

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