

Lot No.: **05S**

Lot-specific information  
**Olerup SSP<sup>®</sup> HLA-C\*15**

Product number: 101.626-12 – including *Taq* polymerase  
101.626-12u – without *Taq* polymerase  
Lot number: 05S  
Expiry date: 2015-September-01  
Number of tests: 12  
Number of wells per test: 27  
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. 05S.**

**CHANGES COMPARED TO THE PREVIOUS OLERUP SSP<sup>®</sup>  
HLA-C\*15 LOT (74N)**

The HLA-C\*15 kit is updated for new alleles to enable separation of:

- Confirmed<sup>1</sup> 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\*15 including and without *Taq* polymerase is now described in one common Product Insert.

<sup>1</sup>As described in section Uniquely Identified Alleles.

The HLA-C\*15 specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup SSP<sup>®</sup>* HLA-C\*15 lot was made (**Lot No. 74N**).

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

Well	5'-primer	3'-primer	rationale
11	Added	-	5'-primer added for the C*15:02:09 allele.

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**PRODUCT DESCRIPTION**

**HLA-C\*15 SSP typing**

**CONTENT**

The primer set contains 5'- and 3'-primers for identifying the C\*15:02 to C\*15:66 alleles.

**PLATE LAYOUT**

Each HLA-C\*15 test consists of 27 PCR reactions in a 32 well cut PCR plate. Wells 28 to 32 are empty.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	empty	empty	empty	empty	empty

The 32 well PCR plate is marked with 'HLA-C\*15' in silver/gray ink.

Well No. 1 is marked with the Lot No. '05S'.

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 32 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\*15 SSP subtypings will be influenced by five C\*01, the C\*02, most C\*03, the C\*04, the C\*05, most C\*06, most C\*07, the C\*08, the C\*12, the C\*14, the C\*16, the C\*17 and two C\*18 alleles, when present on the other haplotype.

In addition, primer mix 5 amplifies the B\*35:03:11 and B\*35:205 alleles, primer mix 7 amplifies the B\*35:08:02, 35:08:05 and B\*67:02 alleles, primer mix 8 weakly amplifies the B\*07:78, B\*13:18, B\*13:31, B\*13:41, B\*15:73, B\*54:10, B\*54:20, B\*55:09, B\*55:21, B\*55:37 and B\*55:52 alleles, primer mix 12 amplifies the B\*40:164 allele, primer mix 14 amplifies the B\*46:11, B\*46:18, B\*56:08 and B\*56:14 alleles, primer mix 16 amplifies the B\*35:222, primer mix 18 amplifies the B\*15:200, B\*51:115 and B\*58:05 alleles and primer mix 26 amplifies the B\*35:132 allele.

**UNIQUELY IDENTIFIED ALLELES**

All the HLA-C\*15 alleles, i.e. **C\*15:02 to C\*15:66**, recognized by the HLA Nomenclature Committee in January 2013<sup>1</sup> will be amplified by the primers in the HLA-C\*15 SSP kit.

The HLA-C\*15 kit enables separation of the confirmed HLA-C\*15 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\*15 alleles is listed below.

The HLA-C\*15 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\*15:31 and C\*15:33 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 18.

The C\*15:32Q and C\*15:41 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 24.

The C\*15:34 and C\*15:39 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 17.

The C\*15:35 and C\*15:47 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

The C\*15:44 and C\*15:45 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 20.

The HLA-C\*15 subtyping kit cannot distinguish the following silent mutations: C\*15:02:01 to C\*15:02:15 alleles, the C\*15:05:01 to C\*15:05:08 alleles, the C\*15:06:01 to C\*15:06:03 alleles or the C\*15:10:01 and C\*15:10:02 alleles.

<sup>1</sup>HLA-C alleles listed on the IMGT/HLA web page 2013-January-11, release 3.11.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

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**ALLELE CONFIRMATION STATUS**

<b>C*15:02:04</b>	<b>Confirmed</b>	<b>C*15:11</b>	<b>Confirmed</b>	C*15:43	Unconfirmed
<b>C*15:02:05</b>	<b>Confirmed</b>	C*15:12	Unconfirmed	<b>C*15:44</b>	<b>Confirmed</b>
C*15:02:06	Unconfirmed	<b>C*15:13</b>	<b>Confirmed</b>	C*15:45	Unconfirmed
<b>C*15:02:07</b>	<b>Confirmed</b>	C*15:15	Unconfirmed	C*15:46	Unconfirmed
C*15:02:08	Unconfirmed	C*15:16	Unconfirmed	C*15:47	Unconfirmed
C*15:02:09	Unconfirmed	<b>C*15:17</b>	<b>Confirmed</b>	C*15:48	Unconfirmed
C*15:02:10	Unconfirmed	C*15:18	Unconfirmed	C*15:49	Unconfirmed
C*15:02:11	Unconfirmed	<b>C*15:19</b>	<b>Confirmed</b>	C*15:50	Unconfirmed
C*15:02:12	Unconfirmed	C*15:21	Unconfirmed	C*15:51	Unconfirmed
C*15:02:13	Unconfirmed	<b>C*15:22</b>	<b>Confirmed</b>	<b>C*15:52</b>	<b>Confirmed</b>
C*15:02:14	Unconfirmed	<b>C*15:23</b>	<b>Confirmed</b>	C*15:53	Unconfirmed
C*15:02:15	Unconfirmed	<b>C*15:24</b>	<b>Confirmed</b>	C*15:54	Unconfirmed
C*15:03	Unconfirmed	C*15:25	Unconfirmed	C*15:55	Unconfirmed
<b>C*15:04</b>	<b>Confirmed</b>	<b>C*15:26</b>	<b>Confirmed</b>	<b>C*15:56</b>	<b>Confirmed</b>
C*15:05:01	Unconfirmed	<b>C*15:27</b>	<b>Confirmed</b>	C*15:57	Unconfirmed
<b>C*15:05:02</b>	<b>Confirmed</b>	<b>C*15:28</b>	<b>Confirmed</b>	C*15:58	Unconfirmed
C*15:05:03	Unconfirmed	C*15:29	Unconfirmed	C*15:59	Unconfirmed
C*15:05:04	Unconfirmed	<b>C*15:30</b>	<b>Confirmed</b>	C*15:60	Unconfirmed
C*15:05:05	Unconfirmed	<b>C*15:31</b>	<b>Confirmed</b>	C*15:61	Unconfirmed
<b>C*15:05:06</b>	<b>Confirmed</b>	<b>C*15:32Q</b>	<b>Confirmed</b>	C*15:62	Unconfirmed
C*15:05:07	Unconfirmed	<b>C*15:33</b>	<b>Confirmed</b>	C*15:63	Unconfirmed
C*15:05:08	Unconfirmed	C*15:34	Unconfirmed	C*15:64	Unconfirmed
<b>C*15:06:01</b>	<b>Confirmed</b>	C*15:35	Unconfirmed	C*15:65	Unconfirmed
<b>C*15:06:02</b>	<b>Confirmed</b>	<b>C*15:36</b>	<b>Confirmed</b>	C*15:66	Unconfirmed
<b>C*15:06:03</b>	<b>Confirmed</b>	C*15:37	Unconfirmed		
<b>C*15:07</b>	<b>Confirmed</b>	C*15:38	Unconfirmed		
C*15:08	Unconfirmed	<b>C*15:39</b>	<b>Confirmed</b>		

<sup>1</sup>Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2013-January-11, release 3.11.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

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**RESOLUTION IN HOMO- AND HETEROZYGOTES**

A total of 87 alleles generate 45 amplification patterns that can be combined in 1035 homozygous and heterozygous combinations. 592 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.

```

-+-----+-----+-----+--- *15:40, *15:40 = *15:40, *15:64
-+-----+-----+-----+--- *15:04, *15:04 = *15:04, *15:64
-+-----+-----+-----+--+ *15:04, *15:30 = *15:30, *15:30 = *15:30, *15:64
-+-----+-----+-----+--- *15:04, *15:40 = *15:04, *15:65 = *15:40, *15:65 = *15:64, *15:65 =
*15:65, *15:65
+-----+-----+-----+--- *15:17, *15:43 = *15:43, *15:43
+-----+-----+-----+--- *15:11, *15:11 = *15:11, *15:17
+-----+-----+-----+--- *15:16, *15:16 = *15:16, *15:17
+-----+-----+-----+--- *15:24, *15:24 = *15:24, *15:64
+-----+-----+-----+--- *15:02:01, *15:02:01 = *15:02:01, *15:64
+-----+-----+-----+--- *15:06:01, *15:06:01 = *15:06:01, *15:40 = *15:06:01, *15:64
+-----+-----+-----+--- *15:05:01, *15:05:01 = *15:05:01, *15:64
+-----+-----+-----+--- *15:04, *15:09 = *15:09, *15:09 = *15:09, *15:64
-+-----+-----+-----+--+ *15:30, *15:40 = *15:30, *15:65
+-----+-----+-----+--- *15:11, *15:63 = *15:17, *15:63
+-----+-----+-----+--+ *15:02:01, *15:56 = *15:56, *15:56 = *15:56, *15:64
+-----+-----+-----+--+ *15:02:01, *15:52 = *15:52, *15:52 = *15:52, *15:64
+-----+-----+-----+--- *15:02:01, *15:32Q = *15:32Q, *15:32Q = *15:32Q, *15:64
+-----+-----+-----+--- *15:02:01, *15:48 = *15:48, *15:64
+-----+-----+-----+--- *15:02:01, *15:38 = *15:38, *15:38 = *15:38, *15:64
+-----+-----+-----+--- *15:02:01, *15:35 = *15:35, *15:35 = *15:35, *15:64
+-----+-----+-----+--- *15:02:01, *15:44 = *15:44, *15:44 = *15:44, *15:64
+-----+-----+-----+--- *15:02:01, *15:42 = *15:42, *15:42 = *15:42, *15:64
+-----+-----+-----+--- *15:02:01, *15:31 = *15:31, *15:31 = *15:31, *15:64
+-----+-----+-----+--- *15:02:01, *15:34 = *15:34, *15:34 = *15:34, *15:64
+-----+-----+-----+--- *15:02:01, *15:15 = *15:15, *15:15 = *15:15, *15:64
+-----+-----+-----+--- *15:02:01, *15:13 = *15:02:01, *15:17 = *15:13, *15:13 = *15:13,
*15:17 = *15:13, *15:64 = *15:17, *15:64
+-----+-----+-----+--- *15:02:01, *15:12 = *15:02:01, *15:24 = *15:12, *15:12 = *15:12,
*15:24 = *15:12, *15:64
+-----+-----+-----+--- *15:02:01, *15:10:01 = *15:10:01, *15:64
+-----+-----+-----+--- *15:02:01, *15:18 = *15:02:01, *15:63 = *15:18, *15:18 = *15:18,
*15:63 = *15:18, *15:64 = *15:63, *15:64
+-----+-----+-----+--- *15:02:01, *15:08 = *15:08, *15:08 = *15:08, *15:64
+-----+-----+-----+--- *15:06:01, *15:24 = *15:24, *15:40
+-----+-----+-----+--- *15:02:01, *15:06:01 = *15:02:01, *15:37 = *15:02:01, *15:40 =
*15:06:01, *15:37 = *15:37, *15:37 = *15:37, *15:40 = *15:37, *15:64
+-----+-----+-----+--- *15:05:01, *15:29 = *15:29, *15:29 = *15:29, *15:64
+-----+-----+-----+--- *15:05:01, *15:46 = *15:46, *15:46 = *15:46, *15:64
+-----+-----+-----+--- *15:05:01, *15:36 = *15:36, *15:36 = *15:36, *15:64
+-----+-----+-----+--- *15:05:01, *15:23 = *15:23, *15:23 = *15:23, *15:64
+-----+-----+-----+--- *15:05:01, *15:06:01 = *15:05:01, *15:22 = *15:05:01, *15:40 =
*15:06:01, *15:22 = *15:22, *15:22 = *15:22, *15:40 = *15:22, *15:64
+-----+-----+-----+--- *15:04, *15:27 = *15:09, *15:27 = *15:27, *15:64
+-----+-----+-----+--- *15:04, *15:24 = *15:09, *15:24
+-----+-----+-----+--- *15:02:01, *15:04 = *15:02:01, *15:09
+-----+-----+-----+--- *15:04, *15:19 = *15:09, *15:19 = *15:19, *15:19 = *15:19, *15:64
+-----+-----+-----+--- *15:04, *15:06:01 = *15:06:01, *15:09 = *15:06:01, *15:65 = *15:09,
*15:40 = *15:09, *15:65
    
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+++++	-----	---	*15:04, *15:05:01 = *15:05:01, *15:09
+++++	-----	---	*15:02:01, *15:03 = *15:03, *15:03 = *15:03, *15:64
+++++	-----	---	*15:16, *15:25 = *15:17, *15:25 = *15:25, *15:43
+++++	-----	-+	*15:13, *15:56 = *15:17, *15:56
+++++	-----	+--	*15:13, *15:52 = *15:17, *15:52
+++++	-----	---	*15:13, *15:32Q = *15:17, *15:32Q
+++++	-----	---	*15:13, *15:38 = *15:17, *15:38
+++++	-----	---	*15:13, *15:35 = *15:17, *15:35
+++++	-----	---	*15:13, *15:44 = *15:17, *15:44
+++++	-----	---	*15:13, *15:42 = *15:17, *15:42
+++++	-----	---	*15:13, *15:31 = *15:17, *15:31
+++++	-----	---	*15:13, *15:34 = *15:17, *15:34
+++++	-----	---	*15:13, *15:15 = *15:15, *15:17
+++++	-----	-+	*15:12, *15:56 = *15:24, *15:56
+++++	-----	+--	*15:12, *15:52 = *15:24, *15:52
+++++	-----	---	*15:12, *15:32Q = *15:24, *15:32Q
+++++	-----	---	*15:12, *15:48 = *15:24, *15:48
+++++	-----	---	*15:12, *15:38 = *15:24, *15:38
+++++	-----	---	*15:12, *15:35 = *15:24, *15:35
+++++	-----	---	*15:12, *15:44 = *15:24, *15:44
+++++	-----	---	*15:12, *15:42 = *15:24, *15:42
+++++	-----	---	*15:12, *15:31 = *15:24, *15:31
+++++	-----	---	*15:12, *15:34 = *15:24, *15:34
+++++	-----	---	*15:12, *15:15 = *15:15, *15:24
+++++	-----	---	*15:12, *15:13 = *15:12, *15:17 = *15:13, *15:24 = *15:17, *15:24
+++++	-----	---	*15:02:01, *15:43 = *15:13, *15:43 = *15:43, *15:64
+++++	-----	---	*15:10:01, *15:12 = *15:10:01, *15:24
+++++	-----	-+	*15:18, *15:56 = *15:56, *15:63
+++++	-----	+--	*15:18, *15:52 = *15:52, *15:63
+++++	-----	---	*15:18, *15:32Q = *15:32Q, *15:63
+++++	-----	---	*15:18, *15:48 = *15:48, *15:63
+++++	-----	---	*15:18, *15:38 = *15:38, *15:63
+++++	-----	---	*15:18, *15:35 = *15:35, *15:63
+++++	-----	---	*15:18, *15:44 = *15:44, *15:63
+++++	-----	---	*15:18, *15:42 = *15:42, *15:63
+++++	-----	---	*15:18, *15:31 = *15:31, *15:63
+++++	-----	---	*15:18, *15:34 = *15:34, *15:63
+++++	-----	---	*15:15, *15:18 = *15:15, *15:63
+++++	-----	---	*15:02:01, *15:11 = *15:11, *15:13 = *15:11, *15:18 = *15:11, *15:64 = *15:13, *15:18 = *15:13, *15:63 = *15:17, *15:18
+++++	-----	---	*15:12, *15:18 = *15:12, *15:63 = *15:18, *15:24 = *15:24, *15:63
+++++	-----	---	*15:08, *15:13 = *15:08, *15:17
+++++	-----	---	*15:08, *15:12 = *15:08, *15:24
+++++	-----	---	*15:08, *15:18 = *15:08, *15:63
+++++	-----	---	*15:02:01, *15:07 = *15:02:01, *15:21 = *15:07, *15:21 = *15:07, *15:64 = *15:21, *15:21 = *15:21, *15:64
+++++	-----	---	*15:07, *15:17 = *15:07, *15:43
+++++	-----	-+	*15:06:01, *15:56 = *15:37, *15:56 = *15:40, *15:56
+++++	-----	+--	*15:06:01, *15:52 = *15:37, *15:52 = *15:40, *15:52
+++++	-----	---	*15:06:01, *15:32Q = *15:32Q, *15:37 = *15:32Q, *15:40
+++++	-----	---	*15:06:01, *15:48 = *15:37, *15:48 = *15:40, *15:48
+++++	-----	---	*15:06:01, *15:38 = *15:37, *15:38 = *15:38, *15:40
+++++	-----	---	*15:06:01, *15:35 = *15:35, *15:37 = *15:35, *15:40
+++++	-----	---	*15:06:01, *15:44 = *15:37, *15:44 = *15:40, *15:44
+++++	-----	---	*15:06:01, *15:42 = *15:37, *15:42 = *15:40, *15:42
+++++	-----	---	*15:06:01, *15:31 = *15:31, *15:37 = *15:31, *15:40
+++++	-----	---	*15:06:01, *15:34 = *15:34, *15:37 = *15:34, *15:40



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++-----	*15:02:01, *15:26 = *15:06:01, *15:15 = *15:06:01, *15:26 = *15:15, *15:26 = *15:15, *15:37 = *15:15, *15:40 = *15:26, *15:26 = *15:26, *15:37 = *15:26, *15:40 = *15:26, *15:64
++-----	*15:06:01, *15:13 = *15:06:01, *15:17 = *15:13, *15:37 = *15:13, *15:40 = *15:17, *15:37 = *15:17, *15:40
++-----	*15:06:01, *15:12 = *15:12, *15:37 = *15:12, *15:40 = *15:24, *15:37
++-----	*15:06:01, *15:10:01 = *15:10:01, *15:37 = *15:10:01, *15:40
++-----	*15:06:01, *15:18 = *15:06:01, *15:63 = *15:18, *15:37 = *15:18, *15:40 = *15:37, *15:63 = *15:40, *15:63
++-----	*15:06:01, *15:08 = *15:08, *15:37 = *15:08, *15:40
++-----	*15:02:01, *15:29 = *15:05:01, *15:48 = *15:29, *15:48
++-----	*15:02:01, *15:46 = *15:05:01, *15:42 = *15:42, *15:46
++-----	*15:02:01, *15:36 = *15:05:01, *15:34 = *15:34, *15:36
++-----	*15:05:01, *15:13 = *15:05:01, *15:17
++-----	*15:02:01, *15:23 = *15:05:01, *15:18 = *15:05:01, *15:63 = *15:18, *15:23 = *15:23, *15:63
++-----	*15:06:01, *15:29 = *15:22, *15:29 = *15:29, *15:40
++-----	*15:06:01, *15:46 = *15:22, *15:46 = *15:40, *15:46
++-----	*15:06:01, *15:36 = *15:22, *15:36 = *15:36, *15:40
++-----	*15:02:01, *15:22 = *15:05:01, *15:37 = *15:22, *15:37
++-----	*15:06:01, *15:23 = *15:22, *15:23 = *15:23, *15:40
++-----	*15:04, *15:56 = *15:09, *15:56
++-----	*15:04, *15:52 = *15:09, *15:52
++-----	*15:04, *15:32Q = *15:09, *15:32Q
++-----	*15:04, *15:48 = *15:09, *15:48
++-----	*15:04, *15:38 = *15:09, *15:38
++-----	*15:04, *15:35 = *15:09, *15:35
++-----	*15:04, *15:44 = *15:09, *15:44
++-----	*15:04, *15:42 = *15:09, *15:42
++-----	*15:04, *15:31 = *15:09, *15:31
++-----	*15:04, *15:34 = *15:09, *15:34
++-----	*15:02:01, *15:27 = *15:04, *15:15 = *15:09, *15:15 = *15:15, *15:27
++-----	*15:04, *15:13 = *15:04, *15:17 = *15:09, *15:13 = *15:09, *15:17
++-----	*15:04, *15:12 = *15:09, *15:12
++-----	*15:04, *15:10:01 = *15:09, *15:10:01
++-----	*15:04, *15:18 = *15:04, *15:63 = *15:09, *15:18 = *15:09, *15:63
++-----	*15:02:01, *15:19 = *15:04, *15:08 = *15:08, *15:09 = *15:08, *15:19
++-----	*15:06:01, *15:27 = *15:27, *15:40 = *15:27, *15:65
++-----	*15:02:01, *15:65 = *15:04, *15:37 = *15:09, *15:37 = *15:37, *15:65
++-----	*15:06:01, *15:19 = *15:19, *15:40 = *15:19, *15:65
++-----	*15:04, *15:29 = *15:09, *15:29
++-----	*15:04, *15:46 = *15:09, *15:46
++-----	*15:04, *15:36 = *15:09, *15:36
++-----	*15:04, *15:23 = *15:09, *15:23
++-----	*15:04, *15:22 = *15:05:01, *15:65 = *15:09, *15:22 = *15:22, *15:65
++-----	*15:02:01, *15:16 = *15:03, *15:13 = *15:03, *15:16 = *15:03, *15:17 = *15:13, *15:16 = *15:16, *15:64
++-----	*15:03, *15:12 = *15:03, *15:24
++-----	*15:02:01, *15:28 = *15:03, *15:28 = *15:28, *15:28 = *15:28, *15:64
++-----	*15:03, *15:18 = *15:03, *15:63
++-----	*15:03, *15:06:01 = *15:03, *15:37 = *15:03, *15:40
++-----	*15:03, *15:04 = *15:03, *15:09
++-----	*15:12, *15:43 = *15:24, *15:43
++-----	*15:11, *15:12 = *15:11, *15:24
++-----	*15:07, *15:56 = *15:21, *15:56
++-----	*15:07, *15:52 = *15:21, *15:52
++-----	*15:07, *15:32Q = *15:21, *15:32Q

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++-----+ -++-----+ -----+--	*15:07, *15:38 = *15:21, *15:38
++-----+ -++-----+ -----+--	*15:07, *15:35 = *15:21, *15:35
++-----+ -++-----+ -----+--	*15:07, *15:44 = *15:21, *15:44
++-----+ -++-----+ -----+--	*15:07, *15:42 = *15:21, *15:42
++-----+ -++-----+ -----+--	*15:07, *15:31 = *15:21, *15:31
++-----+ -++-----+ -----+--	*15:07, *15:34 = *15:21, *15:34
++-----+ -++-----+ -----+--	*15:07, *15:15 = *15:15, *15:21
++-----+ -++-----+ -----+--	*15:07, *15:13 = *15:13, *15:21 = *15:17, *15:21 = *15:21, *15:43
++-----+ -++-----+ -----+--	*15:07, *15:12 = *15:07, *15:24 = *15:12, *15:21 = *15:21, *15:24
++-----+ -++-----+ -----+--	*15:07, *15:10:01 = *15:10:01, *15:21
++-----+ -++-----+ -----+--	*15:07, *15:18 = *15:07, *15:63 = *15:18, *15:21 = *15:21, *15:63
++-----+ -++-----+ -----+--	*15:07, *15:08 = *15:08, *15:21
++-----+ -++-----+ -----+--	*15:13, *15:26 = *15:17, *15:26
++-----+ -++-----+ -----+--	*15:12, *15:26 = *15:24, *15:26
++-----+ -++-----+ -----+--	*15:06:01, *15:43 = *15:37, *15:43 = *15:40, *15:43
++-----+ -++-----+ -----+--	*15:18, *15:26 = *15:26, *15:63
++-----+ -++-----+ -----+--	*15:06:01, *15:11 = *15:11, *15:37 = *15:11, *15:40
++-----+ -++-----+ -----+--	*15:06:01, *15:07 = *15:06:01, *15:21 = *15:07, *15:37 = *15:07, *15:40 = *15:21, *15:37 = *15:21, *15:40
++-----+ -++-----+ -----+--	*15:29, *15:42 = *15:46, *15:48
++-----+ -++-----+ -----+--	*15:29, *15:34 = *15:36, *15:48
++-----+ -++-----+ -----+--	*15:34, *15:46 = *15:36, *15:42
++-----+ -++-----+ -----+--	*15:13, *15:29 = *15:17, *15:29
++-----+ -++-----+ -----+--	*15:13, *15:46 = *15:17, *15:46
++-----+ -++-----+ -----+--	*15:13, *15:36 = *15:17, *15:36
++-----+ -++-----+ -----+--	*15:18, *15:29 = *15:23, *15:48 = *15:29, *15:63
++-----+ -++-----+ -----+--	*15:18, *15:46 = *15:23, *15:42 = *15:46, *15:63
++-----+ -++-----+ -----+--	*15:18, *15:36 = *15:23, *15:34 = *15:36, *15:63
++-----+ -++-----+ -----+--	*15:05:01, *15:11 = *15:11, *15:23 = *15:13, *15:23 = *15:17, *15:23
++-----+ -++-----+ -----+--	*15:05:01, *15:07 = *15:05:01, *15:21
++-----+ -++-----+ -----+--	*15:22, *15:48 = *15:29, *15:37
++-----+ -++-----+ -----+--	*15:22, *15:42 = *15:37, *15:46
++-----+ -++-----+ -----+--	*15:22, *15:34 = *15:36, *15:37
++-----+ -++-----+ -----+--	*15:05:01, *15:26 = *15:15, *15:22 = *15:22, *15:26
++-----+ -++-----+ -----+--	*15:13, *15:22 = *15:17, *15:22
++-----+ -++-----+ -----+--	*15:18, *15:22 = *15:22, *15:63 = *15:23, *15:37
++-----+ -++-----+ -----+--	*15:13, *15:30 = *15:17, *15:30
++-----+ -++-----+ -----+--	*15:04, *15:43 = *15:09, *15:43
++-----+ -++-----+ -----+--	*15:18, *15:30 = *15:30, *15:63
++-----+ -++-----+ -----+--	*15:04, *15:11 = *15:09, *15:11
++-----+ -++-----+ -----+--	*15:08, *15:27 = *15:15, *15:19
++-----+ -++-----+ -----+--	*15:13, *15:19 = *15:17, *15:19
++-----+ -++-----+ -----+--	*15:18, *15:19 = *15:19, *15:63
++-----+ -++-----+ -----+--	*15:04, *15:07 = *15:04, *15:21 = *15:07, *15:09 = *15:09, *15:21
++-----+ -++-----+ -----+--	*15:04, *15:26 = *15:09, *15:26 = *15:15, *15:65 = *15:26, *15:27 = *15:26, *15:65 = *15:27, *15:37
++-----+ -++-----+ -----+--	*15:13, *15:65 = *15:17, *15:65
++-----+ -++-----+ -----+--	*15:18, *15:65 = *15:63, *15:65
++-----+ -++-----+ -----+--	*15:08, *15:65 = *15:19, *15:37
++-----+ -++-----+ -----+--	*15:12, *15:16 = *15:16, *15:24
++-----+ -++-----+ -----+--	*15:03, *15:43 = *15:13, *15:28 = *15:16, *15:28 = *15:17, *15:28 = *15:28, *15:43
++-----+ -++-----+ -----+--	*15:12, *15:28 = *15:24, *15:28
++-----+ -++-----+ -----+--	*15:03, *15:11 = *15:16, *15:18
++-----+ -++-----+ -----+--	*15:18, *15:28 = *15:28, *15:63
++-----+ -++-----+ -----+--	*15:02:01, *15:25 = *15:03, *15:07 = *15:03, *15:21 = *15:03, *15:25 = *15:07, *15:28 = *15:21, *15:25 = *15:21, *15:28 = *15:25, *15:28





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+++++---	---+---+--	-----	---	*15:06:01, *15:16 = *15:16, *15:37 = *15:16, *15:40
+++++---	---+---+--	-----	---	*15:06:01, *15:28 = *15:28, *15:37 = *15:28, *15:40
+++++---	---+---+--	-----	---	*15:04, *15:16 = *15:09, *15:16
+++++---	---+---+--	-----	---	*15:04, *15:28 = *15:09, *15:28
+++-----	---+---+--	-----	---	*15:07, *15:26 = *15:21, *15:26
+++-----	---+---+--	-----	---	*15:07, *15:29 = *15:21, *15:29
+++-----	---+---+--	-----	---	*15:07, *15:46 = *15:21, *15:46
+++-----	---+---+--	-----	---	*15:07, *15:36 = *15:21, *15:36
+++-----	---+---+--	-----	---	*15:07, *15:23 = *15:21, *15:23
+++-----	---+---+--	-----	---	*15:07, *15:22 = *15:21, *15:22
+++-----	---+---+--	-----	---	*15:07, *15:30 = *15:21, *15:30
+++-----	---+---+--	-----	---	*15:07, *15:19 = *15:19, *15:21
+++-----	---+---+--	-----	---	*15:07, *15:65 = *15:21, *15:65
+++++---	---+---+--	-----	---	*15:13, *15:25 = *15:16, *15:21

\*15:02:01 = \*15:02:01-15:02:15 and 15:49-15:51 and 15:53, 15:57, 15:60 and 15:62

\*15:05:01 = \*15:05:01-15:05:08 and 15:54 and 15:59

\*15:06:01 = \*15:06:01-15:06:03 and 15:55

\*15:09 = 15:09 and 15:61

\*15:10:01 = \*15:10:01-15:10:02

\*15:31 = \*15:31 and 15:33

\*15:32Q = \*15:32Q and 15:41

\*15:34 = \*15:34 and 15:39

\*15:35 = \*15:35 and 15:47

\*15:37 = \*15:37 and 15:58

\*15:44 = \*15:44 and 15:45

\*15:64 = \*15:64 and 15:66

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Lot-specific information  
**SPECIFICITY TABLE**

**HLA-C\*15 SSP subtyping**

Specificities and sizes of the PCR products of the 27 primer mixes used for HLA-C\*15 SSP subtyping

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-C*15 alleles <sup>3</sup>	Other amplified HLA Class I alleles <sup>4</sup>
<b>1</b>	325 bp	<b>800 bp</b>	*15:02:01-15:03, 15:05:01-15:13, 15:15-15:19, 15:21-15:24, 15:26-15:29, 15:31-15:39, 15:41-15:63	*02:06, 02:23, 02:36, 03:81, 03:175, 04:108, 06:89, 07:123, 07:173, 07:294, 12:15, 16:20
<b>2</b>	175 bp	1070 bp	*15:02:01-15:09, 15:12-15:13, 15:15, 15:18-15:19, 15:21-15:24, 15:26, 15:28-15:42, 15:44-15:62, 15:64-15:66	*03:08, 03:29, 03:31, 07:20, 07:96:01-07:96:02, 07:263
<b>3<sup>5,9</sup></b>	70 bp, 195 bp	1070 bp	*15:03, 15:16, 15:25 <sup>w</sup> , 15:28	*02:12 <sup>w</sup> , 02:49, 02:55, 03:15, 03:27 <sup>w</sup> , 03:38:01 <sup>w</sup> -03:38:02 <sup>w</sup> , 03:69 <sup>w</sup> , 03:130, 03:136 <sup>w</sup> , 03:163, 04:03, 04:06, 04:16, 04:80, 04:107, 06:70, 07:20 <sup>w</sup> , 07:96:01 <sup>w</sup> -07:96:02 <sup>w</sup> , 07:127 <sup>w</sup> , 07:263 <sup>w</sup>
<b>4</b>	315 bp	1070 bp	*15:04, 15:09, 15:19, 15:27, 15:30, 15:61, 15:65	*01:04, 01:21, 01:54, 02:02:01-02:02:03, 02:02:05-02:05, 02:08-02:18, 02:20-02:21, 02:24-02:40, 02:42-02:46, 02:48-02:67, 03:02:01-03:02:09, 03:14-03:16, 03:33, 03:36, 03:40:01-03:40:03, 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, 03:169, 03:175, 04:54, 05:04:01-05:04:02, 06:02:01:01-06:02:01:02, 06:02:03-06:08, 06:10-06:33, 06:35-06:37, 06:39-06:96, 07:01:01:01-07:03, 07:05-07:10, 07:14-07:27:02, 07:30-07:33N, 07:35-07:40, 07:42-07:44,

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				07:46-07:62, 07:64-07:100, 07:102-07:138, 07:140- 07:141:02, 07:143-07:176, 07:178-07:180, 07:182-07:183, 07:185-07:198N, 07:200- 07:218, 07:220-07:230, 07:232- 07:247, 07:249-07:271, 07:273- 07:288, 07:291-07:294, 07:296- 07:299, 08:09, 08:11, 08:59, 12:02:01-12:14:02, 12:16-12:30, 12:32-12:94, 14:02:01-14:25, 14:27-14:49, 16:01:01-16:02:09, 16:04:01, 16:06-16:09, 16:11- 16:44, 16:46-16:55
<b>5<sup>5,6</sup></b>	100 bp	1070 bp	*15:05:01-15:05:08, 15:22-15:23, 15:29, 15:36, 15:46, 15:54, 15:59	*04:108, <b>B*35:03:11, B*35:205</b>
<b>6<sup>10</sup></b>	305 bp, 345 bp, 370 bp	1070 bp	*15:06:01-15:06:03, 15:22, 15:26, 15:37, 15:40, 15:55, 15:58, 15:65	
<b>7</b>	140 bp	<b>800 bp</b>	*15:07, 15:21, 15:25	*01:21, 02:12, 02:27:01- 02:27:02, 03:04:25, 04:11, 04:29, 04:36, 04:55, 07:02:09, 08:01:01-08:09, 08:11-08:63, 08:65-08:74, 12:02:01-12:03:03, 12:03:05-12:03:08, 12:03:10- 12:03:23, 12:03:24 <sup>w</sup> , 12:03:25, 12:06-12:08, 12:10:01-12:20, 12:22-12:26, 12:28-12:32, 12:34-12:40, 12:42Q-12:53, 12:55-12:59, 12:61-12:94, 14:02:03, 14:03, 14:08, 14:10, 14:22, 14:35N, 14:38, 14:41, 16:01:01, 16:01:03-16:01:13, 16:04:01, 16:06-16:08, 16:10- 16:11, 16:13-16:18, 16:20- 16:24, 16:26-16:45, 16:49- 16:55, <b>B*35:08:02, B*35:08:05, B*67:02</b>
<b>8<sup>11</sup></b>	160 bp, 185 bp	1070 bp	*15:08, 15:19	*02:06, 02:47, 12:15, <b>B*07:78<sup>w</sup>, B*13:18<sup>w</sup>, B*13:31<sup>w</sup>, B*13:41<sup>w</sup>, B*15:73<sup>w</sup>, B*54:10<sup>w</sup>, B*54:20<sup>w</sup>, B*55:09<sup>w</sup>, B*55:21<sup>w</sup>, B*55:37<sup>w</sup>, B*55:52<sup>w</sup></b>

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Lot-specific information

<b>9<sup>12</sup></b>	135 bp, 305 bp	1070 bp	*15:11, 15:18, 15:23, 15:63	*02:02:01-02:02:03, 02:02:05-02:02:12, 02:02:14- 02:20, 02:22-02:25Q, 02:27:01- 02:38N, 02:40, 02:42-02:44, 02:46-02:67, 04:03, 04:06, 04:42, 04:80, 04:107, 05:26, 05:43, 06:05, 07:02:09, 08:37, 12:16, 16:21, 16:34
<b>10</b>	170 bp	1070 bp	*15:10:01-15:10:02	*01:64, 02:08, 03:18, 03:64:01- 03:64:02, 04:01:01:01-04:01:02, 04:01:04-04:01:48, 04:04:01- 04:05, 04:07-04:15:03, 04:17- 04:20, 04:23-04:79, 04:81- 04:106, 04:108-04:132, 04:134- 04:139, 04:141-04:144, 05:01:01:01-05:01:21, 05:01:23- 05:01:26, 05:03-05:57, 05:59- 05:87, 06:28, 06:76:01- 06:76:02, 07:64, 07:73, 07:92, 07:172, 08:01:01-08:13, 08:15:01-08:57, 08:59-08:63, 08:65-08:74, 12:02:01-12:15, 12:17-12:70, 12:72-12:94, 14:02:01-14:02:09, 14:02:11, 14:04-14:09, 14:11-14:17, 14:19-14:21N, 14:23-14:34, 14:36-14:37, 14:39-14:40, 14:42-14:49, 16:01:01-16:02:09, 16:04:01, 16:06-16:33, 16:35- 16:55, 17:01:01:01-17:01:07, 17:01:09-17:19, 18:04
<b>11</b>	315 bp	<b>800 bp</b>	*15:02:01-15:03, 15:07-15:08, 15:10:01-15:13, 15:15-15:18, 15:21, 15:26, 15:28, 15:31- 15:35, 15:37-15:39, 15:41-15:45, 15:47- 15:53, 15:56-15:58, 15:60, 15:62-15:63	*02:06, 02:47, 03:12, 03:19, 03:102, 07:289, 12:15
<b>12<sup>5,13</sup></b>	100 bp, 240 bp	1070 bp	*15:07, 15:21, 15:25, 15:28, 15:43	*02:12, 02:27:01-02:27:02, 03:02:01-03:03:14, 03:03:15 <sup>w</sup> , 03:03:16-03:04:16, 03:04:18- 03:04:25, 03:04:27-03:06, 03:08-03:14, 03:16-03:17, 03:19-03:38:02, 03:40:01-03:44, 03:46-03:64:01, 03:65-03:66,

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Lot-specific information

				03:68-03:98, 03:100-03:114, 03:116:01-03:129, 03:131-03:133, 03:135-03:136, 03:138-03:139, 03:141-03:143, 03:145-03:155, 03:157-03:162, 03:164-03:165, 03:167-03:169, 03:171-03:181, 03:183-03:185, 07:96:01-07:96:02, 12:03:23, 16:34, <b>B*40:164</b>
<b>13</b> <sup>5,14</sup>	125 bp, 185 bp	1070 bp	*15:12, 15:24	*04:52, 04:55, 04:89, 04:135, 05:47, 05:55, 12:58, 14:10
<b>14</b> <sup>15</sup>	130 bp, 440 bp	<b>800 bp</b>	*15:11, 15:13, 15:16-15:17, 15:43	*02:06, 02:47, 03:12, 03:19, 03:102, 07:289, 12:15, <b>B*46:11,</b> <b>B* 46:18, B*56:08, B*56:14</b>
<b>15</b> <sup>5</sup>	85 bp	1070 bp	*15:02:01-15:06:03, 15:08-15:10:02, 15:12-15:13, 15:15, 15:18-15:19, 15:21- 15:24, 15:26, 15:28- 15:42, 15:44-15:47, 15:49-15:66	*03:29, 04:112, 05:36, 06:44, 07:07, 07:09, 18:05
<b>16</b> <sup>5,16</sup>	90 bp, 165 bp, 345 bp	1070 bp	*15:15, 15:26-15:27	<b>B*35:222</b>
<b>17</b> <sup>8,17</sup>	140 bp, 215 bp, 295 bp	1070 bp	*15:34, 15:36, 15:39	*01:30, 04:112, 08:51, 12:87
<b>18</b> <sup>5,7,18</sup>	85 bp, 160 bp	1070 bp	*15:31, 15:33	*07:123, 07:173, 07:294, <b>B*15:200, B*51:115, B*58:05</b>
<b>19</b> <sup>19</sup>	165 bp, 355 bp	1070 bp	*15:42, 15:46	
<b>20</b> <sup>5,20</sup>	120 bp, 235 bp	1070 bp	*15:44-15:45	
<b>21</b> <sup>21</sup>	170 bp, 445 bp	1070 bp	*15:35, 15:47	*02:35, 05:21
<b>22</b>	225 bp	<b>800 bp</b>	*15:38	
<b>23</b> <sup>6,22</sup>	175 bp, 545 bp	1070 bp	*15:29, 15:48	*08:22, 08:56
<b>24</b> <sup>23</sup>	175 bp, 380 bp	1070 bp	*15:32Q, 15:41	*06:74
<b>25</b>	225 bp	1070 bp	*15:52	
<b>26</b>	205 bp	1070 bp	*15:56	<b>B*35:132</b>
<b>27</b>	330 bp	1070 bp	*15:30	*07:174, 07:298

<sup>1</sup>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 C\*15 high resolution SSP typings.

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**Lot-specific information**

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 respective lengths of the HLA-specific PCR product(s) are given for the alleles amplified by these primer mixes.

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.

<sup>2</sup>The 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\*15 SSP subtyping.

In addition, wells number 7, 11, 14 and 22 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band.

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

<sup>3</sup>For several HLA C\*15 alleles 1<sup>st</sup> and/or 4<sup>th</sup> 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. We assume that unknown sequences in these regions are conserved within allelic groups.

<sup>4</sup>Due to the sharing of sequence motifs between HLA Class I alleles non-HLA-C\*15 alleles will be amplified by most primer mixes. In addition, primer mix 5 amplifies the B\*35:03:11 and B\*35:205 alleles, primer mix 7 amplifies the B\*35:08:02, 35:08:05 and B\*67:02 alleles, primer mix 8 weakly amplifies the B\*07:78, B\*13:18, B\*13:31, B\*13:41, B\*15:73, B\*54:10, B\*54:20, B\*55:09, B\*55:21, B\*55:37 and B\*55:52 alleles, primer mix 12 amplifies the B\*40:164 allele, primer mix 14 amplifies the B\*46:11, B\*46:18, B\*56:08 and B\*56:14 alleles, primer mix 16 amplifies the B\*35:222, primer mix 18 amplifies the B\*15:200, B\*51:115 and B\*58:05 alleles and primer mix 26 amplifies the B\*35:132 allele.

<sup>5</sup>HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

<sup>6</sup>Primer mixes 5 and 23 may give rise to a lower yield of HLA-specific PCR product than the other C\*15 primer mixes.

<sup>7</sup>Primer mix 18 have a tendency to giving rise to primer oligomer formation.

<sup>8</sup>Primer mix 17 may have may have a tendency of unspecific amplifications.

<sup>9</sup>Primer mix 3: Specific PCR fragment of 70 bp in the C\*15:28 allele. Specific PCR fragment of 195 bp in the C\*15:03, 15:16 and 15:25<sup>w</sup> and in the C\*02:12<sup>w</sup>, 02:49, 02:55, 03:15, 03:27<sup>w</sup>, 03:38:01<sup>w</sup>-03:38:02<sup>w</sup>, 03:69<sup>w</sup>, 03:130, 03:136<sup>w</sup>, 03:163, 04:03, 04:06, 04:16, 04:80, 04:107, 06:70, 07:20<sup>w</sup>, 07:96:01<sup>w</sup>-07:96:02<sup>w</sup>, 07:127<sup>w</sup> and 07:263<sup>w</sup> alleles.

<sup>10</sup>Primer mix 6: Specific PCR fragment of 305 bp in the C\*15:06:01-15:06:03, 15:40 and 15:55 alleles. Specific PCR fragment of 345 bp in the C\*15:26 allele. Specific PCR fragment of 370 bp in the C\*15:22, 15:37, 15:55, 15:58 and 15:65 alleles.

<sup>11</sup>Primer mix 8: Specific PCR fragment of 160 bp in the C\*15:08 and in the C\*02:06, 02:47 and 12:15 and the B\*07:78<sup>w</sup>, B\*13:18<sup>w</sup>, 13:31<sup>w</sup>, 13:41<sup>w</sup>, B\*15:73<sup>w</sup>, B\*54:10<sup>w</sup>, B\*54:20<sup>w</sup>, B\*55:09<sup>w</sup>, B\*55:21<sup>w</sup>, B\*55:37<sup>w</sup> and B\*55:52<sup>w</sup> alleles. Specific PCR fragment of 185 bp in the C\*15:19 allele.

<sup>12</sup>Primer mix 9: Specific PCR fragment of 135 bp in the C\*15:11, 15:23 and 15:63 and in the C\*02:02:01-02:02:03, 02:02:05-02:02:12, 02:02:14-02:20, 02:22-02:25Q, 02:27:01-02:38N, 02:40, 02:42-02:44, 02:46-02:67, 04:03, 04:06, 04:42, 04:80, 04:107, 05:26, 05:43, 06:05, 07:02:09, 08:37, 12:16, 16:21 and 16:34 alleles. Specific PCR fragment of 305 bp in the C\*15:18 allele.

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**Lot-specific information**

<sup>13</sup>Primer mix 12: Specific PCR fragment of 100 bp in the C\*15:28 allele. Specific PCR fragment of 240 bp in the \*15:07, 15:21, 15:25 and 15:43 and in the 02:12, 02:27:01-02:27:02, 03:02:01-03:03:14, 03:03:15w, 03:03:16-03:04:16, 03:04:18-03:04:25, 03:04:27-03:06, 03:08-03:09, 03:10, 03:11:01-03:14, 03:16-03:17, 03:19-03:28, 03:29, 03:30-03:38:02, 03:40:01-03:44, 03:46-03:64:01, 03:65-03:66, 03:68-03:98, 03:100-03:114, 03:116:01-03:129, 03:131-03:133, 03:135-03:136, 03:138-03:139, 03:141-03:143, 03:145-03:155, 03:157-03:162, 03:164-03:165, 03:167-03:169, 03:171-03:181, 03:183-03:185, 07:96:01-07:96:02, 12:03:23, 16:34 and in the B\*40:164 alleles

<sup>14</sup>Primer mix 13: Specific PCR fragment of 125 bp in the C\*15:24 and the C\*04:89, 04:135 and 05:47 alleles. Specific PCR fragment of 185 bp in the C\*15:12 and in the C\*04:52, 04:55, 05:55, 12:58 and 14:10 alleles.

<sup>15</sup>Primer mix 14: Specific PCR fragment of 130 bp in the C\*15:13 allele. Specific PCR fragment of 440 bp the C\*15:11, 15:16-15:17 and 15:43 and the C\*02:06, 02:47, 03:12, 03:19, 03:102, 07:289 and 12:15 and in the B\*46:11, B\*46:18, B\*56:08 and B\*56:14 alleles.

<sup>16</sup>Primer mix 16: Specific PCR fragment of 90 bp in the C\*15:27 and in the B\*35:222 alleles. Specific PCR fragment of 165 bp in the C\*15:15 allele. Specific PCR fragment of 345 bp in the C\*15:26 allele.

<sup>17</sup>Primer mix 17: Specific PCR fragment of 140 bp in the C\*15:34 allele. Specific PCR fragment of 215 bp in the C\*15:36 and the C\*04:112 alleles. Specific PCR fragment of 295 bp in the C\*15:39 and the C\*01:30, 08:51 and 12:87 alleles.

<sup>18</sup>Primer mix 18: Specific PCR fragment of 85 bp in the C\*15:33 allele. Specific PCR fragment of 160 bp in the C\*15:31 and the C\*07:123, 07:173 and 07:294 and in the B\*15:200, B\*51:115 and B\*58:05 alleles.

<sup>19</sup>Primer mix 19: Specific PCR fragment of 165 bp in the C\*15:42 allele. Specific PCR fragment of 355 bp in the C\*15:46 allele.

<sup>20</sup>Primer mix 20: Specific PCR fragment of 120 bp in the C\*15:44 allele. Specific PCR fragment of 235 bp in the C\*15:45 allele.

<sup>21</sup>Primer mix 21: Specific PCR fragment of 170 bp in the C\*15:47 allele. Specific PCR fragment of 445 bp in the C\*15:35 and the C\*02:35 and 05:21 alleles.

<sup>22</sup>Primer mix 23: Specific PCR fragment of 175 bp in the C\*15:48 allele. Specific PCR fragment of 545 bp in the C\*15:29 and in the C\*08:22 and 08:56 alleles.

<sup>23</sup>Primer mix 24: Specific PCR fragment of 175 bp in the C\*15:32Q and the C\*06:74 alleles. Specific PCR fragment of 380 bp in the C\*15:41 allele.

‘w’, might be weakly amplified.

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Lot-specific information

<b>INTERPRETATION TABLE</b>																
<b>HLA-C*15 SSP subtyping</b>																
Amplification patterns of the HLA-C*15:02 to 15:65 alleles																
	Well <sup>11</sup>															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Length of int. pos. control <sup>1</sup>	800	1070	1070	1070	1070	1070	800	1070	1070	1070	800	1070	1070	800	1070	1070
5'-primer <sup>2</sup>	409	134	134	419	420	355	201	125	97	1 <sup>st</sup>	420	105	201	270	270	261
	5'-ggC 3'	5'-CCA 3'	5'-CCA 3'	5'-gTC 3'	5'-TTC 3'	5'-CCC 3'	5'-CCA 3'	5'-CgA 3'	5'-TCg 3'	5'-CgA 3'	5'-TTA 3'	5'-gCT 3'	5'-CCA 3'	5'-AAG 3'	5'-AAC 3'	5'-AAC 3'
						379		420	118		420		2 <sup>nd</sup>	757		379
							5'-ACg 3'	5'-TTA 3'	5'-CCA 3'		5'-TTA 3'		5'-CCA 3'	5'-CCC 3'		5'-ACg 3'
						419			430							560
							5'-gTA 3'		5'-ACC 3'							5'-CCT 3'
3'-primer <sup>3</sup>	3 <sup>rd</sup>	270	164	3 <sup>rd</sup>	477	3 <sup>rd</sup>	302	270	201	134	3 <sup>rd</sup>	164	343	420	312	312
	5'-CTC 3'	5'-TAg 3'	5'-gCA 3'	5'-CTC 3'	5'-gCg 3'	5'-ggA 3'	5'-ggC 3'	5'-TAg 3'	5'-CTT 3'	5'-AgC 3'	5'-CTC 3'	5'-gCA 3'	5'-T 3'	5'-gCT 3'	5'-AgT 3'	5'-AgT 3'
			289				302	539	3 <sup>rd</sup>			302	412	846		3 <sup>rd</sup>
			5'-AgC 3'				5'-ggC 3'	5'-TCC 3'	5'-CTC 3'			5'-ggC 3'	5'-gTT 3'	5'-CAC 3'		5'-ggA 3'
												302				
												5'-ggC 3'				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HLA-C allele <sup>4,5</sup>																
*15:02:01-15:02:15, 15:49-15:51, 15:53, 15:57, 15:60, 15:62	1	2									11				15	
*15:03	1	2	3								11				15	
*15:04		2		4											15	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16





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Lot-specific information

<b>INTERPRETATION TABLE</b>											
<b>HLA-C*15 SSP subtyping</b>											
<b>Amplification patterns of the HLA-C*15:02 to 15:65 alleles</b>											
<b>Well<sup>11</sup></b>											
17	18	19	20	21	22	23	24	25	26	27	
140	85	165	120	170	225	175	380	225	205	330	<b>Length of spec. PCR product(s)</b>
215	160	355	235	445		545	175				
295											<b>Length of int. pos. control<sup>1</sup></b>
1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070	
98	409	368	105	322	128	134	356	409	409	404	<b>5'-primer<sup>2</sup></b>
5' -CTC 3'	5' -ggC 3'	5' -gTC 3'	5' -gCT 3'	5' -gCC 3'	5' -AgT 3'	5' -CCA 3'	5' -CAA 3'	5' -ggC 3'	5' -ggC 3'	5' -CCA 3'	
2 <sup>nd</sup> I		560		715		972	562				
5' -CCA 3'		5' -CgA 3'		5' -Cag 3'		5' -CTA 3'	5' -Cgg 3'				
270	455	3 <sup>rd</sup> I	186	477	312	266	3 <sup>rd</sup> I	595	575	3 <sup>rd</sup> I	<b>3'-primer<sup>3</sup></b>
5' -Tag 3'	5' -CCA 3'	5' -ggA 3'	5' -TCC 3'	5' -gCg 3'	5' -AgT 3'	5' -TCA 3'	5' -CTC 3'	5' -CCg 3'	5' -ggg 3'	5' -CTC 3'	
427	527		299	846		1034					
5' -gTT 3'	5' -CCg 3'		5' -TCT 3'	5' -CAC 3'		5' -AgT 3'					
583											
5' -gTg 3'											
17	18	19	20	21	22	23	24	25	26	27	<b>Well No.</b>
											<b>HLA-C allele<sup>4,5</sup></b>
											*15:02:01-15:02:15, 15:49-15:51, 15:53, 15:57, 15:60, 15:62
											*15:03
											*15:04
17	18	19	20	21	22	23	24	25	26	27	<b>Well No.</b>



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Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*15:05:01-15:05:08, 15:54, 15:59	1	2			5											15
*15:06:01-15:06:03, 15:55	1	2				6										15
*15:07	1	2					7				11	12				
*15:08	1	2						8			11					15
*15:09, 15:61	1	2		4												15
*15:10:01-15:10:02	1									10	11					15
*15:11	1								9		11			14		
*15:12	1	2									11		13		15	
*15:13	1	2									11			14	15	
*15:15	1	2									11				15	16
*15:16	1		3								11			14		
*15:17	1										11			14		
*15:18	1	2							9		11					15
*15:19	1	2		4				8								15
*15:21	1	2					7				11	12				15
*15:22	1	2			5	6										15
*15:23	1	2			5				9							15
*15:24	1	2											13		15	
*15:25			w				7					12				
*15:26	1	2				6					11				15	16
*15:27	1			4												16
*15:28	1	2	3								11	12			15	
*15:29	1	2			5										15	
*15:30		2		4											15	
*15:31, 15:33 <sup>6</sup>	1	2									11				15	
*15:32Q, 15:41 <sup>7</sup>	1	2									11				15	
*15:34, 15:39 <sup>8</sup>	1	2									11				15	
*15:35, 15:47 <sup>9</sup>	1	2									11				15	
*15:36	1	2			5										15	
*15:37, 15:58	1	2				6					11				15	
*15:38	1	2									11				15	
*15:40		2				6									15	
*15:42	1	2									11				15	
*15:43	1										11	12		14		
*15:44-15:45 <sup>10</sup>	1	2									11				15	
*15:46	1	2			5										15	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*15:05:01-15:05:08, 15:54, 15:59
											*15:06:01-15:06:03, 15:55
											*15:07
											*15:08
											*15:09, 15:61
											*15:10:01-15:10:02
											*15:11
											*15:12
											*15:13
											*15:15
											*15:16
											*15:17
											*15:18
											*15:19
											*15:21
											*15:22
											*15:23
											*15:24
											*15:25
											*15:26
											*15:27
											*15:28
						23					*15:29
										27	*15:30
	18										*15:31, 15:33 <sup>6</sup>
							24				*15:32Q, 15:41 <sup>7</sup>
17											*15:34, 15:39 <sup>8</sup>
				21							*15:35, 15:47 <sup>9</sup>
17											*15:36
											*15:37, 15:58
					22						*15:38
											*15:40
		19									*15:42
											*15:43
			20								*15:44-15:45 <sup>10</sup>
		19									*15:46
17	18	19	20	21	22	23	24	25	26	27	Well No.



Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*15:48	1	2									11					
*15:52	1	2									11				15	
*15:56	1	2									11				15	
*15:63	1								9		11				15	
*15:64, 15:66		2													15	
*15:65		2		4		6									15	
*01:04, 01:54, 02:02:13, 02:21, 02:26:01- 02:26:03, 02:39, 02:45, 06:02:01:01-06:02:01:02, 06:02:03-06:04, 06:06- 06:08, 06:10-06:27, 06:29-06:33, 06:35- 06:37, 06:39-06:43, 06:45-06:69, 06:71- 06:73, 06:75, 06:77- 06:88, 06:90-06:96, 07:01:01:01-07:02:08, 07:02:10-07:03, 07:05- 07:06, 07:08, 07:10, 07:14-07:19, 07:21- 07:27:02, 07:30-07:33N, 07:35-07:40, 07:42- 07:44, 07:46-07:62, 07:65-07:72, 07:74- 07:91, 07:93-07:95, 07:97-07:100, 07:102- 07:122, 07:124-07:126, 07:128-07:138, 07:140- 07:141:02, 07:143- 07:171, 07:175-07:176, 07:178-07:180, 07:182- 07:183, 07:185-07:198N, 07:200-07:218, 07:220- 07:230, 07:232-07:247, 07:249-07:262, 07:264N- 07:271, 07:273-07:288, 07:291-07:293, 07:296- 07:297, 07:299, 14:02:10, 14:18				4												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
						23					*15:48
								25			*15:52
									26		*15:56
											*15:63
											*15:64, 15:66
											*15:65
											*01:04, 01:54, 02:02:13, 02:21, 02:26:01- 02:26:03, 02:39, 02:45, 06:02:01-06:02:01:02, 06:02:03-06:04, 06:06- 06:08, 06:10-06:27, 06:29-06:33, 06:35- 06:37, 06:39-06:43, 06:45-06:69, 06:71- 06:73, 06:75, 06:77- 06:88, 06:90-06:96, 07:01:01-07:02:08, 07:02:10-07:03, 07:05- 07:06, 07:08, 07:10, 07:14-07:19, 07:21- 07:27:02, 07:30-07:33N, 07:35-07:40, 07:42- 07:44, 07:46-07:62, 07:65-07:72, 07:74- 07:91, 07:93-07:95, 07:97-07:100, 07:102- 07:122, 07:124-07:126, 07:128-07:138, 07:140- 07:141:02, 07:143- 07:171, 07:175-07:176, 07:178-07:180, 07:182- 07:183, 07:185-07:198N, 07:200-07:218, 07:220- 07:230, 07:232-07:247, 07:249-07:262, 07:264N- 07:271, 07:273-07:288, 07:291-07:293, 07:296- 07:297, 07:299, 14:02:10, 14:18
17	18	19	20	21	22	23	24	25	26	27	Well No.



Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*01:21, 12:71, 14:03, 14:22, 14:35N, 14:38, 14:41				4			7									
*01:30																
*01:64, 03:18, 03:64:02, 04:01:01:01-04:01:02, 04:01:04-04:01:48, 04:04:01-04:05, 04:07- 04:10, 04:12-04:15:03, 04:17-04:20, 04:23- 04:28, 04:30-04:35, 04:37-04:41, 04:43- 04:51, 04:53, 04:56- 04:79, 04:81-04:88N, 04:90-04:106, 04:109- 04:111, 04:113-04:132, 04:134, 04:136-04:139, 04:141-04:144, 05:01:01:01-05:01:21, 05:01:23-05:01:26, 05:03, 05:05-05:20, 05:22:01-05:25, 05:27- 05:35, 05:37-05:42, 05:44:01-05:46, 05:48N- 05:54, 05:56-05:57, 05:59-05:87, 08:10, 14:26, 17:01:01:01- 17:01:07, 17:01:09- 17:19, 18:04										10						
*02:02:01-02:02:03, 02:02:05-02:02:12, 02:02:14-02:05, 02:09- 02:11, 02:13-02:18, 02:20, 02:24-02:25Q, 02:28-02:34, 02:37- 02:38N, 02:40, 02:42- 02:44, 02:46, 02:48, 02:50-02:54, 02:56- 02:67, 06:05				4					9							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*01:21, 12:71, 14:03, 14:22, 14:35N, 14:38, 14:41
17											*01:30
											*01:64, 03:18, 03:64:02, 04:01:01:01-04:01:02, 04:01:04-04:01:48, 04:04:01-04:05, 04:07- 04:10, 04:12-04:15:03, 04:17-04:20, 04:23- 04:28, 04:30-04:35, 04:37-04:41, 04:43- 04:51, 04:53, 04:56- 04:79, 04:81-04:88N, 04:90-04:106, 04:109- 04:111, 04:113-04:132, 04:134, 04:136-04:139, 04:141-04:144, 05:01:01:01-05:01:21, 05:01:23-05:01:26, 05:03, 05:05-05:20, 05:22:01-05:25, 05:27- 05:35, 05:37-05:42, 05:44:01-05:46, 05:48N- 05:54, 05:56-05:57, 05:59-05:87, 08:10, 14:26, 17:01:01:01- 17:01:07, 17:01:09- 17:19, 18:04
											*02:02:01-02:02:03, 02:02:05-02:02:12, 02:02:14-02:05, 02:09- 02:11, 02:13-02:18, 02:20, 02:24-02:25Q, 02:28-02:34, 02:37- 02:38N, 02:40, 02:42- 02:44, 02:46, 02:48, 02:50-02:54, 02:56- 02:67, 06:05
17	18	19	20	21	22	23	24	25	26	27	Well No.



Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*02:06	1							8	9		11			14		
*02:07, 02:19, 02:22									9							
*02:08				4					9	10						
*02:12			w	4			7		9			12				
*02:23	1								9							
*02:27:01-02:27:02, 16:34				4			7		9			12				
*02:35				4					9							
*02:36	1			4					9							
*02:47								8	9		11			14		
*02:49, 02:55			3	4					9							
*03:02:01-03:02:09, 03:14, 03:16, 03:33, 03:36, 03:40:01- 03:40:03, 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, 03:169				4								12				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16





Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*02:06
											*02:07, 02:19, 02:22
											*02:08
											*02:12
											*02:23
											*02:27:01-02:27:02, 16:34
				21							*02:35
											*02:36
											*02:47
											*02:49, 02:55
											*03:02:01-03:02:09, 03:14, 03:16, 03:33, 03:36, 03:40:01- 03:40:03, 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, 03:169
17	18	19	20	21	22	23	24	25	26	27	Well No.

Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*03:03:01-03:03:14, 03:03:16-03:04:16, 03:04:18-03:04:24, 03:04:27-03:06, 03:09- 03:11:02, 03:13, 03:17, 03:20N-03:26, 03:28, 03:30, 03:32, 03:34- 03:35, 03:37:01- 03:37:02, 03:41, 03:44, 03:46-03:59, 03:61- 03:63, 03:65-03:66, 03:68, 03:70, 03:72- 03:80, 03:82-03:83, 03:85-03:88, 03:90- 03:94, 03:96-03:98, 03:100-03:101, 03:103- 03:107, 03:109, 03:111- 03:114, 03:116:01- 03:118, 03:120, 03:122- 03:129, 03:131, 03:133, 03:135, 03:138, 03:141- 03:143, 03:145, 03:147- 03:155, 03:157-03:162, 03:164-03:165, 03:167- 03:168, 03:171-03:174, 03:176-03:181, 03:183- 03:185, <i>B*40:164</i>												12				
*03:03:15												w				
*03:04:25							7					12				
*03:08, 03:31		2										12				
*03:12, 03:19, 03:102											11	12		14		
*03:15, 06:70			3	4												
*03:27, 03:38:01- 03:38:02, 03:69, 03:136			w									12				
*03:29		2										12			15	
*03:64:01										10		12				
*03:81	1											12				
*03:130, 03:163, 04:16			3													
*03:175	1			4								12				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*03:03:01-03:03:14, 03:03:16-03:04:16, 03:04:18-03:04:24, 03:04:27-03:06, 03:09- 03:11:02, 03:13, 03:17, 03:20N-03:26, 03:28, 03:30, 03:32, 03:34- 03:35, 03:37:01- 03:37:02, 03:41, 03:44, 03:46-03:59, 03:61- 03:63, 03:65-03:66, 03:68, 03:70, 03:72- 03:80, 03:82-03:83, 03:85-03:88, 03:90- 03:94, 03:96-03:98, 03:100-03:101, 03:103- 03:107, 03:109, 03:111- 03:114, 03:116:01- 03:118, 03:120, 03:122- 03:129, 03:131, 03:133, 03:135, 03:138, 03:141- 03:143, 03:145, 03:147- 03:155, 03:157-03:162, 03:164-03:165, 03:167- 03:168, 03:171-03:174, 03:176-03:181, 03:183- 03:185, <i>B*40:164</i>
											*03:03:15
											*03:04:25
											*03:08, 03:31
											*03:12, 03:19, 03:102 *03:15, 06:70
											*03:27, 03:38:01- 03:38:02, 03:69, 03:136
											*03:29
											*03:64:01 *03:81
											*03:130, 03:163, 04:16
											*03:175
17	18	19	20	21	22	23	24	25	26	27	Well No.

Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*04:03, 04:06, 04:80, 04:107			3						9							
*04:11, 04:29, 04:36, 08:01:01-08:08, 08:12- 08:13, 08:15:01-08:21, 08:23-08:36N, 08:38- 08:50, 08:52N-08:55N, 08:57, 08:60-08:63, 08:65-08:74, 12:31, 16:10, 16:45							7			10						
*04:42, 05:26, 05:43									9	10						
*04:52, 04:89, 04:135, 05:47, 05:55										10			13			
*04:54, 05:04:01- 05:04:02, 06:28, 06:76:01- 06:76:02, 07:64, 07:73, 07:92, 07:172, 12:03:04, 12:03:09, 12:04:01- 12:05, 12:09, 12:21, 12:27, 12:33, 12:41, 12:54, 12:60, 14:02:01- 14:02:02, 14:02:04- 14:02:09, 14:02:11, 14:04- 14:07N, 14:09, 14:11- 14:17, 14:19-14:21N, 14:23-14:25, 14:27- 14:34, 14:36-14:37, 14:39-14:40, 14:42- 14:49, 16:01:02, 16:02:01- 16:02:09, 16:09, 16:12, 16:19, 16:25, 16:46- 16:48				4						10						
*04:55							7			10			13			
*04:108	1				5					10						
*04:112										10						15
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*04:03, 04:06, 04:80, 04:107
											*04:11, 04:29, 04:36, 08:01:01-08:08, 08:12- 08:13, 08:15:01-08:21, 08:23-08:36N, 08:38- 08:50, 08:52N-08:55N, 08:57, 08:60-08:63, 08:65-08:74, 12:31, 16:10, 16:45
											*04:42, 05:26, 05:43
											*04:52, 04:89, 04:135, 05:47, 05:55
											*04:54, 05:04:01- 05:04:02, 06:28, 06:76:01- 06:76:02, 07:64, 07:73, 07:92, 07:172, 12:03:04, 12:03:09, 12:04:01- 12:05, 12:09, 12:21, 12:27, 12:33, 12:41, 12:54, 12:60, 14:02:01- 14:02:02, 14:02:04- 14:02:09, 14:02:11, 14:04- 14:07N, 14:09, 14:11- 14:17, 14:19-14:21N, 14:23-14:25, 14:27- 14:34, 14:36-14:37, 14:39-14:40, 14:42- 14:49, 16:01:02, 16:02:01- 16:02:09, 16:09, 16:12, 16:19, 16:25, 16:46- 16:48
											*04:55
											*04:108
											*04:112
17	18	19	20	21	22	23	24	25	26	27	Well No.



Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*05:21										10						
*05:36										10					15	
*06:44, 07:07, 07:09				4											15	
*06:74				4												
*06:89	1			4												
*07:02:09, 12:16				4			7		9							
*07:20, 07:263		2	w	4												
*07:96:01-07:96:02		2	w	4								12				
*07:123, 07:173, 07:294	1			4												
*07:127			w	4												
*07:174, 07:298				4												
*07:289											11			14		
*08:09, 08:11, 08:59, 12:02:01-12:03:03, 12:03:05-12:03:08, 12:03:10-12:03:22, 12:03:25, 12:06-12:08, 12:10:01-12:14:02, 12:17- 12:20, 12:22-12:26, 12:28-12:30, 12:32, 12:34-12:40, 12:42Q- 12:53, 12:55-12:57, 12:59, 12:61-12:70, 12:72-12:86, 12:88- 12:94, 14:02:03, 14:08, 16:01:01, 16:01:03- 16:01:13, 16:04:01, 16:06- 16:08, 16:11, 16:13- 16:18, 16:22-16:24, 16:26-16:33, 16:35- 16:44, 16:49-16:55				4			7			10						
*08:14, 08:58, <i>B*35:08:02, B*35:08:05,</i> <i>B*67:02</i>							7									
*08:22, 08:56							7			10						
*08:37							7		9	10						
*08:51							7			10						
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
				21							*05:21
											*05:36
											*06:44, 07:07, 07:09
							24				*06:74
											*06:89
											*07:02:09, 12:16
											*07:20, 07:26:3
											*07:96:01-07:96:02
	18										*07:123, 07:173, 07:294
											*07:127
										27	*07:174, 07:298
											*07:289
											*08:09, 08:11, 08:59, 12:02:01-12:03:03, 12:03:05-12:03:08, 12:03:10-12:03:22, 12:03:25, 12:06-12:08, 12:10:01-12:14:02, 12:17- 12:20, 12:22-12:26, 12:28-12:30, 12:32, 12:34-12:40, 12:42Q- 12:53, 12:55-12:57, 12:59, 12:61-12:70, 12:72-12:86, 12:88- 12:94, 14:02:03, 14:08, 16:01:01, 16:01:03- 16:01:13, 16:04:01, 16:06- 16:08, 16:11, 16:13- 16:18, 16:22-16:24, 16:26-16:33, 16:35- 16:44, 16:49-16:55
											*08:14, 08:58, <i>B*35:08:02, B*35:08:05,</i> <i>B*67:02</i>
							23				*08:22, 08:56
											*08:37
17											*08:51
17	18	19	20	21	22	23	24	25	26	27	Well No.



Lot No.: **05S**

Lot-specific information

Length of spec. PCR product(s)	325	175	70	315	100	305	140	160	135	170	315	100	125	130	85	90
			195			345		185	305			240	185	440		165
						370										345
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*12:03:23				4			7			10		12				
*12:03:24				4			w			10						
*12:15	1						7	8		10	11			14		
*12:58				4			7			10			13			
*12:87				4			7			10						
*14:10				4			7						13			
*16:20	1			4			7			10						
*16:21				4			7		9	10						
*18:05															15	
<i>B*07:78, B*13:18, B*13:31, B*13:41, B*15:73, B*54:10, B*54:20, B*55:09, B*55:21, B*55:37, B*55:52</i>								w								
<i>B*15:200, B*51:115, B*58:05</i>																
<i>B*35:03:11, B*35:205 B*35:132</i>					5											
<i>B*35:222</i>																16
<i>B*46:11, B*46:18, B*56:08, B*56:14</i>														14		
HLA-C allele <sup>4,5</sup>																
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



Lot No.: **05S**

Lot-specific information

140	85	165	120	170	225	175	380	225	205	330	Length of spec. PCR product(s)
215	160	355	235	445		545	175				
295											
17	18	19	20	21	22	23	24	25	26	27	Well No.
											*12:03:23
											*12:03:24
											*12:15
											*12:58
<b>17</b>											*12:87
											*14:10
											*16:20
											*16:21
											*18:05
											<i>B*07:78, B*13:18, B*13:31, B*13:41, B*15:73, B*54:10, B*54:20, B*55:09, B*55:21, B*55:37, B*55:52</i>
	<b>18</b>										<i>B*15:200, B*51:115, B*58:05</i>
											<i>B*35:03:11, B*35:205</i>
									<b>26</b>		<i>B*35:132</i>
											<i>B*35:222</i>
											<i>B*46:11, 46:18, B*56:08, B*56:14</i>
											<b>HLA-C allele<sup>4,5</sup></b>
<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>Well No.</b>

Lot No.: **05S**

Lot-specific information

<sup>1</sup>The 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\*15 SSP subtyping.

In addition, wells number 7, 11, 14 and 22 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band.

<sup>2</sup>The nucleotide position, in the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> exon or the 1<sup>st</sup> or 2<sup>nd</sup> intron, matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla) web site. The sequence of the 3 terminal nucleotides of the primer is given.

<sup>3</sup>The nucleotide position, in the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> or 6<sup>th</sup> exon or the 3<sup>rd</sup> intron, 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](http://www.ebi.ac.uk/imgt/hla) web site. The sequence of the 3 terminal nucleotides of the primer is given.

<sup>4</sup>The HLA-Cw\*1501 nucleotide sequence has been shown to be identical to C\*15:02:01.

The HLA-Cw\*1514 nucleotide sequence has been renamed C\*15:10:02.

The HLA-Cw 15:20 nucleotide Sequence has been shown to be identical to C\*15:27

<sup>5</sup>HLA-C\*15 alleles in bold lettering are listed as confirmed alleles on the IMGT/HLA web page [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), release 3.11.0, January 2013.

<sup>6</sup>The C\*15:31 and C\*15:33 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 18.

<sup>7</sup>The C\*15:32Q and C\*15:41 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 24.

<sup>8</sup>The C\*15:34 and C\*15:39 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 17.

<sup>9</sup>The C\*15:35 and C\*15:47 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

<sup>10</sup>The C\*15:44 and C\*15:45 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 20.

<sup>11</sup>Primer mix 3: Specific PCR fragment of 70 bp in the C\*15:28 allele. Specific PCR fragment of 195 bp in the C\*15:03, 15:16 and 15:25<sup>w</sup> and in the C\*02:12<sup>w</sup>, 02:49, 02:55, 03:15, 03:27<sup>w</sup>, 03:38:01<sup>w</sup>-03:38:02<sup>w</sup>, 03:69<sup>w</sup>, 03:130, 03:136<sup>w</sup>, 03:163, 04:03, 04:06, 04:16, 04:80, 04:107, 06:70, 07:20<sup>w</sup>, 07:96:01<sup>w</sup>-07:96:02<sup>w</sup>, 07:127<sup>w</sup> and 07:263<sup>w</sup> alleles.

Primer mix 6: Specific PCR fragment of 305 bp in the C\*15:06:01-15:06:03, 15:40 and 15:55 alleles. Specific PCR fragment of 345 bp in the C\*15:26 allele. Specific PCR fragment of 370 bp in the C\*15:22, 15:37, 15:55, 15:58 and 15:65 alleles.

Primer mix 8: Specific PCR fragment of 160 bp in the C\*15:08 and in the C\*02:06, 02:47 and 12:15 and the B\*07:78<sup>w</sup>, B\*13:18<sup>w</sup>, 13:31<sup>w</sup>, 13:41<sup>w</sup>, B\*15:73<sup>w</sup>, B\*54:10<sup>w</sup>, B\*54:20<sup>w</sup>, B\*55:09<sup>w</sup>, B\*55:21<sup>w</sup>, B\*55:37<sup>w</sup> and B\*55:52<sup>w</sup> alleles. Specific PCR fragment of 185 bp in the C\*15:19 allele.

Primer mix 9: Specific PCR fragment of 135 bp in the C\*15:11, 15:23 and 15:63 and in the C\*02:02:01-02:02:03, 02:02:05-02:02:12, 02:02:14-02:02:20, 02:22-02:25Q, 02:27:01-02:38N, 02:40, 02:42-02:44, 02:46-02:67, 04:03, 04:06, 04:42, 04:80, 04:107, 05:26, 05:43, 06:05, 07:02:09, 08:37, 12:16, 16:21 and 16:34 alleles. Specific PCR fragment of 305 bp in the C\*15:18 allele.

Primer mix 12: Specific PCR fragment of 100 bp in the C\*15:28 allele. Specific PCR fragment of 240 bp in the \*15:07, 15:21, 15:25 and 15:43 and in the 02:12, 02:27:01-02:27:02, 03:02:01-03:03:14, 03:03:15<sup>w</sup>, 03:03:16-03:04:16, 03:04:18-03:04:25, 03:04:27-03:06, 03:08-03:09, 03:10, 03:11:01-03:14, 03:16-03:17, 03:19-03:28, 03:29, 03:30-03:38:02, 03:40:01-03:44, 03:46-03:64:01, 03:65-03:66, 03:68-03:98, 03:100-03:114, 03:116:01-03:129, 03:131-03:133, 03:135-03:136, 03:138-03:139, 03:141-03:143, 03:145-03:155, 03:157-03:162, 03:164-03:165, 03:167-03:169, 03:171-03:181, 03:183-03:185, 07:96:01-07:96:02, 12:03:23, 16:34 and in the B\*40:164 alleles

Primer mix 13: Specific PCR fragment of 125 bp in the C\*15:24 and the C\*04:89, 04:135 and 05:47 alleles. Specific PCR fragment of 185 bp in the C\*15:12 and in the C\*04:52, 04:55, 05:55, 12:58 and 14:10 alleles.

Primer mix 14: Specific PCR fragment of 130 bp in the C\*15:13 allele. Specific PCR fragment of 440 bp in the C\*15:11, 15:16-15:17 and 15:43 and the C\*02:06, 02:47, 03:12, 03:19, 03:102, 07:289 and 12:15 and in the B\*46:11, B\*46:18, B\*56:08 and B\*56:14 alleles.

**Lot No.: 05S**

**Lot-specific information**

Primer mix 16: Specific PCR fragment of 90 bp in the C\*15:27 and in the B\*35:222 alleles. Specific PCR fragment of 165 bp in the C\*15:15 allele. Specific PCR fragment of 345 bp in the C\*15:26 allele.

Primer mix 17: Specific PCR fragment of 140 bp in the C\*15:34 allele. Specific PCR fragment of 215 bp in the C\*15:36 and the C\*04:112 alleles. Specific PCR fragment of 295 bp in the C\*15:39 and the C\*01:30, 08:51 and 12:87 alleles.

Primer mix 18: Specific PCR fragment of 85 bp in the C\*15:33 allele. Specific PCR fragment of 160 bp in the C\*15:31 and the C\*07:123, 07:173 and 07:294 and in the B\*15:200, B\*51:115 and B\*58:05 alleles.

Primer mix 19: Specific PCR fragment of 165 bp in the C\*15:42 allele. Specific PCR fragment of 355 bp in the C\*15:46 allele.

Primer mix 20: Specific PCR fragment of 120 bp in the C\*15:44 allele. Specific PCR fragment of 235 bp in the C\*15:45 allele.

Primer mix 21: Specific PCR fragment of 170 bp in the C\*15:47 allele. Specific PCR fragment of 445 bp in the C\*15:35 and the C\*02:35 and 05:21 alleles.

Primer mix 23: Specific PCR fragment of 175 bp in the C\*15:48 allele. Specific PCR fragment of 545 bp in the C\*15:29 and in the C\*08:22 and 08:56 alleles.

Primer mix 24: Specific PCR fragment of 175 bp in the C\*15:32Q and the C\*06:74 alleles. Specific PCR fragment of 380 bp in the C\*15:41 allele.

'w', might be weakly amplified.

Lot No.: 05S

Lot-specific information

CELL LINE VALIDATION SHEET																			
HLA-C*15 SSP primer set																			
			Prod. No.:	Well															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				201071801	201071802	201071803	201071804	201071805	201071806	201201307	201071808	201071809	201071810	201315511	201071812	201201313	201315514	201315515	201184816
	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	*15:29	+	+	-	-	+	-	-	-	-	-	-	-	-	-	+	-
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	-	-	-	+	-	-	+	-	-	+	-	-	-	-	-	-



Lot No.: **05S**

Lot-specific information

CELL LINE VALIDATION SHEET																
HLA-C*15 SSP primer set																
				Prod. No.:	Well											
					17	18	19	20	21	22	23	24	25	26	27	
					201315517	201184818	201201319	201184820	201184821	201184822	201184823	201184824	201201325	201201326	201201327	
	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	*15:29	-	-	-	-	-	-	+	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	



Lot No.: **05S**

Lot-specific information

## CERTIFICATE OF ANALYSIS

### Olerup SSP® HLA-C\*15 SSP

Product number: 101.626-12 – including *Taq* polymerase  
101.626-12u – without *Taq* polymerase  
Lot number: 05S  
Expiry date: 2015-September-01  
Number of tests: 12  
Number of wells per test: 27

#### Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2010-718-01	11	2013-155-11	21	2011-848-21
2	2010-718-02	12	2010-718-12	22	2011-848-22
3	2010-718-03	13	2012-013-13	23	2011-848-23
4	2010-718-04	14	2013-155-14	24	2011-848-24
5	2010-718-05	15	2013-155-15	25	2012-013-25
6	2010-718-06	16	2011-848-16	26	2012-013-26
7	2012-013-07	17	2013-155-17	27	2012-013-27
8	2010-718-08	18	2011-848-18		
9	2010-718-09	19	2012-013-19		
10	2010-718-10	20	2011-848-20		

The specificity of each primer solution of the HLA-C\*15 primer set has been tested against 48 well characterized cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 6, 8, 13, 14, 16 to 22 and 24 to 27 were available. The specificity of the primers in primer solutions 6, 8, 13, 14 and 16 to 19 were tested by separately adding one 5'-primer, respectively one 3'-primer.

In primer solutions 20, 25 and 26 it was only possible to test the 5'-primer, the 3'-primers were not possible to test. In primer solutions 21, 22, 24 and 27 it was only possible to test the 3'-primers, the 5'-primers were not possible to test.

In primer mixes 8, 9, 11 and 14 one of the 5'-primers could not be tested, and in primer mixes 3, 7, 12, 17, 18 and 23 one or two of the 3'-primers could not be tested. Additional primers in primer solutions 9 and 23 were tested by separately adding either one 5'-primer or one 3'-primer.

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

**Date of approval:** 2013-April-04

**Approved by:**

#### Production Quality Control

Lot No.: **05S**

Lot-specific information

## Declaration of Conformity

**Product name:** *Olerup* SSP® HLA-C\*15  
**Product number:** 101.626-12/12u  
**Lot number:** 05S

**Intended use:** HLA-C\*15 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 13485:2012, 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  
2013-April-04

Åsa Olausson  
Production Quality Control

HLA-C\*15  
101.626-12 – including *Taq* polymerase, IFU-01  
101.626-12u – without *Taq* polymerase, IFU-02

Product Insert

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Visit [www.olerup-ssp.com](http://www.olerup-ssp.com) for  
“Instructions for Use” (IFU)

Lot No.: **05S**

Lot-specific information



HLA-C\*15  
101.626-12 – including *Taq* polymerase, IFU-01  
101.626-12u – without *Taq* polymerase, IFU-02

Product Insert

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Lot No.: **05S**

Lot-specific information

Lot No.: **05S**

Lot-specific information

HLA-C\*15  
101.626-12 – including *Taq* polymerase, IFU-01  
101.626-12u – without *Taq* polymerase, IFU-02

Product Insert

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Lot No.: **05S**

Lot-specific information

HLA-C\*15  
101.626-12 – including *Taq* polymerase, IFU-01  
101.626-12u – without *Taq* polymerase, IFU-02

Product Insert

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Visit [www.olerup-ssp.com](http://www.olerup-ssp.com) for  
“Instructions for Use” (IFU)

Lot No.: **05S**

Lot-specific information

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**E-mail:** [support-at@olerup.com](mailto:support-at@olerup.com)

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