

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information  
**Olerup SSP® HLA-A\*68**

Product number:	101.418-12/04 – including <i>Taq</i> pol. 101.418-12u/04u – without <i>Taq</i> pol.
Lot number:	97Y
Expiry date:	2018-May-01
Number of tests:	12 tests – Product No. 101.418-12/12u 4 tests – Product No. 101.418-04/04u
Number of wells per test:	47+1
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. 97Y.**

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-A\*68 LOT (30X)**

The HLA-A\*68 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

A well containing Negative Control primer pairs has been added.

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

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

The HLA-A\*68 primer set, specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP®* HLA-A\*68 lot was made (**Lot No. 30X**). The kit design is based on IMGT/HLA database 3.2.1.1.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

**Lot-specific information**

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

Well	5'-primer	3'-primer	rationale
1	-	Added	3'-primer added for the A*68:01:29 allele.
9	-	Removed	3'-primer removed for improved HLA-specific amplification of the A*68:18N allele.
11	Added	-	5'-primer added for the A*68:120N allele.
12	Added	-	5'-primer added for the A*68:120N allele.
13	-	Added	3'-primer added for the A*68:113 allele.
23	-	Modified	3'-primer modified for improved HLA-specific amplification.
27	Added	-	5'-primers added for the A*68:43:02 and A*68:18N alleles.
34	Added	-	5'-primer added for the A*68:18N allele.
35	Added	Added	Primer pair added for the A*68:93 allele.
37	-	Added	3'-primer added for the A*68:123 allele.
39	Added	-	5'-primer added from well 40.
40	Moved, added	Added	5'-primer moved to well 39, primer pair added for the A*68:104:02 allele.
42	Added	-	5'-primer added for the A*68:101 allele.
44	-	Added	3'-primer added for the A*68:130 allele.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

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
<b>5'-primer<sup>1</sup></b>	<b>164</b>	<b>340</b>	<b>440</b>	<b>45</b>	<b>45</b>	<b>43</b>	<b>36</b>
	5'-CAC <sup>3'</sup>	5'-Agg <sup>3'</sup>	5'-TTA <sup>3'</sup>	5'-Tgg <sup>3'</sup>	5'-Tgg <sup>3'</sup>	5'-Tgg <sup>3'</sup>	5'-TAC <sup>3'</sup>
							36
							5'-TAT <sup>3'</sup>
<b>3'-primer<sup>2</sup></b>	<b>231</b>	<b>2<sup>nd</sup> I</b>	<b>507</b>	<b>59</b>	<b>58</b>	<b>57</b>	<b>47</b>
	5'-TgC <sup>3'</sup>	5'-AAA <sup>3'</sup>	5'-TTg <sup>3'</sup>	5'-CTC <sup>3'</sup>	5'-ggC <sup>3'</sup>	5'-CTC <sup>3'</sup>	5'-ACA <sup>3'</sup>
							48
							5'-gCA <sup>3'</sup>
							48
							5'-gCC <sup>3'</sup>
							52
							5'-TgT <sup>3'</sup>
<b>A*</b>	<b>+</b>	<b>+</b>	<b>+</b>				
<b>B*</b>	<b>+</b>	<b>+</b>	<b>+</b>				
<b>C*</b>	<b>+</b>	<b>+</b>	<b>+</b>				
<b>DRB1</b>				<b>+</b>	<b>+</b>		
<b>DRB3</b>				<b>+</b>	<b>+</b>		
<b>DRB5</b>				<b>+</b>			
<b>DQB1</b>					<b>+</b>		
<b>DPB1</b>						<b>+</b>	
<b>DQA1</b>							<b>+</b>

<sup>1</sup>The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2<sup>nd</sup> or 3<sup>rd</sup> exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codon 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>2</sup>The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2<sup>nd</sup> or 3<sup>rd</sup> exon or the 2<sup>nd</sup> 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](http://www.ebi.ac.uk/imgt/hla) web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

## PRODUCT DESCRIPTION

### HLA-A\*68 SSP subtyping

#### CONTENT

The primer set contains 5'- and 3'-primers for identifying the A\*68:01 to A\*68:134 and to separate the A\*68 alleles from the A\*69 alleles.

#### PLATE LAYOUT

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

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</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>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>
<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>NC</b>

The 48 well cut PCR plate is marked with ‘HLA-A\*68’ in silver gray ink.

Well No. 1 is marked with the Lot No ‘97Y’.

Wells 1 to 47 – HLA-A\*68 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-A alleles non-HLA-A\*68 alleles will be amplified by primer mixes 1, 2, 4 to 7, 9 to 11, 13 to 27, 29 to 32, 34 to 38 and 40 to 46. In addition, a few HLA-B and HLA-C alleles will be amplified by primer mixes 1, 10, 15, 17, 21, 23, 28, 29, 35 and 45.

For further details see Specificity Table.

#### UNIQUELY IDENTIFIED ALLELES

All the HLA-A\*68 alleles, i.e. **A\*68:01 to A\*68:134 as well as the A\*69:01 to 69:03 alleles**, recognized by the HLA Nomenclature Committee in August 2015<sup>1,2</sup> will be amplified by the primers in the HLA-A\*68 subtyping kit.

The HLA-A\*68 kit enables separation of the confirmed HLA-A\*68 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-A\*68 alleles is listed below.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

**Lot-specific information**

The HLA-A\*68 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-A\*68 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix
A*68:68, 68:106	39
A*68:99, 68:101	42

The HLA-A\*68 subtyping kit cannot distinguish the following silent mutations: the A\*68:01:01:01-68:01:01:02, 68:01:03-68:01:05, 68:01:07-68:01:12 68:01:14, 68:01:18-68:01:20, 68:01:28 and 68:01:32, the A\*68:01:02:01-68:01:02:02, 68:01:06, 68:01:13, 68:01:15-68:01:16 68:01:21-68:01:27 and 68:01:30-68:01:31, the A\*68:02:01:01-68:02:10, the A\*68:03:01-68:03:02, the A\*68:27:01-68:27:02 alleles or the A\*68:43:01-68:43:02 alleles.

<sup>1</sup>HLA-A alleles listed on the IMGT/HLA web page 2015-August-11, release 3.21.1, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

<sup>2</sup>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>.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

**ALLELE CONFIRMATION STATUS**

Allele	Status <sup>1</sup>	Allele	Status <sup>1</sup>	Allele	Status <sup>1</sup>	Allele	Status <sup>1</sup>
A*68:01:01:01	Confirmed	A*68:05	Confirmed	A*68:50	Unconfirmed	A*68:97	Unconfirmed
A*68:01:01:02	Confirmed	A*68:06	Confirmed	A*68:51	Unconfirmed	A*68:98	Unconfirmed
A*68:01:02:01	Confirmed	A*68:07	Confirmed	A*68:52	Unconfirmed	A*68:99	Confirmed
A*68:01:02:02	Confirmed	A*68:08:01	Unconfirmed	A*68:53	Confirmed	A*68:100	Unconfirmed
A*68:01:03	Unconfirmed	A*68:08:02	Confirmed	A*68:54	Confirmed	A*68:101	Confirmed
A*68:01:04	Unconfirmed	A*68:09	Unconfirmed	A*68:55:01	Confirmed	A*68:102	Unconfirmed
A*68:01:05	Unconfirmed	A*68:10	Confirmed	A*68:55:02	Unconfirmed	A*68:103:01	Unconfirmed
A*68:01:06	Confirmed	A*68:11N	Confirmed	A*68:56	Unconfirmed	A*68:103:02	Unconfirmed
A*68:01:07	Unconfirmed	A*68:12	Confirmed	A*68:57	Unconfirmed	A*68:104:01	Confirmed
A*68:01:08	Confirmed	A*68:13:01	Confirmed	A*68:58	Unconfirmed	A*68:104:02	Unconfirmed
A*68:01:09	Unconfirmed	A*68:13:02	Unconfirmed	A*68:59N	Confirmed	A*68:105	Unconfirmed
A*68:01:10	Unconfirmed	A*68:14	Unconfirmed	A*68:60	Confirmed	A*68:106	Confirmed
A*68:01:11	Unconfirmed	A*68:15	Confirmed	A*68:61	Unconfirmed	A*68:107	Unconfirmed
A*68:01:12	Unconfirmed	A*68:16	Confirmed	A*68:62	Unconfirmed	A*68:108	Unconfirmed
A*68:01:13	Unconfirmed	A*68:17	Confirmed	A*68:63	Unconfirmed	A*68:109	Unconfirmed
A*68:01:14	Unconfirmed	A*68:18N	Unconfirmed	A*68:64	Unconfirmed	A*68:110	Confirmed
A*68:01:15	Unconfirmed	A*68:19	Confirmed	A*68:65	Confirmed	A*68:111	Unconfirmed
A*68:01:16	Unconfirmed	A*68:20	Unconfirmed	A*68:66	Unconfirmed	A*68:112	Unconfirmed
A*68:01:17	Unconfirmed	A*68:21:01	Unconfirmed	A*68:67	Confirmed	A*68:113	Unconfirmed
A*68:01:18	Unconfirmed	A*68:21:02	Unconfirmed	A*68:68	Confirmed	A*68:114	Unconfirmed
A*68:01:19	Unconfirmed	A*68:22	Unconfirmed	A*68:69	Unconfirmed	A*68:115	Unconfirmed
A*68:01:20	Confirmed	A*68:23	Unconfirmed	A*68:70	Unconfirmed	A*68:116	Unconfirmed
A*68:01:21	Unconfirmed	A*68:24	Confirmed	A*68:71	Unconfirmed	A*68:117	Unconfirmed
A*68:01:22	Confirmed	A*68:25	Confirmed	A*68:72	Confirmed	A*68:118	Unconfirmed
A*68:01:23	Unconfirmed	A*68:26	Unconfirmed	A*68:73	Unconfirmed	A*68:119:01	Unconfirmed
A*68:01:24	Confirmed	A*68:27:01	Confirmed	A*68:74	Unconfirmed	A*68:119:02	Unconfirmed
A*68:01:25	Confirmed	A*68:27:02	Unconfirmed	A*68:75:01	Unconfirmed	A*68:120N	Unconfirmed
A*68:01:26	Confirmed	A*68:28	Unconfirmed	A*68:75:02	Unconfirmed	A*68:121	Unconfirmed
A*68:01:27	Unconfirmed	A*68:29	Unconfirmed	A*68:76:01	Unconfirmed	A*68:122	Unconfirmed
A*68:01:28	Unconfirmed	A*68:30	Unconfirmed	A*68:76:02	Unconfirmed	A*68:123	Confirmed
A*68:01:29	Unconfirmed	A*68:31	Confirmed	A*68:77	Unconfirmed	A*68:124	Unconfirmed
A*68:01:30	Unconfirmed	A*68:32	Unconfirmed	A*68:78	Unconfirmed	A*68:125	Unconfirmed
A*68:01:31	Unconfirmed	A*68:33	Confirmed	A*68:79	Unconfirmed	A*68:126	Unconfirmed
A*68:01:32	Unconfirmed	A*68:34	Unconfirmed	A*68:80	Confirmed	A*68:127	Unconfirmed
A*68:02:01:01	Confirmed	A*68:35	Confirmed	A*68:81	Unconfirmed	A*68:128	Unconfirmed
A*68:02:01:02	Unconfirmed	A*68:36	Confirmed	A*68:82	Unconfirmed	A*68:129	Unconfirmed
A*68:02:01:03	Confirmed	A*68:37	Confirmed	A*68:83	Unconfirmed	A*68:130	Unconfirmed
A*68:02:02	Confirmed	A*68:38	Unconfirmed	A*68:84	Unconfirmed	A*68:131	Unconfirmed
A*68:02:03	Confirmed	A*68:39	Unconfirmed	A*68:85	Unconfirmed	A*68:132	Unconfirmed
A*68:02:04	Confirmed	A*68:40	Confirmed	A*68:86	Confirmed	A*68:133	Unconfirmed
A*68:02:05	Unconfirmed	A*68:41	Unconfirmed	A*68:87	Unconfirmed	A*68:134	Unconfirmed
A*68:02:06	Unconfirmed	A*68:42	Unconfirmed	A*68:88	Unconfirmed		
A*68:02:07	Unconfirmed	A*68:43:01	Unconfirmed	A*68:89	Unconfirmed		
A*68:02:08	Unconfirmed	A*68:43:02	Unconfirmed	A*68:90	Unconfirmed		
A*68:02:09	Unconfirmed	A*68:44	Confirmed	A*68:91	Confirmed		
A*68:02:10	Unconfirmed	A*68:45	Unconfirmed	A*68:92	Unconfirmed		
A*68:03:01	Confirmed	A*68:46	Confirmed	A*68:93	Confirmed		
A*68:03:02	Unconfirmed	A*68:47	Unconfirmed	A*68:94N	Unconfirmed		
A*68:03:03	Confirmed	A*68:48	Unconfirmed	A*68:95	Unconfirmed		
A*68:04	Unconfirmed	A*68:49N	Unconfirmed	A*68:96	Confirmed		

<sup>1</sup> Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2015-August-11, release 3.21.1, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

**RESOLUTION IN HOMO- AND HETEROZYGOTES**

Results file with resolution in HLA-A\*68 homo- and heterozygotes is available upon request.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: 97Y

Lot-specific information  
**SPECIFICITY TABLE**

**HLA-A\*68 SSP subtyping**

Specificities and sizes of the PCR products of the 47+1 primer mixes used for HLA-A\*68 SSP subtyping

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-A*68 alleles <sup>3</sup>	Other amplified HLA-A alleles <sup>4</sup>
1 <sup>6</sup>	200 bp	800 bp	*68:01:01:01-68:02:10, 68:06-68:14, 68:16-68:19, 68:21:01-68:30, 68:32-68:35, 68:37-68:45, 68:46 <sup>w</sup> , 68:47-68:56, 68:58-68:83, 68:85-68:89, 68:91, 68:93-68:108, 68:110-68:134	*01:13, 02:34-02:35:03, 02:56:01-02:56:02, 02:62, 02:78, 02:103, 02:580, 03:01:01:01-03:01:08, 03:01:10-03:01:22, 03:01:24-03:07, 03:09-03:31, 03:33-03:35, 03:37-03:40, 03:42-03:56, 03:58-03:88, 03:90-03:106, 03:109-03:110, 03:112-03:141, 03:143-03:151, 03:153-03:160, 03:162N-03:171, 03:174-03:175, 03:177, 03:179-03:197N, 03:200Q-03:202, 03:204-03:205, 03:207-03:210, 03:212-03:218, 03:221-03:229, 11:01:01:01-11:01:50, 11:01:52-11:01:68, 11:03-11:13, 11:15:01-11:15:02, 11:20-11:27, 11:29-11:37, 11:39, 11:41-11:44, 11:46-11:50Q, 11:52Q, 11:54-11:56, 11:58-11:70:02, 11:72-11:76, 11:79-11:97, 11:99N-11:100, 11:102-11:105, 11:107-11:109N, 11:112, 11:114-11:120, 11:122-11:139, 11:141-11:146, 11:148-11:160, 11:162-11:167, 11:169-11:175, 11:177, 11:179-11:189, 11:191-11:200, 11:202-11:222, 24:19, 24:290, 30:18, 30:55, 31:89, 34:01:01-34:12, 66:01:01-66:02, 66:04, 66:06-66:10, 66:12-66:14, 66:16-66:23, 69:01-69:03, 74:13, <b>C*03:82, C*03:184:01</b>
2	435 bp	1070 bp	*68:01:01:01-68:01:32, 68:03:01-68:05, 68:08:01-68:09, 68:11N-68:12, 68:16-68:17, 68:19-68:26, 68:29, 68:32-68:33, 68:35-68:39, 68:41-68:43:02, 68:45-68:47, 68:50, 68:52, 68:55:01-68:59N, 68:63, 68:65, 68:68-68:73, 68:76:01-68:76:02, 68:79, 68:83-68:85, 68:87, 68:89-68:91, 68:93-68:96, 68:98-68:103:02, 68:105-68:109, 68:111-68:123, 68:126-68:127, 68:129, 68:131-68:134	*01:51, 03:24, 11:10, 33:18:01-33:18:02, 34:02:01-34:04, 34:07-34:09

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>3</b>	195 bp	1070 bp	*68:02:01:01-68:02:10, 68:15, 68:18N, 68:28, 68:31, 68:34, 68:39-68:40, 68:44, 68:48-68:49N, 68:51, 68:53-68:54, 68:60-68:62, 68:64, 68:67, 68:74, 68:77-68:78, 68:80-68:82, 68:86, 68:92, 68:97, 68:110, 68:124-68:125, 68:128	
<b>4</b>	180 bp 225 bp	1070 bp	*68:30 *68:03:01-68:03:02, *68:05, 68:20	*02:06:05 *02:06:05
<b>5</b>	140 bp 235 bp	<b>800 bp</b>	*68:25 *68:04	*02:339, 02:407, 02:449 *11:98, 33:51, 66:15
<b>6</b>	230 bp	1070 bp	*68:05, 68:15, 68:20	*02:06:05, 02:122, 02:143
<b>7</b>	145 bp	1070 bp	*68:06, 68:32	*02:52
<b>8</b>	160 bp 240 bp	<b>800 bp</b>	*68:07 *68:46	
<b>9</b>	195 bp 250 bp	<b>800 bp</b>	*68:47 *68:08:01-68:08:02, 68:63	*25:19:01-25:19:02, 25:30, 26:43:01-26:43:02, 26:112, 34:03 <sup>?</sup> -34:04 <sup>?</sup> , 34:06 <sup>?</sup> -34:10N <sup>?</sup> , 66:06
<b>10</b>	165 bp	<b>800 bp</b>	*68:09, 68:26, 68:129, 68:134	*01:12, 01:19, 01:127, 01:136, 03:10, 03:167, 11:01:01:01-11:01:34, 11:01:36-11:01:56, 11:01:58-11:07, 11:10-11:21N, 11:26-11:27, 11:29-11:30, 11:32-11:34, 11:36-11:43, 11:45-11:49, 11:51-11:52Q, 11:54-11:58, 11:60-11:93, 11:95-11:111, 11:114-11:115N, 11:117-11:129, 11:131-11:139, 11:141-11:157, 11:159-11:161, 11:163-11:175, 11:177-11:182Q, 11:184-11:190, 11:192-11:203, 11:205-11:210N, 11:212-11:215N, 11:217-11:223, 24:17, 24:41, 24:208, 24:296, 29:05, 29:33, 29:77, <b>C*16:67</b>
<b>11<sup>9</sup></b>	160 bp 200 bp	<b>800 bp</b>	*68:17 *68:10, 68:14, 68:120N	*02:358
<b>12</b>	200 bp 405 bp	1070 bp	*68:38, 68:110, 68:120N *68:11N	<b>C*06:139</b>
<b>13</b>	210 bp  240 bp 260 bp	<b>800 bp</b>	*68:12, 68:50, 68:117, 68:129, 68:131 *68:51 *68:113, 68:115	*26:18
<b>14</b>	400 bp	1070 bp	*68:13:01-68:13:02	*02:217:02, 02:419, 24:309
<b>15</b>	145 bp  200 bp	1070 bp	*68:19  *68:14, 68:80-68:81	*02:237, 03:17:01, 03:171, 24:18, 24:204, 24:213 *02:121, 02:425, 02:517, 23:47, 24:141, 24:234, <b>C*12:37<sup>w</sup></b>
<b>16</b>	215 bp	1070 bp	*68:15, 68:31, 68:40	*02:122, 02:143



101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>17<sup>6</sup></b>	175 bp	1070 bp	*68:02:01:01-68:02:10, 68:15, 68:18N, 68:20, 68:27:01-68:28, 68:31, 68:34, 68:40, 68:44, 68:48-68:49N, 68:51, 68:53-68:54, 68:60-68:62, 68:64, 68:67, 68:74, 68:77-68:78, 68:80-68:82, 68:86, 68:92, 68:97, 68:104:01-68:104:02, 68:110, 68:124-68:125, 68:128	*02:02:01 <sup>W</sup> , 02:02:02, 02:03:01-02:03:08, 02:05:01 <sup>W</sup> -02:05:06 <sup>W</sup> , 02:08 <sup>W</sup> , 02:22:01-02:22:02, 02:47 <sup>W</sup> , 02:49-02:50, 02:63 <sup>W</sup> , 02:102 <sup>W</sup> , 02:104, 02:115 <sup>W</sup> , 02:117, 02:122, 02:135-02:136, 02:148, 02:154 <sup>W</sup> -02:155 <sup>W</sup> , 02:172 <sup>W</sup> , 02:179 <sup>W</sup> , 02:186 <sup>W</sup> , 02:191, 02:209 <sup>W</sup> , 02:230, 02:232 <sup>W</sup> , 02:253, 02:258, 02:264, 02:267, 02:281, 02:286 <sup>W</sup> , 02:315, 02:320 <sup>W</sup> , 02:323, 02:324 <sup>W</sup> , 02:337 <sup>W</sup> , 02:344 <sup>W</sup> , 02:345, 02:355, 02:359 <sup>W</sup> , 02:370, 02:373N <sup>W</sup> , 02:376, 02:382, 02:402, 02:412, 02:413 <sup>W</sup> , 02:421 <sup>W</sup> , 02:427, 02:431, 02:433 <sup>W</sup> , 02:447, 02:463, 02:466, 02:480, 02:484 <sup>W</sup> , 02:489 <sup>W</sup> , 02:492 <sup>W</sup> , 02:495 <sup>W</sup> -02:496 <sup>W</sup> , 02:505, 02:507, 02:517, 02:529, 02:531-02:532, 02:544, 02:546, 02:557, 02:568, 02:572, 02:577, 23:02, 23:66, 24:06, 24:87, 24:138, 24:167, 24:285, 24:289, 25:01:01-25:03, 25:05-25:11, 25:13-25:18, 25:20-25:29, 25:31-25:32, 26:01:01:01-26:01:04, 26:01:07-26:07:02, 26:09-26:26, 26:28-26:39, 26:41-26:42, 26:45-26:47, 26:49-26:66, 26:68-26:72, 26:74-26:80, 26:82-26:85, 26:87-26:90, 26:92, 26:94-26:111, 26:113-26:116, 31:30, 31:97, 32:10, 33:94, 34:01:01-34:01:02, 34:05, 34:11-34:12, 43:01, 66:01:01-66:05, 66:07-66:23, <b>B*07:197, B*15:342, B*27:25, B*27:45, B*27:108, B*27:115, C*02:07</b>
<b>18</b>	200 bp	<b>800 bp</b>	*68:26, 68:65, 68:115, 68:131	*01:01:01:01-01:01:65, 01:01:67-01:04N, 01:06-01:29, 01:31N-01:33, 01:35-01:71, 01:73-01:78, 01:80-01:101, 01:103-01:144, 01:146-01:166, 01:168-01:175, 01:178N-01:189, 03:18, 03:97, 03:122, 03:135, 03:167, 11:27, 11:38-11:39, 11:94, 11:209, 23:53, 24:17, 24:41, 24:208, 24:296, 29:03, 29:33, 80:01:01:01-80:03
	225 bp		*68:21:01-68:21:02	*01:86, 03:04:01-03:04:03, 11:153:01-11:153:02
<b>19</b>	325 bp	1070 bp	*68:22	*33:63
<b>20<sup>5</sup></b>	90 bp	1070 bp	*68:23, 68:105	*01:20, 01:66, 01:73, 01:130, 02:114, 02:246, 02:279, 02:527, 03:95, 03:177, 29:22
<b>21</b>	170 bp	1070 bp	*68:28	*02:49, 24:87, 24:285, 24:289, 24:299, 31:97, 66:19, <b>B*07:197, B*27:45, B*27:108</b>
	215 bp		*68:24, 68:123	

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

22	170 bp	800 bp	*68:01:01:01-68:01:32, 68:03:01-68:05, 68:07, 68:10- 68:14, 68:16-68:17, 68:19- 68:25, 68:29-68:30, 68:32- 68:33, 68:35-68:39, 68:41- 68:43:02, 68:45-68:47, 68:50, 68:52, 68:55:01-68:59N, 68:65-68:66, 68:68-68:73, 68:75:01-68:76:02, 68:79, 68:83-68:85, 68:87-68:91, 68:93-68:96, 68:98-68:103:02, 68:105-68:107, 68:109, 68:111-68:112, 68:114, 68:116-68:123, 68:126- 68:127, 68:130-68:133	*01:01:01:01 <sup>W</sup> -01:01:69 <sup>W</sup> , 01:02 <sup>W</sup> - 01:04N <sup>W</sup> , 01:07 <sup>W</sup> -01:11N <sup>W</sup> , 01:13 <sup>W</sup> - 01:18N <sup>W</sup> , 01:20 <sup>W</sup> -01:24 <sup>W</sup> , 01:26 <sup>W</sup> - 01:29 <sup>W</sup> , 01:31N <sup>W</sup> -01:33 <sup>W</sup> , 01:35 <sup>W</sup> - 01:78 <sup>W</sup> , 01:80 <sup>W</sup> -01:97 <sup>W</sup> , 01:98, 01:99 <sup>W</sup> -01:126 <sup>W</sup> , 01:128 <sup>W</sup> -01:135 <sup>W</sup> , 01:137 <sup>W</sup> -01:144 <sup>W</sup> , 01:146 <sup>W</sup> -01:175 <sup>W</sup> , 01:178N <sup>W</sup> -01:189 <sup>W</sup> , 02:229, 02:527, 03:18 <sup>W</sup> , 03:50, 03:66, 03:225, 11:08, 11:44, 11:183, 11:191, 29:01:03, 29:28, 29:79, 36:01 <sup>W</sup> , 36:02, 36:03 <sup>W</sup> - 36:05 <sup>W</sup>
23	185 bp	1070 bp	*68:01:01:01-68:01:32, 68:03:01-68:05, 68:07-68:14, 68:16-68:17, 68:19-68:25, 68:26 <sup>W</sup> , 68:29-68:30, 68:32- 68:33, 68:35-68:39, 68:41- 68:43:02, 68:45-68:47, 68:50, 68:52, 68:55:01-68:59N, 68:63, 68:66, 68:68-68:73, 68:75:01-68:76:02, 68:79, 68:83-68:85, 68:87-68:91, 68:93-68:96, 68:98-68:103:02, 68:105-68:109, 68:111- 68:114, 68:116-68:123, 68:126-68:127, 68:129- 68:130, 68:132-68:133	*02:114, 02:229, 02:246, 02:279, 02:527, 03:01:01:01-03:01:29, 03:01:31-03:01:49, 03:01:51- 03:17:02, 03:20-03:39, 03:41-03:42, 03:44:01-03:52, 03:54-03:81, 03:83- 03:96, 03:99-03:102, 03:104, 03:106- 03:121, 03:123:01-03:134, 03:136- 03:166, 03:168N-03:169, 03:171- 03:185, 03:187-03:190, 03:192N- 03:196, 03:198-03:207, 03:209- 03:219, 03:221-03:225, 03:227- 03:229, 11:04, 11:35, 11:130, 29:01:01:01-29:02:01:02, 29:02:03- 29:02:17, 29:04-29:31, 29:34-29:66, 29:68-29:69, 29:71-29:80, 30:26, 31:03-31:04, 31:06, 32:04, 32:30, 32:32, 33:18:01-33:18:02, 34:02:01- 34:04, 34:07-34:10N, 36:01-36:03, 36:05, <b>C*16:67</b>
24	375 bp	1070 bp	*68:105	*02:55, 26:22, 33:22, 66:09, 69:01- 69:03
25	240 bp	1070 bp	*68:29	*02:243:01-02:243:02, 24:82
26 <sup>5</sup>	100 bp 190 bp	1070 bp	*68:49N *68:33, 68:80	*24:141, 33:03:17
27 <sup>5</sup>	105 bp 185 bp 235 bp	1070 bp	*68:18N *68:34 *68:43:01-68:43:02	*02:385, 02:529 *11:219
28	200 bp 230 bp	1070 bp	*68:35, 68:38, 68:110 *68:44	<b>C*06:139</b>
29 <sup>5,6</sup>	80 bp	800 bp	*68:42, 68:54, 68:61, 68:63	*02:03:01-02:03:08, 02:26, 02:99, 02:117, 02:148, 02:171:02, 02:253, 02:258, 02:264, 02:281, 02:315, 02:323, 02:345, 02:355, 02:370, 02:393, 02:402, 02:412, 02:427, 02:431, 02:447, 02:463, 02:466, 02:480, 02:489, 02:505, 02:529, 02:541, 02:544, 02:557, 02:568, 03:01:38, 03:123:02, 11:25, 11:191, 26:01:17
	250 bp		*68:36-68:37	<b>B*44:03:19-44:03:20</b>

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>30</b>	145 bp	1070 bp		*02:117, 02:135, 25:01:01-25:01:08, 25:02-25:07, 25:10-25:19:01, 25:20-25:27:02, 25:29-25:30, 26:01:01:01, 26:01:02-26:01:14, 26:01:16-26:01:25, 26:01:27-26:01:37, 26:02:01, 26:03:01-26:10, 26:12-26:13, 26:15-26:17, 26:19-26:27, 26:29-26:39, 26:41-26:43:02, 26:45-26:46, 26:48-26:72, 26:74-26:109, 26:111, 26:113, 34:01:01-34:01:02, 34:05, 34:11-34:12, 43:01, 66:01:01-66:01:02, 66:02-66:15, 66:17, 66:19-66:21
	245 bp		*68:37	
<b>31<sup>6</sup></b>	220 bp	1070 bp	*68:48, 68:50, 68:129	*25:01:01-25:04, 25:06-25:07, 25:09-25:21, 25:23-25:25, 25:27:01-25:32, 26:01:01:01-26:01:25, 26:01:27-26:02:01, 26:03:01-26:10, 26:12-26:43:02, 26:45-26:46, 26:48-26:53, 26:55-26:116, 34:01:01-34:01:02, 34:03 <sup>2</sup> -34:11 <sup>2</sup> , 34:12, 43:01, 66:01:01-66:01:02, 66:02-66:15, 66:17, 66:19-66:23
<b>32<sup>5,8</sup></b>	120 bp	<b>800 bp</b>	*68:21:01, 68:53	*02:74:02, 02:159
<b>33</b>	150 bp	1070 bp	*68:16	
<b>34<sup>5</sup></b>	105 bp 165 bp	1070 bp	*68:18N *68:55:01-68:55:02, 68:124	*03:163
<b>35<sup>7</sup></b>	140 bp 295 bp	1070 bp	*68:59N *68:93, 68:97	*32:73, <b>B*44:129</b>
<b>36</b>	195 bp	1070 bp	*68:01:01:01-68:01:01:02, 68:01:03-68:01:05, 68:01:07-68:01:12, 68:01:14, 68:01:18-68:01:20, 68:01:28, 68:01:32, 68:03:03-68:04, 68:08:01, 68:21:02-68:22, 68:25-68:27:02, 68:35, 68:42-68:43:02, 68:50, 68:55:01, 68:56, 68:58-68:59N, 68:63, 68:68, 68:72, 68:75:02, 68:76:02, 68:79, 68:87-68:88, 68:94N, 68:103:01, 68:104:02, 68:106, 68:113, 68:119:01, 68:122, 68:126-68:127, 68:129, 68:133	*11:10, 25:01:01-25:01:03, 25:01:05-25:02, 25:04-25:14, 25:16, 25:18-25:29, 25:31-25:32, 26:01:01:01-26:01:29, 26:01:31-26:06, 26:08-26:15, 26:17-26:18, 26:21-26:34, 26:36-26:43:02, 26:45-26:63, 26:65-26:71N, 26:73-26:82, 26:84-26:88, 26:90-26:91, 26:93-26:116, 33:51, 34:01:01-34:07, 34:09-34:12, 66:01:01-66:22, 69:01-69:03
<b>37</b>	145 bp 170 bp 285 bp	1070 bp	*68:67 *68:123 *68:26, 68:65, 68:115, 68:131	*34:12 *26:29, 26:49, 66:10
<b>38<sup>7</sup></b>	165 bp	1070 bp	*68:91	*25:01:01-25:19:02, 25:21-25:22, 25:24-25:32, 26:01:01:01-26:09, 26:11N-26:43:02, 26:45-26:60N, 26:62-26:99, 26:101-26:106, 26:108-26:116, 34:01:01-34:01:02, 34:03 <sup>2</sup> -34:11 <sup>2</sup> , 34:12, 43:01, 66:01:01-66:23
<b>39<sup>5</sup></b>	95 bp 180 bp	1070 bp	*68:106 *68:68	

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>40<sup>5</sup></b>	215 bp	1070 bp	*68:01:01:01-68:01:16, 68:01:18-68:01:32, 68:03:01- 68:07, 68:10-68:14, 68:16- 68:17, 68:19-68:22, 68:24- 68:25, 68:29-68:30, 68:32- 68:33, 68:35-68:39, 68:41- 68:43:02, 68:45-68:47, 68:50, 68:52, 68:55:01-68:59N, 68:65-68:66, 68:68-68:72, 68:75:01-68:76:02, 68:79, 68:84-68:85, 68:87-68:91, 68:93-68:96, 68:98-68:102, 68:104:01-68:104:02, 68:106- 68:109, 68:111-68:114, 68:116-68:123, 68:126- 68:127, 68:130-68:133	*23:02 <sup>w</sup> , 23:66 <sup>w</sup> , 24:06 <sup>w</sup> , 24:22 <sup>w</sup> , 24:138 <sup>w</sup> , 24:167 <sup>w</sup> , 26:70, 29:28, 31:30, 32:10, 33:94
<b>41</b>	200 bp	1070 bp	*68:45, 68:117	*24:24, 24:67, 24:290, 26:16
<b>42</b>	130 bp 245 bp	1070 bp	*68:60, 68:99 *68:101	*11:164 *03:180
<b>43</b>	365 bp	1070 bp	*68:94N	*26:71N
<b>44</b>	190 bp	1070 bp	*68:75:01-68:75:02, 68:96, 68:130	*11:11, 43:01
<b>45</b>	150 bp 220 bp 255 bp	1070 bp	*68:41 *68:72 *68:86	*01:126 *26:57, <b>B*39:104</b>
<b>46<sup>5</sup></b>	110 bp	1070 bp	*68:52	*02:396
<b>47</b>	220 bp	1070 bp	*68:01:02:01-68:01:02:02, 68:01:06, 68:01:13, 68:01:15- 68:01:17, 68:01:21-68:01:27, 68:01:30-68:01:31, 68:06- 68:07, 68:08:02-68:09, 68:11N-68:12, 68:13:02, 68:16-68:17, 68:19, 68:21:01, 68:23-68:24, 68:30, 68:32- 68:33, 68:37-68:38, 68:41, 68:47, 68:52, 68:55:02, 68:65- 68:66, 68:69-68:70, 68:73, 68:75:01, 68:76:01, 68:83, 68:85, 68:91, 68:93, 68:95- 68:96, 68:98-68:102, 68:103:02-68:104:01, 68:105, 68:107-68:108, 68:111-68:112, 68:114- 68:116, 68:118, 68:119:02- 68:121, 68:123, 68:131- 68:132, 68:134	
<b>48<sup>10</sup></b>	-	-	<b>Negative Control</b>	

<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 HLA-A\*68 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.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

### Lot-specific information

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 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.

<sup>3</sup>For several HLA Class I 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. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

<sup>4</sup>Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A\*68 alleles will be amplified by primer mixes 1, 2, 4 to 7, 9 to 11, 13 to 27, 29 to 32, 34 to 38 and 40 to 46. In addition, a few HLA-B and HLA-C alleles will be amplified by primer mixes 1, 10, 15, 17, 21, 23, 28, 29, 35 and 45.

<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 1, 17, 29 and 31 may give rise to a lower yield of HLA-specific PCR product than the other HLA-A\*68 primer mixes.

<sup>7</sup>Primer mixes 35 and 38 may have tendencies of unspecific amplifications.

<sup>8</sup>Primer mix 32 has a tendency to giving rise to primer oligomer formation.

<sup>9</sup>Primer mix 11 may faintly amplify the A\*02:06:05, 02:06:09, 02:122, 11:70, 11:121 and 26:07:01-26:07:02 alleles.

<sup>10</sup>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', may be weakly amplified.

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

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information  
**PRIMER SPECIFICATION**

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec. PCR product	200	435	195	180	140	230	145	160	195	165	160	200
				225	235			240	250		200	405
Length of int. pos. control <sup>1</sup>	<b>800</b>	1070	1070	1070	<b>800</b>	1070	1070	<b>800</b>	<b>800</b>	<b>800</b>	<b>800</b>	1070
5'-primer(s) <sup>2</sup>	127	261	106	102	98	102	145	98	106	413	98	47
	5'-ggg <sup>3'</sup>	5'-AAC <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-g.T <sup>3'</sup>
					397	106	414	418	2 <sup>nd</sup> I		386	376
					5'-gCC <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-gAA <sup>3'</sup>	5'-AgC <sup>3'</sup>	5'-CCT <sup>3'</sup>		5'-gTA <sup>3'</sup>	5'-gCA <sup>3'</sup>
											419	386
											5'-ggT <sup>3'</sup>	5'-gTA <sup>3'</sup>
3'-primer(s) <sup>3</sup>	282	413	259	240	290	292	259	299	479	538	256	282
	5'-gAC <sup>3'</sup>	5'-gCC <sup>3'</sup>	5'-gTT <sup>3'</sup>	5'-ggA <sup>3'</sup>	5'-CAA <sup>3'</sup>	5'-gTg <sup>3'</sup>	5'-gTT <sup>3'</sup>	5'-TCA <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-CTg <sup>3'</sup>	5'-CTC <sup>3'</sup>	5'-gAC <sup>3'</sup>
	282			282	497		506	539	538		538	538
	5'-gAC <sup>3'</sup>			5'-gAg <sup>3'</sup>	5'-Tgg <sup>3'</sup>		5'-TgT <sup>3'</sup>	5'-TCC <sup>3'</sup>	5'-CAA <sup>3'</sup>		5'-CCA <sup>3'</sup>	5'-CCA <sup>3'</sup>
	295			292					538			
	5'-TCT <sup>3'</sup>			5'-gTg <sup>3'</sup>					5'-CAg <sup>3'</sup>			
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. PCR product	210	400	145	215	175	200	325	90	170	170	185	375
			200				225		215			
Length of int. pos. control <sup>1</sup>	<b>800</b>	1070	1070	1070	1070	<b>800</b>	1070	1070	1070	<b>800</b>	1070	1070
5'-primer(s) <sup>2</sup>	2 <sup>nd</sup> I	28	453	106	395	413	317	362	102	413	413	261
	5'-CCT <sup>3'</sup>	5'-TCg <sup>3'</sup>	5'-AAA <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-gCA <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-gCA <sup>3'</sup>	5'-gAg <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-AAC <sup>3'</sup>
					413			362	413			
					5'-CCA <sup>3'</sup>			5'-gAg <sup>3'</sup>	5'-CCA <sup>3'</sup>			
3'-primer(s) <sup>3</sup>	497	255	555	278	539	570	362	413	275	539	559	355
	5'-TgA <sup>3'</sup>	5'-Cgg <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-ggC <sup>3'</sup>	5'-TCC <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-TCA <sup>3'</sup>	5'-gCC <sup>3'</sup>	5'-CCC <sup>3'</sup>	5'-TCC <sup>3'</sup>	5'-CgT <sup>3'</sup>	5'-gAC <sup>3'</sup>
	497		605	282		595			538	546		
	5'-TgA <sup>3'</sup>		5'-gCC <sup>3'</sup>	5'-gAg <sup>3'</sup>		5'-CCg <sup>3'</sup>			5'-CCg <sup>3'</sup>	5'-TAA <sup>3'</sup>		
	524		616	282		595						
	5'-CAC <sup>3'</sup>		5'-CgC <sup>3'</sup>	5'-gAg <sup>3'</sup>		5'-CCT <sup>3'</sup>						
	545											
	5'-AgA <sup>3'</sup>											
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec. PCR product	240	100	105	200	80	145	220	120	150	105	140	195
		190	185	230	250	245				165	295	
			235									
Length of int. pos. control <sup>1</sup>	1070	1070	1070	1070	800	1070	1070	800	1070	1070	1070	1070
5'-primer(s) <sup>2</sup>	28	453	87	121	102	102	2 <sup>nd</sup> I	506	413	160	341	106
	5'-TCg <sup>3'</sup>	5'-AAA <sup>3'</sup>	5'-ATT <sup>3'</sup>	5'-gCT <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-CCT <sup>3'</sup>	5'-gCA <sup>3'</sup>	5'-CCg <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-ggg <sup>3'</sup>	5'-CCg <sup>3'</sup>
		666	87	349	489	414				217	413	
		5'-gAA <sup>3'</sup>	5'-ATA <sup>3'</sup>	5'-CTg <sup>3'</sup>	5'-gCA <sup>3'</sup>	5'-CAg <sup>3'</sup>				5'-ggg <sup>3'</sup>	5'-CCg <sup>3'</sup>	
			217	376								
			5'-ggg <sup>3'</sup>	5'-gCA <sup>3'</sup>								
			413									
			5'-CCA <sup>3'</sup>									
3'-primer(s) <sup>3</sup>	97	512	282	282	308	308	506	578	524	282	355	259
	5'-ggT <sup>3'</sup>	5'-ACT <sup>3'</sup>	5'-gAC <sup>3'</sup>	5'-gAC <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-TgC <sup>3'</sup>	5'-Tgg <sup>3'</sup>	5'-CAA <sup>3'</sup>	5'-gAC <sup>3'</sup>	5'-gAT <sup>3'</sup>	5'-gTT <sup>3'</sup>
		605	559	538	317	517		595			512	
		5'-gCC <sup>3'</sup>	5'-CAT <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-ggA <sup>3'</sup>	5'-CgT <sup>3'</sup>		5'-CCg <sup>3'</sup>			5'-CCT <sup>3'</sup>	
		808			527							
		5'-AgA <sup>3'</sup>			5'-CCT <sup>3'</sup>							
					527							
					5'-CCT <sup>3'</sup>							
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47
Length of spec. PCR product	145	165	95	215	200	130	365	190	150	110	220
	170		180			245			220		
	285								255		
Length of int. pos. control <sup>1</sup>	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) <sup>2</sup>	2 <sup>nd</sup> I	2 <sup>nd</sup> I	397	363	98	77	28	98	98	383	102
	5'-CCT <sup>3'</sup>	5'-CCT <sup>3'</sup>	5'-gCg <sup>3'</sup>	5'-ATg <sup>3'</sup>	5'-CTC <sup>3'</sup>	5'-CTT <sup>3'</sup>	5'-TCg <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-ggA <sup>3'</sup>	5'-ACT <sup>3'</sup>
			486			194		666	413		
			5'-ATA <sup>3'</sup>			5'-CgA <sup>3'</sup>		5'-gAA <sup>3'</sup>	5'-CCg <sup>3'</sup>		
						524					
						5'-CCC <sup>3'</sup>					
3'-primer(s) <sup>3</sup>	430	453	538	538	259	282	224	256	277	453	282
	5'-gCg <sup>3'</sup>	5'-TCg <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-CCA <sup>3'</sup>	5'-gTT <sup>3'</sup>	5'-gAC <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-CCC <sup>3'</sup>	5'-ggT <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-gAC <sup>3'</sup>
		457				616		257	311		
		5'-gTA <sup>3'</sup>				5'-CgT <sup>3'</sup>		5'-gCA <sup>3'</sup>	5'-ggA <sup>3'</sup>		
		570						809	521		
		5'-CCg <sup>3'</sup>						5'-CAT <sup>3'</sup>	5'-ggA <sup>3'</sup>		
Well No.	37	38	39	40	41	42	43	44	45	46	47

<sup>1</sup>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.

<sup>2</sup>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](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 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.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>CELL LINE VALIDATION SHEET</b>																			
<b>HLA-A*68 SSP subtyping kit<sup>2</sup></b>																			
			Prod. No.:	Well															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				201558001	201297502	201297503	201297504	201297505	201297506	201297507	201297508	201558009	201297510	201558011	201558012	201558013	201558014	201441315	201297516
	<b>IHC cell line<sup>1</sup></b>	<b>A*</b>																	
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
37	9065 HHKB	*03:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-



101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

<b>CELL LINE VALIDATION SHEET</b>																			
<b>HLA-A*68 SSP subtyping kit<sup>2</sup></b>																			
			Prod. No.:	Well															
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	<b>IHWC cell line<sup>1</sup></b>	<b>A*</b>		201297517	201438018	201297519	201297520	201297521	201438022	201558023	201297524	201316025	201441326	201558027	201297528	201558029	201316030	201297531	201438032
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	+	-	-	-	W	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	+	-	-	-	W	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
7	9020 QBL	*26:01		+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*03:01		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	-	+	-	-	-	W	+	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

CELL LINE VALIDATION SHEET																			
HLA-A*68 SSP subtyping kit <sup>2</sup>																			
				Well															
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
				Prod. No.:	201441333	201558034	201558035	201316036	201558037	201438038	201558039	201558040	201297541	201558042	201316043	201558044	201438045	201316046	201438047
	IHWC cell line <sup>1</sup>	A*																	
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*26:01		-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup>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.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

**Lot No.: 97Y**

**Lot-specific information**

<sup>2</sup>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 5, 7 to 9, 11 to 16, 19 to 21, 25, 26, 28, 32, 33, 35, 37, 39, 41 to 46 were available. The specificities of the primers in primer solutions 5, 7 to 9, 11, 13, 15, 16, 20, 21, 25, 26, 35, 37 and 41 were tested by separately adding additional 5'-primers, respectively additional 3'-primers.

In primer solutions 12, 19, 28, 34, 39, 42 and 46 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 14, 32, 33, 43 and 45 it was only possible to test the 5'-primers, the 3'-primers were not possible to test.

In primer solution 5, 7, 8, 11, 17, 27, 34 and 35 one of the 5'-primers was not possible to test. In primer solutions 1, 8, 9, 11, 15, 16, 18, 21, 22, 26, 27, 35, 37 and 44 one or two of the 3'-primers were not possible to test. Additional primers in primer solutions 4, 6, 27, 29 and 44 were tested tested by separately adding either one additional 5'-primer, or one additional 3'-primer.

101.418-12/04 – including *Taq* pol., IFU-01  
101.418-12u/04 – without *Taq* pol., IFU-02

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

Lot No.: **97Y**

Lot-specific information

**ADDRESSES:**

**Manufacturer:**

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

**Tel:** +46-8-717 88 27

**Fax:** +46-8-717 88 18

**E-mail:** [info-ssp@olerup.com](mailto:info-ssp@olerup.com)

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

**Distributed by:**

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

**Tel:** +43-1-710 15 00

**Fax:** +43-1-710 15 00 10

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

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

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

**Tel:** 1-877-OLERUP1

**Fax:** 610-344-7989

**E-mail:** [info.us@olerup.com](mailto:info.us@olerup.com)

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

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