

## Olerup SSP<sup>®</sup> HLA-B\*37

Product number:	101.541-06 – including <i>Taq</i> polymerase
Lot number:	72K
Expiry date:	2013-May-01
Number of tests:	6
Number of wells per test:	23
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. 72K.**

### CHANGES COMPARED TO THE PREVIOUS *OLERUP SSP*<sup>®</sup> HLA-B\*37 LOT.

The HLA-B\*37 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP*<sup>®</sup> HLA-B\*37 lot was made (Lot No. 98F).

Seven wells have been added to the HLA-B\*37 kit,  
wells **17 to 23**.

The primers of the wells detailed below has been exchanged, added or modified.

Well	5'-primer	3'-primer	rationale
9	Added	-	Primer added for the B*37:22 allele.
11	Added	-	Primer added for the B*37:18 allele.
13	-	Added	Primer added for the B*37:15 allele.
17	New	New	New primer pair for the B*37:25 allele.
18	New	New	New primer pair for the B*37:20 allele.
19	New	New	New primer pair for the B*37:21 allele.
20	New	New	New primer pair for the B*37:16Q allele.
21	New	New	New primer pair for the B*37:24 allele.
22	New	New	New primer pair for the B*37:17 allele.
23	New	New	New primer pair for the B*37:19 and 37:23 alleles.

## PRODUCT DESCRIPTION

### HLA-B\*37 SSP typing

#### CONTENT

The primer set contains 5'- and 3'-primers for identifying the B\*37:01 to B\*37:25 alleles.

#### PLATE LAYOUT

Each HLA-B\*37 test consists of 23 PCR reactions in a 24 well cut PCR plate. Well 24 is empty.

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

The 24 well PCR plate is marked with 'HLA-B\*37' in silver/gray ink.

Well No. 1 is marked with the Lot No. '72K'.

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 24 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-B\*37 SSP subtypings will be influenced by most B\*07, the B\*08, the B\*13:23, the B\*14:10, thirteen B\*15, the B\*18, the B\*27, the B\*35, two B\*38, four B\*39, the B\*40, the B\*41, the B\*42, thirteen B\*44, the B\*45, the B\*46:14, B\*47, three B\*48, the B\*49, the B\*50, seven B\*51, the B\*52:19, two B\*53, the B\*54:02, two B\*55, two B\*56, two B\*57, the B\*73, the B\*78 and B\*82 alleles when present on the other haplotype. In addition, the C\*07:68 allele will be amplified by primer mix 1, and the C\*02:23 and C\*04:77 alleles will be amplified by primer mix 8.

#### UNIQUELY IDENTIFIED ALLELES

All the HLA-B\*37, i.e. **B\*37:01 to B\*37:25**, recognized by the HLA Nomenclature Committee in October 2010<sup>1</sup> will be amplified by the primers in the HLA-B\*37 SSP kit.

The HLA-B\*37 subtyping kit cannot distinguish the B\*37:01:01 to B\*37:01:07 or the B\*37:04:01 and 37:04:02 alleles.

<sup>1</sup>HLA-B alleles listed on the IMGT/HLA web page 2010-October-15, release 3.2.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

### RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 32 alleles generate 25 amplification patterns that can be combined in 325 homozygous and heterozygous combinations. 144 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.

+++----	+-----	-----	*37:02, *37:08 = *37:02, *37:22
+++----	-----	-----	*37:02, *37:10 = *37:02, *37:15
+----+	+-----	-----	*37:08, *37:13 = *37:13, *37:22
+----+	-----	-----	*37:10, *37:13 = *37:13, *37:15
+----+	-----	-----	*37:13, *37:19 = *37:13, *37:23
+----+	-----	-----	*37:01:01, *37:13 = *37:03N, *37:04:01 = *37:03N, *37:13 = *37:04:01, *37:13 = *37:13, *37:13
+----+	+-----	-----	*37:03N, *37:08 = *37:03N, *37:22
+----+	-----	-----	*37:03N, *37:10 = *37:03N, *37:15
+----+	-----	-----	*37:03N, *37:19 = *37:03N, *37:23
+----+	+-----	-----	*37:01:01, *37:03N = *37:03N, *37:03N
+----+	+-----	-----	*37:04:01, *37:08 = *37:04:01, *37:22
+----+	-----	-----	*37:04:01, *37:10 = *37:04:01, *37:15
+----+	-----	-----	*37:04:01, *37:19 = *37:04:01, *37:23
+----+	-----	-----	*37:01:01, *37:04:01 = *37:04:01, *37:04:01
+----+	-----	-----	*37:14, *37:19 = *37:14, *37:23
+----+	-----	-----	*37:11, *37:19 = *37:11, *37:23
+----+	-----	-----	*37:05, *37:19 = *37:05, *37:23
+----+	+-----	-----	*37:06, *37:08 = *37:06, *37:22
+----+	-----	-----	*37:06, *37:10 = *37:06, *37:15
+----+	-----	-----	*37:06, *37:19 = *37:06, *37:23
+----+	-----	-----	*37:01:01, *37:06 = *37:06, *37:06
+----+	+-----	-----	*37:07, *37:08 = *37:07, *37:22
+----+	-----	-----	*37:07, *37:10 = *37:07, *37:15
+----+	+-----	-----	*37:08, *37:09 = *37:09, *37:22
+----+	+-----	-----	*37:08, *37:18 = *37:18, *37:22
+----+	+-----	-----	*37:08, *37:10 = *37:08, *37:15 = *37:15, *37:22
+----+	+-----	-----	*37:08, *37:12 = *37:12, *37:22
+----+	+-----	-----	*37:08, *37:25 = *37:22, *37:25
+----+	+-----	-----	*37:08, *37:20 = *37:20, *37:22
+----+	+-----	-----	*37:08, *37:21 = *37:21, *37:22
+----+	+-----	-----	*37:08, *37:16Q = *37:16Q, *37:22
+----+	+-----	-----	*37:08, *37:24 = *37:22, *37:24
+----+	+-----	-----	*37:08, *37:17 = *37:17, *37:22
+----+	+-----	-----	*37:08, *37:19 = *37:08, *37:23 = *37:19, *37:22 = *37:22, *37:23
+----+	+-----	-----	*37:01:01, *37:08 = *37:01:01, *37:22 = *37:08, *37:22
+----+	-----	-----	*37:09, *37:10 = *37:09, *37:15
+----+	-----	-----	*37:10, *37:18 = *37:15, *37:18
+----+	-----	-----	*37:01:01, *37:09 = *37:09, *37:18 = *37:12, *37:18
+----+	-----	-----	*37:18, *37:19 = *37:18, *37:23
+----+	-----	-----	*37:01:01, *37:18 = *37:18, *37:18
+----+	-----	-----	*37:10, *37:12 = *37:12, *37:15
+----+	-----	-----	*37:10, *37:25 = *37:15, *37:25
+----+	-----	-----	*37:10, *37:20 = *37:15, *37:20
+----+	-----	-----	*37:10, *37:21 = *37:15, *37:21
+----+	-----	-----	*37:10, *37:16Q = *37:15, *37:16Q

Lot No.: **72K**

Lot-specific information

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+---+---	----+---	-----	*37:10, *37:24 = *37:15, *37:24
+---+---	----+---	-----	*37:10, *37:17 = *37:15, *37:17
+---+---	----+---	-----	*37:10, *37:19 = *37:10, *37:23 = *37:15, *37:19 = *37:15, *37:23
+---+---	----+---	-----	*37:01:01, *37:10 = *37:01:01, *37:15 = *37:10, *37:15 = *37:15, *37:15
+---+---	----+---	-----	*37:19, *37:25 = *37:23, *37:25
+---+---	----+---	-----	*37:01:01, *37:25 = *37:25, *37:25
+---+---	----+---	-----	*37:19, *37:20 = *37:20, *37:23
+---+---	----+---	-----	*37:01:01, *37:20 = *37:20, *37:20
+---+---	----+---	-----	*37:19, *37:21 = *37:21, *37:23
+---+---	----+---	-----	*37:01:01, *37:21 = *37:21, *37:21
+---+---	----+---	-----	*37:16Q, *37:19 = *37:16Q, *37:23
+---+---	----+---	-----	*37:01:01, *37:16Q = *37:16Q, *37:16Q
+---+---	----+---	-----	*37:19, *37:24 = *37:23, *37:24
+---+---	----+---	-----	*37:01:01, *37:24 = *37:24, *37:24
+---+---	----+---	-----	*37:17, *37:19 = *37:17, *37:23
+---+---	----+---	-----	*37:01:01, *37:17 = *37:17, *37:17
+---+---	----+---	-----	*37:01:01, *37:19 = *37:01:01, *37:23 = *37:19, *37:23 = *37:23, *37:23
+---+---	----+---	-----	*37:05, *37:14 = *37:14, *37:14
+---+---	----+---	-----	*37:05, *37:11 = *37:11, *37:11
+---+---	----+---	-----	*37:09, *37:09 = *37:09, *37:12

\*37:01:01 = \*37:01:01-37:01:07

\*37:04:01 = \*37:04:01-37:04:02

## SPECIFICITY TABLE

### HLA-B\*37 SSP subtyping

Specificities and sizes of the PCR products of the 23 primer mixes used for HLA-B\*37 SSP subtyping

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-B*37 alleles	Other amplified HLA-B alleles <sup>3</sup>
<b>1</b>	210 bp	<b>800 bp</b>	*37:01:01-37:01:07, 37:03N-37:06, 37:08, 37:10-37:11, 37:13-37:18, 37:20-37:25	*08:49, <b>C*07:68</b>
<b>2<sup>4</sup></b>	95 bp	1070 bp	*37:02	*27:01-27:05:15, 27:08, 27:10, 27:12-27:13, 27:15-27:18, 27:23, 27:25-27:26, 27:28-27:29, 27:31, 27:36-27:40, 27:42, 27:44-27:45, 27:47-27:69, 27:71-27:73, 47:04-47:05
<b>3<sup>8</sup></b>	200 bp, 235 bp	1070 bp	*37:03N, 37:13	
<b>4<sup>9</sup></b>	200 bp, 255 bp	1070 bp	*37:04:01-37:04:02, 37:13	*18:18
<b>5</b>	210 bp	1070 bp	*37:01:01-37:04:02, 37:06-37:09, 37:12-37:13, 37:15-37:21, 37:23-37:25	*07:27, 38:17
<b>6<sup>4</sup></b>	145 bp	1070 bp	*37:05, 37:11, 37:14 <sup>w</sup>	*07:65, 08:32, 15:46, 15:53, 15:106, 15:143, 15:202, 18:01:01-18:08, 18:10-18:15, 18:17N-18:36, 18:38-18:52, 35:01:01:01-35:08:01, 35:08:03-35:24:02, 35:27-35:45, 35:47-35:48, 35:50-35:72, 35:74-35:151, 39:19:01-39:19:02, 40:01:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:40, 40:42-40:45, 40:48-40:75, 40:77-40:92, 40:94-40:95,

Lot No.: **72K**

Lot-specific information

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				40:97-40:108, 40:111-40:116, 40:118N-40:136, 40:138-40:156, 40:158, 41:01-41:04, 41:05 <sup>w</sup> , 41:06-41:16, 44:09, 44:46, 44:75, 44:90, 45:01-45:13, 47:02, 47:03 <sup>w</sup> , 50:01:01-50:02, 50:04-50:05, 50:07-50:12, 56:06, 78:01-78:07
<b>7<sup>4</sup></b>	135 bp	1070 bp	*37:06	*47:01:01:01-47:01:01:02, 47:05-47:07
<b>8<sup>4,5</sup></b>	120 bp	1070 bp	*37:07	*07:02:01-07:18:02, 07:20-07:24, 07:26-07:32, 07:34-07:39, 07:41-07:47, 07:49N-07:50, 07:52, 07:54-07:59, 07:61-07:99, 07:101-07:117, 15:138, 40:15-40:16, 40:23, 40:32, 40:98, 40:158, 48:05, 48:08, 48:15, <b>C*02:23</b> , <b>C*04:77</b>
<b>9<sup>4,10</sup></b>	80 bp, 215 bp	1070 bp	*37:08, 37:22	*07:27, 38:17, 53:03
<b>10<sup>4,6</sup></b>	145 bp	1070 bp	*37:14	
<b>11<sup>4,11</sup></b>	95 bp, 215 bp	1070 bp	*37:09, 37:18	*07:04, 07:19, 07:25, 08:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26-08:39, 08:41-08:48, 08:50-08:54, 08:56-08:59, 08:61-08:66, 35:87, 41:02:01-41:02:03, 41:04, 41:10-41:11, 41:13, 41:15, 42:01:01-42:02, 42:05:01-42:12, 42:14, 44:106
<b>12</b>	205 bp	1070 bp	*37:01:01-37:07, 37:09-37:25	*13:23, 15:71, 15:175, 15:204, 18:12, 27:01-27:21, 27:24-27:36, 27:38-27:73, 35:63, 40:01:01-40:07, 40:09, 40:11:01-40:11:02, 40:13-40:16, 40:18-40:20, 40:22N-40:24, 40:26-40:39, 40:42-40:48, 40:50-40:57, 40:59-40:67,

Lot No.: **72K**

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				40:70-40:105, 40:107-40:109, 40:111-40:128, 40:130-40:136, 40:138-40:158, 41:01-41:16, 44:15, 44:18, 44:55, 44:103, 45:01-45:13, 48:22, 49:01:01-49:09, 49:11-49:15, 50:01:01-50:02, 50:04-50:12
<b>13<sup>5,12</sup></b>	170 bp, 255 bp	<b>800 bp</b>	*37:10, 37:15	*13:23, 18:09, 27:01, 40:47, 40:96, 40:157, 44:15, 44:55, 44:103, 49:02
<b>14<sup>7</sup></b>	245 bp	1070 bp	*37:11	*08:62, 15:71, 15:175, 15:204, 18:01:01-18:03, 18:05-18:08, 18:10-18:15, 18:17N-18:24, 18:26-18:42, 18:44-18:48, 18:50-18:52, 27:08, 27:12, 27:18, 27:26, 27:33, 27:40, 27:44, 35:50, 35:63, 35:84, 39:31, 40:01:01-40:01:04, 40:01:06-40:09, 40:11:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:36, 40:38-40:39, 40:42-40:46, 40:48, 40:50-40:57, 40:59-40:75, 40:77-40:95, 40:97-40:108, 40:111-40:116, 40:118N-40:128, 40:130-40:134, 40:136, 40:138-40:156, 40:158, 41:01-41:04, 41:06-41:16, 42:02, 42:09, 45:01-45:13, 46:14, 48:22, 50:01:01-50:02, 50:04-50:12, 54:02, 55:16, 73:01-73:02
<b>15<sup>4</sup></b>	135 bp	1070 bp	*37:11	*07:65, 08:32, 15:202, 18:01:01-18:08, 18:10-18:15, 18:17N-18:36, 18:38-18:47, 18:50-18:52, 35:01:01:01-35:02:02, 35:02:04-35:03:02, 35:03:04-35:08:01, 35:08:03-35:18, 35:20:01-35:24:02, 35:28-35:45, 35:48, 35:50-35:55, 35:57-35:62, 35:64-35:72,

				35:74-35:151, 39:19:01-39:19:02, 56:06, 78:01-78:05, 78:07
<b>16</b>	170 bp	1070 bp	*37:09, 37:12	*07:04, 07:19, 07:25, 08:01:01-08:05, 08:07-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:39, 08:41-08:48, 08:50-08:54, 08:56-08:66, 15:51, 15:83, 15:179, 15:199, 35:38, 35:87, 35:115, 40:136, 41:01-41:09, 41:11-41:16, 42:01:01-42:02, 42:04-42:14, 44:14, 44:17, 44:51, 44:62, 45:09, 51:08, 51:20, 51:36, 51:44N, 51:97, 52:19, 53:22, 55:20, 56:13, 57:09, 57:24, 82:01-82:03
<b>17</b>	165 bp	1070 bp	*37:25	*45:03
<b>18</b>	195 bp	1070 bp	*37:20	
<b>19</b>	215 bp	1070 bp	*37:21	*08:62, 18:07:01-18:07:02, 18:29, 27:23, 35:50, 35:84, 40:07-40:08, 40:13, 40:68, 40:106, 51:103
<b>20</b>	235 bp	<b>800 bp</b>	*37:16Q	
<b>21</b>	270 bp	1070 bp	*37:24	*40:152
<b>22<sup>6</sup></b>	175 bp	1070 bp	*37:17	*40:153
<b>23<sup>4,13</sup></b>	90 bp, 345 bp	1070 bp	*37:19, 37:23	*14:10, 27:69, 35:59, 38:20, 39:42, 51:32

<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-B\*37 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective lengths of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

Nonspecific amplifications, i.e. a ladder or a smear of bands, may sometimes be seen. GC-rich primers have a higher tendency of giving rise to nonspecific amplifications than other primers.

PCR fragments longer than the control bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.

PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherent feature of the primer pair(s) of a primer mix. More often it is due to other factors such as too low amount of DNA in the PCR reactions, taking too long time in setting up the PCR reactions, working at elevated room temperature or using thermal cyclers that are not pre-heated.

<sup>2</sup>The internal positive control primer pairs amplify segments of the human growth hormone gene.



Lot No.: **72K**

Lot-specific information

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The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-B\*37 SSP subtyping.

In addition, wells number 13 and 20 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

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

<sup>3</sup>Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B\*37 alleles will be amplified by primer mixes 1,2, 4 to 9, 11 to 17, 19 and 21 to 23. In addition, the C\*07:68 allele will be amplified by primer mix 1, and the C\*02:23 and C\*04:77 alleles will be amplified by primer mix 8.

<sup>4</sup>Short specific PCR fragments are less intense and not as sharp as longer specific bands.

<sup>5</sup>Primer mixes 8 and 13 have a tendency of giving rise to primer oligomer formation.

<sup>6</sup>Primer mixes 10 and 22 may give rise to nonspecific amplifications.

<sup>7</sup>Primer mix 14 may give a lower yield of specific PCR product than the other HLA-B\*37 primer mixes.

<sup>8</sup>Primer mix 3: Specific PCR fragment of 200 bp in the B\*37:13 allele. Specific PCR fragment of 235 bp in the B\*37:03N allele.

<sup>9</sup>Primer mix 4: Specific PCR fragment of 200 bp in the B\*37:13 allele. Specific PCR fragment of 255 bp in the B\*37:04:01-37:04:02 and B\*18:18 alleles.

<sup>10</sup>Primer mix 9: Specific PCR fragment of 80 bp in the B\*37:08 and B\*07:27, 38:17 and 53:03 alleles. Specific PCR fragment of 215 bp in the B\*37:22 allele.

<sup>11</sup>Primer mix 11: Specific PCR fragment of 95 bp in the B\*37:18 allele. Specific PCR fragment of 215 bp in the B\*37:09 and B\*07:04, 07:19, 07:25, 08:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26-08:39, 08:41-08:48, 08:50-08:54, 08:56-08:59, 08:61-08:66, 35:87, 41:02:01-41:02:03, 41:04, 41:10-41:11, 41:13, 41:15, 42:01:01-42:02, 42:05:01-42:12, 42:14 and 44:106 alleles.

<sup>12</sup>Primer mix 13: Specific PCR fragment of 170 bp in the B\*37:15 allele. Specific PCR fragment of 255 bp in the B\*37:10 and B\*13:23, 18:09, 27:01, 40:47, 40:96, 40:157, 44:15, 44:55, 44:103 and 49:02 alleles.

<sup>13</sup>Primer mix 23: Specific PCR fragment of 90 bp in the B\*37:19 and B\*14:10, 35:59, 38:20 and 39:42 alleles. Specific PCR fragment of 345 bp in the B\*37:23 and in the B\*27:69 and 51:32 alleles. ‘w’, might be weakly amplified.

## INTERPRETATION TABLE

### HLA-B\*37 SSP subtyping

Amplification patterns of the HLA-B\*37:01 to \*37:25 alleles

	Well <sup>4</sup>											
	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	210	95	200	200	210	145	135	120	80	145	95	205
PCR product(s)			235	255					215		215	
Length of int.	800	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
pos. control <sup>1</sup>												
5'-primer(s) <sup>2</sup>	368	363	142	368	142	206	206	527	126	206	363	97
	5'-gTC <sup>3'</sup>	5'-AAT <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-gTC <sup>3'</sup>	5'-TCT <sup>3'</sup>	5'-gAA <sup>3'</sup>	5'-gAA <sup>3'</sup>	5'-TgA <sup>3'</sup>	5'-ggA <sup>3'</sup>	5'-gAC <sup>3'</sup>	5'-AgC <sup>3'</sup>	5'-TCC <sup>3'</sup>
			368			206			261		483	
			5'-gTC <sup>3'</sup>			5'-gAC <sup>3'</sup>			5'-AAC <sup>3'</sup>		5'-gAA <sup>3'</sup>	
3'-primer(s) <sup>3</sup>	538	418	337	527	311	311	301	605	301	311	538	259
	5'-gTC <sup>3'</sup>	5'-gTC <sup>3'</sup>	5'-CTA <sup>3'</sup>	5'-CCT <sup>3'</sup>	5'-ggg <sup>3'</sup>	5'-ggT <sup>3'</sup>	5'-gTC <sup>3'</sup>	5'-gCT <sup>3'</sup>	5'-gTC <sup>3'</sup>	5'-ggT <sup>3'</sup>	5'-gTC <sup>3'</sup>	5'-CTC <sup>3'</sup>
			527	583	311							259
			5'-CCT <sup>3'</sup>	5'-gTg <sup>3'</sup>	5'-ggg <sup>3'</sup>							5'-CTC <sup>3'</sup>
Well No.	1	2	3	4	5	6	7	8	9	10	11	12
HLA-B allele												
*37:01:01-37:01:07	1				5							12
*37:02		2			5							12
*37:03N	1		3		5							12
*37:04:01-37:04:02	1			4	5							12
*37:05	1					6						12
*37:06	1				5		7					12
*37:07					5			8				12
*37:08	1				5				9			
*37:09					5						11	12
*37:10	1											12
*37:11	1					6						12
*37:12					5							12
*37:13	1		3	4	5							12
*37:14	1					w				10		12
*37:15	1				5							12
*37:16Q	1				5							12
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

## INTERPRETATION TABLE

### HLA-B\*37 SSP subtyping

Amplification patterns of the HLA-B\*37:01 to \*37:25 alleles

Well <sup>4</sup>											
13	14	15	16	17	18	19	20	21	22	23	
170	245	135	170	165	195	215	235	270	175	90	Length of spec.
255										345	PCR product(s)
800	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	Length of int.
											pos. control <sup>1</sup>
97	97	206	409	416	385	97	368	97	520	369	5'-primer(s) <sup>2</sup>
5' -TCC 3'	5' -TCC 3'	5' -gAC 3'	5' -ggC 3'	5' -CCg 3'	5' -ggg 3'	5' -TCC 3'	5' -gTC 3'	5' -TCC 3'	5' -CgA 3'	5' -TAC 3'	
									3 <sup>rd</sup> I	5' -Agg 3'	
227	302	302	538	538	538	272	563	326	3 <sup>rd</sup> I	419	3'-primer(s) <sup>3</sup>
5' -CTg 3'	5' -ggC 3'	5' -ggC 3'	5' -gTC 3'	5' -gTC 3'	5' -gTC 3'	5' -TgA 3'	5' -CgT 3'	5' -TgC 3'	5' -TAT 3'	5' -CgA 3'	
309										872	
5' -gTg 3'										5' -TCA 3'	
13	14	15	16	17	18	19	20	21	22	23	Well No.
											HLA-B allele
											*37:01:01-37:01:07
											*37:02
											*37:03N
											*37:04:01-37:04:02
											*37:05
											*37:06
											*37:07
											*37:08
			16								*37:09
13											*37:10
	14	15									*37:11
			16								*37:12
											*37:13
											*37:14
13											*37:15
							20				*37:16Q
13	14	15	16	17	18	19	20	21	22	23	Well No.

Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	210	95	200	200	210	145	135	120	80	145	95	205
PCR product(s)			235	255					215		215	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12
*37:17	1				5							12
*37:18	1				5						11	12
*37:19					5							12
*37:20	1				5							12
*37:21	1				5							12
*37:22	1								9			12
*37:23	1				5							12
*37:24	1				5							12
*37:25	1				5							12
*07:02:01-07:03, 07:05:01-07:18:02, 07:20-07:24, 07:26, 07:28-07:32, 07:34-07:39, 07:41-07:47, 07:49N- 07:50, 07:52, 07:54-07:59, 07:61- 07:64, 07:66-07:99, 07:101-07:117, 15:138, 48:05, 48:08, 48:15, C*02:23, C*04:77								8				
*07:04								8			11	
*07:19, 07:25, 08:01:01-08:05, 08:07- 08:08N, 08:10-08:11, 08:15, 08:17- 08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:31, 08:33-08:39, 08:41- 08:48, 08:50-08:54, 08:56-08:59, 08:61, 08:63-08:66, 42:01:01- 42:01:02, 42:05:01-42:08, 42:10- 42:12, 42:14											11	
*07:27					5			8	9			
*07:65						6		8				
*08:09, 08:12:01-08:12:03, 08:16, 08:60, 15:51, 15:83, 15:179, 15:199, 42:04, 42:13, 44:14, 44:17, 44:51, 44:62, 51:08, 51:20, 51:36, 51:44N, 51:97, 52:19, 53:22, 55:20, 56:13, 57:09, 57:24, 82:01-82:03												
*08:14, 08:28, 44:106											11	
*08:32, 35:87						6					11	
*08:49, C*07:68	1											
*08:62											11	
*13:23, 40:47, 40:96, 40:157, 44:15, 44:55, 44:103, 49:02												12
*14:10, 38:20, 39:42, 51:32												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

170	245	135	170	165	195	215	235	270	175	90	Length of spec.
255										345	PCR product(s)
13	14	15	16	17	18	19	20	21	22	23	Well No.
									22		*37:17
											*37:18
										23	*37:19
					18						*37:20
						19					*37:21
											*37:22
										23	*37:23
								21			*37:24
				17							*37:25
											*07:02:01-07:03, 07:05:01-07:18:02, 07:20-07:24, 07:26, 07:28-07:32, 07:34-07:39, 07:41-07:47, 07:49N- 07:50, 07:52, 07:54-07:59, 07:61- 07:64, 07:66-07:99, 07:101-07:117, 15:138, 48:05, 48:08, 48:15, C*02:23, C*04:77
			16								*07:04
											*07:19, 07:25, 08:01:01-08:05, 08:07- 08:08N, 08:10-08:11, 08:15, 08:17- 08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:31, 08:33-08:39, 08:41- 08:48, 08:50-08:54, 08:56-08:59, 08:61, 08:63-08:66, 42:01:01- 42:01:02, 42:05:01-42:08, 42:10- 42:12, 42:14
											*07:27
		15									*07:65
											*08:09, 08:12:01-08:12:03, 08:16, 08:60, 15:51, 15:83, 15:179, 15:199, 42:04, 42:13, 44:14, 44:17, 44:51, 44:62, 51:08, 51:20, 51:36, 51:44N, 51:97, 52:19, 53:22, 55:20, 56:13, 57:09, 57:24, 82:01-82:03
											*08:14, 08:28, 44:106
		15	16								*08:32, 35:87
											*08:49, C*07:68
	14		16			19					*08:62
13											*13:23, 40:47, 40:96, 40:157, 44:15, 44:55, 44:103, 49:02
										23	*14:10, 38:20, 39:42, 51:32
13	14	15	16	17	18	19	20	21	22	23	Well No.

Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	210	95	200	200	210	145	135	120	80	145	95	205
PCR product(s)			235	255					215		215	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12
*15:46, 15:53, 15:106, 15:143, 18:49, 35:02:03, 35:03:03, 35:19, 35:27, 35:47, 35:56, 40:10:01-40:10:02, 40:40, 40:49, 40:58, 40:129, 44:09, 44:46, 44:75, 44:90, 47:02, 78:06						6						
*15:71, 15:175, 15:204, 27:33, 40:46, 40:93, 48:22, 50:06												12
*15:202, 18:04, 18:25, 18:43, 35:01:01:01-35:02:02, 35:02:04-35:03:02, 35:03:04-35:08:01, 35:08:03-35:18, 35:20:01-35:24:02, 35:28-35:37, 35:39-35:45, 35:48, 35:51-35:55, 35:57-35:58, 35:60-35:62, 35:64-35:72, 35:74-35:83, 35:85-35:86, 35:88-35:114, 35:116-35:151, 39:19:01-39:19:02, 56:06, 78:01-78:05, 78:07						6						
*18:01:01-18:03, 18:05-18:06, 18:08, 18:10-18:11, 18:13-18:15, 18:17N, 18:19-18:24, 18:26-18:28, 18:30-18:36, 18:38-18:42, 18:44-18:47, 18:50-18:52						6						
*18:07:01-18:07:02, 18:29, 35:50, 35:84						6						
*18:09												
*18:12						6						12
*18:18				4		6						
*18:37, 39:31, 46:14, 54:02, 55:16, 73:01-73:02												
*18:48, 40:25, 40:69						6						
*27:01		2										12
*27:02-27:05:15, 27:10, 27:13, 27:15-27:17, 27:25, 27:28-27:29, 27:31, 27:36, 27:38-27:39, 27:42, 27:45, 27:47-27:68, 27:71-27:73		2										12
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

170	245	135	170	165	195	215	235	270	175	90	Length of spec.
255										345	PCR product(s)
13	14	15	16	17	18	19	20	21	22	23	Well No.
											*15:46, 15:53, 15:106, 15:143, 18:49, 35:02:03, 35:03:03, 35:19, 35:27, 35:47, 35:56, 40:10:01-40:10:02, 40:40, 40:49, 40:58, 40:129, 44:09, 44:46, 44:75, 44:90, 47:02, 78:06
	14										*15:71, 15:175, 15:204, 27:33, 40:46, 40:93, 48:22, 50:06
		15									*15:202, 18:04, 18:25, 18:43, 35:01:01:01-35:02:02, 35:02:04-35:03:02, 35:03:04-35:08:01, 35:08:03-35:18, 35:20:01-35:24:02, 35:28-35:37, 35:39-35:45, 35:48, 35:51-35:55, 35:57-35:58, 35:60-35:62, 35:64-35:72, 35:74-35:83, 35:85-35:86, 35:88-35:114, 35:116-35:151, 39:19:01-39:19:02, 56:06, 78:01-78:05, 78:07
	14	15									*18:01:01-18:03, 18:05-18:06, 18:08, 18:10-18:11, 18:13-18:15, 18:17N, 18:19-18:24, 18:26-18:28, 18:30-18:36, 18:38-18:42, 18:44-18:47, 18:50-18:52
	14	15				19					*18:07:01-18:07:02, 18:29, 35:50, 35:84
13											*18:09
	14	15									*18:12
	14	15									*18:18
	14										*18:37, 39:31, 46:14, 54:02, 55:16, 73:01-73:02
	14										*18:48, 40:25, 40:69
13											*27:01
											*27:02-27:05:15, 27:10, 27:13, 27:15-27:17, 27:25, 27:28-27:29, 27:31, 27:36, 27:38-27:39, 27:42, 27:45, 27:47-27:68, 27:71-27:73
13	14	15	16	17	18	19	20	21	22	23	Well No.

Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	210	95	200	200	210	145	135	120	80	145	95	205
PCR product(s)			235	255					215		215	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12
*27:06-27:07, 27:09, 27:11, 27:14, 27:19-27:21, 27:24, 27:27, 27:30, 27:32, 27:34-27:35, 27:41, 27:43, 27:46, 27:70, 40:19, 40:76, 40:109, 40:117, 44:18, 49:01:01-49:01:02, 49:03-49:09, 49:11-49:15												12
*27:08, 27:12, 27:18, 27:26, 27:40, 27:44		2										12
*27:23		2										
*27:37, 47:04		2										
*27:69		2										12
*35:38, 35:115						6						
*35:59						6						
*35:63, 40:01:01-40:01:04, 40:01:06-40:06:03, 40:09, 40:11:01-40:11:02, 40:14:01-40:14:03, 40:18, 40:20, 40:22N, 40:24, 40:26-40:31, 40:33-40:36, 40:38-40:39, 40:42-40:45, 40:48, 40:50-40:57, 40:59-40:67, 40:70-40:75, 40:77-40:92, 40:94-40:95, 40:97, 40:99-40:105, 40:107-40:108, 40:111-40:116, 40:118N-40:128, 40:130-40:134, 40:138-40:151, 40:154-40:156, 45:01-45:02, 45:04-45:08, 45:10-45:13, 50:01:01-50:02, 50:04-50:05, 50:07-50:12							6					12
*38:17					5				9			
*40:01:05, 40:37, 40:135						6						12
*40:07						6						12
*40:08, 40:68, 40:106						6						
*40:13												12
*40:15-40:16, 40:23, 40:32, 40:98, 40:158						6		8				12
*40:136, 41:01, 41:03:01-41:03:02, 41:06-41:09, 41:12, 41:14, 41:16, 45:09						6						12
*40:152						6						12
*40:153						6						12
*41:02:01-41:02:03, 41:04, 41:11, 41:13, 41:15						6					11	12
Well No.	1	2	3	4	5	6	7	8	9	10	11	12



Lot No.: **72K**

Lot-specific information

www.olerup-ssp.com

170	245	135	170	165	195	215	235	270	175	90	Length of spec.
255										345	PCR product(s)
13	14	15	16	17	18	19	20	21	22	23	Well No.
											*27:06-27:07, 27:09, 27:11, 27:14, 27:19-27:21, 27:24, 27:27, 27:30, 27:32, 27:34-27:35, 27:41, 27:43, 27:46, 27:70, 40:19, 40:76, 40:109, 40:117, 44:18, 49:01:01-49:01:02, 49:03-49:09, 49:11-49:15
	14										*27:08, 27:12, 27:18, 27:26, 27:40, 27:44
						19					*27:23
											*27:37, 47:04
										23	*27:69
		15	16								*35:38, 35:115
		15								23	*35:59
	14										*35:63, 40:01:01-40:01:04, 40:01:06-40:06:03, 40:09, 40:11:01-40:11:02, 40:14:01-40:14:03, 40:18, 40:20, 40:22N, 40:24, 40:26-40:31, 40:33-40:36, 40:38-40:39, 40:42-40:45, 40:48, 40:50-40:57, 40:59-40:67, 40:70-40:75, 40:77-40:92, 40:94-40:95, 40:97, 40:99-40:105, 40:107-40:108, 40:111-40:116, 40:118N-40:128, 40:130-40:134, 40:138-40:151, 40:154-40:156, 45:01-45:02, 45:04-45:08, 45:10-45:13, 50:01:01-50:02, 50:04-50:05, 50:07-50:12
											*38:17
											*40:01:05, 40:37, 40:135
	14					19					*40:07
	14					19					*40:08, 40:68, 40:106
						19					*40:13
	14										*40:15-40:16, 40:23, 40:32, 40:98, 40:158
	14		16								*40:136, 41:01, 41:03:01-41:03:02, 41:06-41:09, 41:12, 41:14, 41:16, 45:09
	14							21			*40:152
	14								22		*40:153
	14		16								*41:02:01-41:02:03, 41:04, 41:11, 41:13, 41:15
13	14	15	16	17	18	19	20	21	22	23	Well No.

Length of spec.	210	95	200	200	210	145	135	120	80	145	95	205
PCR product(s)			235	255					215		215	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12
*41:05						w						12
*41:10						6					11	12
*42:02, 42:09											11	
*45:03						6						12
*47:01:01:01-47:01:01:02, 47:06-47:07							7					
*47:03						w						
*47:05		2					7					
*51:103												
*53:03									9			
HLA-B allele												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

<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-B\*37 SSP subtyping.

In addition, wells number 13 and 20 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

<sup>2</sup>The nucleotide position, in the 2<sup>nd</sup> or 3<sup>rd</sup> exon or the 3<sup>rd</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> or 4<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.

170	245	135	170	165	195	215	235	270	175	90	Length of spec. PCR product(s)
13	14	15	16	17	18	19	20	21	22	23	Well No.
										345	
			16								*41:05
	14										*41:10
	14		16								*42:02, 42:09
	14			17							*45:03
											*47:01:01:01-47:01:01:02, 47:06-47:07
											*47:03
											*47:05
						19					*51:103
											*53:03
											HLA-B allele
13	14	15	16	17	18	19	20	21	22	23	Well No.

<sup>4</sup>Primer mix 3: Specific PCR fragment of 200 bp in the B\*37:13 allele. Specific PCR fragment of 235 bp in the B\*37:03N allele.

Primer mix 4: Specific PCR fragment of 200 bp in the B\*37:13 allele. Specific PCR fragment of 255 bp in the B\*37:04:01-37:04:02 and B\*18:18 alleles.

Primer mix 9: Specific PCR fragment of 80 bp in the B\*37:08 and B\*07:27, 38:17 and 53:03 alleles. Specific PCR fragment of 215 bp in the B\*37:22 allele.

Primer mix 11: Specific PCR fragment of 95 bp in the B\*37:18 allele. Specific PCR fragment of 215 bp in the B\*37:09 and B\*07:04, 07:19, 07:25, 08:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26-08:39, 08:41-08:48, 08:50-08:54, 08:56-08:59, 08:61-08:66, 35:87, 41:02:01-41:02:03, 41:04, 41:10-41:11, 41:13, 41:15, 42:01:01-42:02, 42:05:01-42:12, 42:14 and 44:106 alleles.

Primer mix 13: Specific PCR fragment of 170 bp in the B\*37:15 allele. Specific PCR fragment of 255 bp in the B\*37:10 and B\*13:23, 18:09, 27:01, 40:47, 40:96, 40:157, 44:15, 44:55, 44:103 and 49:02 alleles.

Primer mix 23: Specific PCR fragment of 90 bp in the B\*37:19 and B\*14:10, 35:59, 38:20 and 39:42 alleles. Specific PCR fragment of 345 bp in the B\*37:23 and in the B\*27:69 and 51:32 alleles.

‘w’, might be weakly amplified.

CELL LINE VALIDATION SHEET				Well															
HLA-B*37 SSP primer set																			
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				200845701	200845702	200845703	200845704	200845705	200845706	200845707	200960808	201079709	200960810	201079711	200960812	201079713	200960814	200845715	200845716
	IHC cell line	B*	Prod. No.:																
1	9001 SA	*07:02		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
2	9280 LK707	*52:01	*73:01	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
3	9011 E4181324	*52:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*15:10	*53:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*37:01		+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*39:01	*51:01	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
7	9020 QBL	*18:01		-	-	-	-	-	+	-	-	-	-	-	-	+	+	-	-
8	9025 DEU	*35:01		-	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-
9	9026 YAR	*38:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*54:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*44:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*57:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*27:05		-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-
14	9071 OLGA	*15:01	*15:20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*40:01		-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-
16	9037 SWEIG007	*40:02		-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-
17	9282 CTM3953540	*08:01	*55:01	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+
18	9257 32367	*14:01	*56:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*18:01		-	-	-	-	-	+	-	-	-	-	-	-	+	+	-	-
20	9059 SLE005	*40:01		-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-
21	9064 AMALA	*15:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*35:03		-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-
23	9124 IHL	*40:02	*56:02	-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-
24	9035 JBUSH	*38:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*58:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*07:05	*51:01	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*44:02	*44:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*44:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*42:01		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+
31	9019 DUCAF	*18:01		-	-	-	-	-	+	-	-	-	-	-	-	+	+	-	-
32	9297 HAG	*41:02		-	-	-	-	-	+	-	-	-	+	+	-	+	-	+	-
33	9098 MT14B	*40:01		-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-
34	9104 DHIF	*38:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*44:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*15:01	*35:01	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-
37	9065 HHKB	*07:02		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
38	9099 LZL	*15:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*08:01	*27:05	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-	+
40	9134 WHONP199	*13:02	*46:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*46:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*46:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*38:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*42:01	*50:01	-	-	-	-	-	+	-	-	-	-	+	+	-	+	-	+
46	9013 SCHU	*07:02		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
47	9045 TUBO	*51:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*35:01	*44:03	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-

CELL LINE VALIDATION SHEET					Well							
HLA-B*37 SSP primer set					17	18	19	20	21	22	23	
				Prod. No.:	201079717	201079718	201079719	201079720	201079721	201079722	201079723	
	IHWC cell line		B*									
1	9001 SA		*07:02		-	-	-	-	-	-	-	
2	9280 LK707		*52:01	*73:01	-	-	-	-	-	-	-	
3	9011 E4181324		*52:01		-	-	-	-	-	-	-	
4	9275 GU373		*15:10	*53:01	-	-	-	-	-	-	-	
5	9009 KAS011		*37:01		-	-	-	-	-	-	-	
6	9353 SM		*39:01	*51:01	-	-	-	-	-	-	-	
7	9020 QBL		*18:01		-	-	-	-	-	-	-	
8	9025 DEU		*35:01		-	-	-	-	-	-	-	
9	9026 YAR		*38:01		-	-	-	-	-	-	-	
10	9107 LKT3		*54:01		-	-	-	-	-	-	-	
11	9051 PITOUT		*44:03		-	-	-	-	-	-	-	
12	9052 DBB		*57:01		-	-	-	-	-	-	-	
13	9004 JESTHOM		*27:05		-	-	-	-	-	-	-	
14	9071 OLG A		*15:01	*15:20	-	-	-	-	-	-	-	
15	9075 DKB		*40:01		-	-	-	-	-	-	-	
16	9037 SWEIG007		*40:02		-	-	-	-	-	-	-	
17	9282 CTM3953540		*08:01	*55:01	-	-	-	-	-	-	-	
18	9257 32367		*14:01	*56:01	-	-	-	-	-	-	-	
19	9038 BM16		*18:01		-	-	-	-	-	-	-	
20	9059 SLE005		*40:01		-	-	-	-	-	-	-	
21	9064 AMALA		*15:01		-	-	-	-	-	-	-	
22	9056 KOSE		*35:03		-	-	-	-	-	-	-	
23	9124 IHL		*40:02	*56:02	-	-	-	-	-	-	-	
24	9035 JBUSH		*38:01		-	-	-	-	-	-	-	
25	9049 IBW9		*14:02		-	-	-	-	-	-	-	
26	9285 WT49		*58:01		-	-	-	-	-	-	-	
27	9191 CH1007		*07:05	*51:01	-	-	-	-	-	-	-	
28	9320 BEL5GB		*44:02	*44:03	-	-	-	-	-	-	-	
29	9050 MOU		*44:03		-	-	-	-	-	-	-	
30	9021 RSH		*42:01		-	-	-	-	-	-	-	
31	9019 DUCAF		*18:01		-	-	-	-	-	-	-	
32	9297 HAG		*41:02		-	-	-	-	-	-	-	
33	9098 MT14B		*40:01		-	-	-	-	-	-	-	
34	9104 DHIF		*38:01		-	-	-	-	-	-	-	
35	9302 SSTO		*44:02		-	-	-	-	-	-	-	
36	9024 KT17		*15:01	*35:01	-	-	-	-	-	-	-	
37	9065 HHKB		*07:02		-	-	-	-	-	-	-	
38	9099 LZL		*15:01		-	-	-	-	-	-	-	
39	9315 CML		*08:01	*27:05	-	-	-	-	-	-	-	
40	9134 WHONP199		*13:02	*46:01	-	-	-	-	-	-	-	
41	9055 H0301		*14:02		-	-	-	-	-	-	-	
42	9066 TAB089		*46:01		-	-	-	-	-	-	-	
43	9076 T7526		*46:01		-	-	-	-	-	-	-	
44	9057 TEM		*38:01		-	-	-	-	-	-	-	
45	9239 SHJO		*42:01	*50:01	-	-	-	-	-	-	-	
46	9013 SCHU		*07:02		-	-	-	-	-	-	-	
47	9045 TUBO		*51:01		-	-	-	-	-	-	-	
48	9303 TER-ND		*35:01	*44:03	-	-	-	-	-	-	-	

## CERTIFICATE OF ANALYSIS

### Olerup SSP® HLA-B\*37 SSP

Product number: 101.541-06 – including *Taq* polymerase  
Lot number: 72K  
Expiry date: 2013-May-01  
Number of tests: 6  
Number of wells per test: 23

#### Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2008-457-01	9	2010-797-09	17	2010-797-17
2	2008-457-02	10	2009-608-10	18	2010-797-18
3	2008-457-03	11	2010-797-11	19	2010-797-19
4	2008-457-04	12	2009-608-12	20	2010-797-20
5	2008-457-05	13	2010-797-13	21	2010-797-21
6	2008-457-06	14	2009-608-14	22	2010-797-22
7	2008-457-07	15	2008-457-15	23	2010-797-23
8	2009-608-08	16	2008-457-16		

The specificity of each primer solution of the HLA-B\*37 primer set has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the allele to be amplified by primer solutions 3, 4, 9, 10, 17, 18 and 20 to 23 were available. The specificities of the primers in primer solutions 4, 9, 10 and 23 were tested by separately adding one additional 3'-primer, respectively one additional 5'-primer.

In primer solutions 3, 20 and 21 the 5'-primers were tested by separately adding one additional 3'-primer, the 3'-primers were not possible to test. In primer solutions 17, 18 and 22 the 3'-primers were tested by separately adding one additional 3'-primer, the 5'-primers were not possible to test. In primer solutions 4, 13 and 23 one 3'-primer was not possible to test, and in primer solutions 9 and 11 one 5'-primer was not possible to test.

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

**Date of approval:** 2010-November-24

**Approved by:**

**Quality Control, Supervisor**

Lot No.: **72K**

Lot-specific information

[www.olerup-ssp.com](http://www.olerup-ssp.com)

## Declaration of Conformity

**Product name:** *Olerup* SSP® HLA-B\*37  
**Product number:** 101.541-06  
**Lot number:** 72K

**Intended use:** HLA-B\*37 high resolution histocompatibility testing

**Manufacturer:** *Olerup* SSP AB  
Hasselstigen 1  
SE-133 33 Saltsjöbaden, Sweden  
**Phone:** +46-8-717 88 27  
**Fax:** +46-8-717 88 18

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

The Authorized Representative located within the Community is: *Olerup* SSP AB.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Saltsjöbaden, Sweden  
2010-November-24

Olle Olerup  
Managing Director

Lot No.: **72K**

Lot-specific information

[www.olerup-ssp.com](http://www.olerup-ssp.com)

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