

Olerup SSP® HLA-A*26

Product number:	101.424-12u – without <i>Taq</i> polymerase
Lot number:	14L
Expiry date:	2013-September-01
Number of tests:	12
Number of wells per test:	43
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. 14L.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® HLA-A*26 LOT

The HLA-A*26 specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP*® HLA-A*26 lot was made (Lot No. 13K).

Eleven wells have been added to the HLA-A*26 kit,
wells **33 to 43**.
The amplification patterns for some rare HLA-A*26 alleles
only differ by the length of the specific PCR products.

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	Primer added for the A*26:01:21 allele.
18	-	Added	Exchanged positive control primer pair, primer added for increased yield.
23	-	Added	Primer added for the A*26:56 allele.
30	-	Added	Primer added for the A*26:56 allele.
32	-	Added	Primer added for the A*26:61 allele.
33	New	New	New primer pairs for the A*26:46 and A*26:53 alleles.
34	New	New	New primer pairs for the A*26:47 and A*26:49 alleles.
35	New	New	New primer pairs for the A*26:48 and A*26:59 alleles.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

36	New	New	New primer pairs for the A*26:54 and A*26:55 alleles.
37	New	New	New primer pairs for the A*26:50 and A*26:64 alleles.
38	New	New	New primer pair for the A*26:51 allele.
39	New	New	New primer pairs for the A*26:62, A*26:63 and A*26:64 alleles.
40	New	New	New primer pair for the A*26:57 allele.
41	New	New	New primer pair for the A*26:60N allele.
42	New	New	New primer pair for the A*26:58 allele.
43	New	New	New primer pair for improved resolution the A*26:28 and A*26:52 alleles.

Change in revision R01 compared to R00:

1. The HLA-A*23:13, 24:07, 24:24, 24:112, 24:131 and 68:36 alleles are amplified by primer mix 16. This has been revised in the Specificity and Interpretation Tables.

PRODUCT DESCRIPTION

HLA-A*26 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the A*26:01 to A*26:65 alleles.

PLATE LAYOUT

Each test consists of 43 PCR reactions in a 48 well cut PCR plate. Wells 44 to 48 are empty.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	empty	empty	empty	empty	empty

The 48 well PCR plate is marked with 'HLA-A*26' in silver/gray ink.

Well No. 1 is marked with the Lot Number '14L'.

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 covered with a PCR-compatible foil.

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

INTERPRETATION

The interpretation of HLA-A*26 SSP subtypings will be influenced by ten A*01, several A*02, five A*03, most A*11, the A*23, the A*24, the A*25, the A*29:19, four A*30, four A*31, the A*32:26, three A*33, the A*34, the A*36:03, the A*43:01, the A*66, the A*68, the A*69:01, two A*74 and the A*80:01 alleles when present on the other haplotype. In addition, primer mix 30 will amplify the B*35:108:01 allele.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*26 alleles, i.e. **A*26:01 to A*26:65**, recognized by the HLA Nomenclature Committee in January 2011¹ will give rise to unique amplification patterns by the primers in the HLA-A*26 subtyping kit.

The HLA-A*26 subtyping kit cannot distinguish the A*26:01:01-26:01:21, the A*26:03:01-26:03:02 or the A*26:07:01-26:07:02 alleles.

The A*26:17 and A*26:45 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 13.

The A*26:24 and A*26:41 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

The A*26:25N and A*26:38 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 22.

Lot No.: 14L

Lot-specific information

www.olerup-ssp.com

The A*26:37 and A*26:43:02 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 29.

The A*26:43:01 and A*26:61 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 32.

The A*26:46 and A*26:53 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 33.

The A*26:54 and A*26:55 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

The A*26:62 and A*26:63 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 39.

¹HLA-A alleles listed on the IMGT/HLA web page 2011-January-14, release 3.3.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 87 alleles generate 57 amplification patterns that can be combined in 1653 homozygous and heterozygous combinations. 536 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.

++++--	-----	-----	-----	-----	---	*26:02, *26:05 = *26:02, *26:27
++++--	-+-----	-----	-----	-----	---	*26:02, *26:07:01 = *26:02, *26:20
++++--	--+-----	-----	---+-----	-----	---	*26:01:01, *26:06 = *26:06, *26:36
++-+--	-----	-+-+-----	-----	-----	---	*26:21, *26:22 = *26:21, *26:40
++-+--	-----	-+-+-----	-+-+-----	-----	---	*26:21, *26:34 = *26:21, *26:42
++++--	-----	-+-----	---+-----	-----	---	*26:01:01, *26:21 = *26:21, *26:36
++++--	-----	--+-----	+-----	-----	---	*26:22, *26:30 = *26:30, *26:40
++-+--	-----	-+-----	---+-----	-----	---	*26:03:01, *26:22 = *26:03:01, *26:40
++++--	-----	-----	++-----	-----	---	*26:30, *26:34 = *26:30, *26:42
++++--	-----	-----	+--+-----	-----	---	*26:03:01, *26:65 = *26:30, *26:36
++++--	-----	-----	+-----	-----	---	*26:01:01, *26:30 = *26:30, *26:65
++-+--	-----	-----	-+-+-----	-----	---	*26:03:01, *26:34 = *26:03:01, *26:42
++++--	-----	-----	---+-----	-----	---	*26:01:01, *26:03:01 = *26:03:01, *26:36
+++++--	-----	-----	-----	-----	---	*26:04, *26:05 = *26:04, *26:27
++-+--	-+-----	-----	-----	-----	---	*26:04, *26:07:01 = *26:04, *26:20
++-+--	-----	-----	-----	-----	---+	*26:05, *26:28 = *26:27, *26:28
++-+--	-----	-----	-----	-----	---	*26:05, *26:52 = *26:27, *26:52
++-+--	-----	-----	-----	---+-----	---	*26:05, *26:48 = *26:27, *26:48
++-+--	-----	-----	-----	-----	---	*26:05, *26:08 = *26:08, *26:27
+++++--	+--+-----	-----	-----	-----	---+	*26:05, *26:18 = *26:18, *26:27
++-+--	-----	-+-----	-----	-----	---+	*26:05, *26:14 = *26:14, *26:27
++-+--	-----	-----	-----	-----	---	*26:05, *26:11N = *26:11N, *26:27
++-+--	+-----	-----	-----	-+-----	---	*26:05, *26:29 = *26:27, *26:29
++-+--	+-----	-----	-----	-+-----	---	*26:05, *26:49 = *26:27, *26:49
++-+--	+-----	-----	-----	-----	---	*26:05, *26:12 = *26:12, *26:27
++-+--	-+-----	-----	-----	-----	---	*26:05, *26:20 = *26:07:01, *26:27 = *26:20, *26:27
+++++--	-----	-----	-----	-----	---	*26:05, *26:16 = *26:16, *26:27
++-+--	-----	-+-----	-----	-----	---	*26:05, *26:17 = *26:17, *26:27
++-+--	-----	+-----	-----	-----	---	*26:05, *26:10 = *26:10, *26:27
++-+--	-----	++++	-----	-+-----	---	*26:05, *26:33 = *26:27, *26:33
++-+--	-----	++++	-----	-----	---	*26:05, *26:13 = *26:13, *26:27
++-+--	-----	+-----	-----	-----	---	*26:05, *26:09 = *26:09, *26:27
++-+--	-----	-+-----	-----	-----	---	*26:05, *26:22 = *26:05, *26:40 = *26:22, *26:27 = *26:27, *26:40
++-+--	-----	---+-----	-----	-----	---	*26:05, *26:23 = *26:23, *26:27
++-+--	-----	---+-----	-----	-----	---	*26:05, *26:24 = *26:24, *26:27
++-+--	-----	-----	-+-----	-----	---	*26:05, *26:25N = *26:25N, *26:27
+++++--	-----	-----	-----	-+-----	---	*26:05, *26:56 = *26:27, *26:56
++-+--	-----	-----	-+-----	-----	---	*26:05, *26:26 = *26:26, *26:27

Lot No.: 14L

Lot-specific information

www.olerup-ssp.com

++-----	-----	-----	-----	---	*26:05, *26:32 = *26:27, *26:32
++-----	-----	-----	-----	---	*26:05, *26:65 = *26:27, *26:65
++-----	-----	-----	-----	---	*26:05, *26:34 = *26:05, *26:42 = *26:27, *26:34 = *26:27, *26:42
++-----	-----	-----	-----	---	*26:05, *26:35 = *26:27, *26:35
++-----	-----	-----	-----	---	*26:05, *26:36 = *26:27, *26:36
++-----	-----	-----	-----	---	*26:05, *26:37 = *26:27, *26:37
++-----	-----	-----	-----	---	*26:05, *26:15 = *26:15, *26:27
++-----	-----	-----	-----	---	*26:05, *26:39 = *26:27, *26:39
++-----	-----	-----	-----	---	*26:05, *26:43:01 = *26:27, *26:43:01
++-----	-----	-----	-----	---	*26:05, *26:46 = *26:27, *26:46
++-----	-----	-----	-----	---	*26:05, *26:47 = *26:27, *26:47
++-----	-----	-----	-----	---	*26:05, *26:59 = *26:27, *26:59
++-----	-----	-----	-----	---	*26:05, *26:54 = *26:27, *26:54
++-----	-----	-----	-----	---	*26:05, *26:64 = *26:27, *26:64
++-----	-----	-----	-----	---	*26:05, *26:50 = *26:27, *26:50
++-----	-----	-----	-----	---	*26:05, *26:51 = *26:27, *26:51
++-----	-----	-----	-----	---	*26:05, *26:62 = *26:27, *26:62
++-----	-----	-----	-----	---	*26:05, *26:60N = *26:27, *26:60N
++-----	-----	-----	-----	---	*26:05, *26:58 = *26:27, *26:58
++-----	-----	-----	-----	---	*26:01:01, *26:05 = *26:01:01, *26:27 = *26:05, *26:27 = *26:27, *26:27
++-----	-----	-----	-----	---	*26:08, *26:18 = *26:12, *26:28 = *26:18, *26:28 = *26:18, *26:52
++-----	-----	-----	-----	---	*26:07:01, *26:28 = *26:20, *26:28
++-----	-----	-----	-----	---	*26:07:01, *26:52 = *26:20, *26:52
++-----	-----	-----	-----	---	*26:22, *26:28 = *26:28, *26:40
++-----	-----	-----	-----	---	*26:22, *26:52 = *26:40, *26:52
++-----	-----	-----	-----	---	*26:28, *26:34 = *26:28, *26:42
++-----	-----	-----	-----	---	*26:34, *26:52 = *26:42, *26:52
++-----	-----	-----	-----	---	*26:14, *26:48 = *26:28, *26:48 = *26:28, *26:59
++-----	-----	-----	-----	---	*26:48, *26:52 = *26:52, *26:59
++-----	-----	-----	-----	---	*26:01:01, *26:28 = *26:08, *26:14 = *26:08, *26:28 = *26:11N, *26:28 = *26:14, *26:28 = *26:14, *26:52 = *26:16, *26:28 = *26:28, *26:28 = *26:28, *26:52
++-----	-----	-----	-----	---	*26:01:01, *26:52 = *26:08, *26:52 = *26:11N, *26:52 = *26:16, *26:52 = *26:52, *26:52
++-----	-----	-----	-----	---	*26:07:01, *26:48 = *26:20, *26:48
++-----	-----	-----	-----	---	*26:07:01, *26:08 = *26:08, *26:20
++-----	-----	-----	-----	---	*26:22, *26:48 = *26:40, *26:48
++-----	-----	-----	-----	---	*26:08, *26:22 = *26:08, *26:40
++-----	-----	-----	-----	---	*26:34, *26:48 = *26:42, *26:48
++-----	-----	-----	-----	---	*26:08, *26:34 = *26:08, *26:42
++-----	-----	-----	-----	---	*26:01:01, *26:48 = *26:08, *26:48 = *26:08, *26:59 = *26:48, *26:48 = *26:48, *26:59
++-----	-----	-----	-----	---	*26:01:01, *26:08 = *26:08, *26:08
++-----	-----	-----	-----	---	*26:07:01, *26:18 = *26:18, *26:20
++-----	-----	-----	-----	---	*26:18, *26:22 = *26:18, *26:40
++-----	-----	-----	-----	---	*26:18, *26:34 = *26:18, *26:42
++-----	-----	-----	-----	---	*26:14, *26:29 = *26:18, *26:29
++-----	-----	-----	-----	---	*26:14, *26:49 = *26:18, *26:47 = *26:18, *26:49
++-----	-----	-----	-----	---	*26:01:01, *26:18 = *26:11N, *26:18 = *26:12, *26:14 = *26:12, *26:18 = *26:14, *26:18 = *26:16, *26:18 = *26:18, *26:18
++-----	-----	-----	-----	---	*26:07:01, *26:14 = *26:14, *26:20
++-----	-----	-----	-----	---	*26:07:01, *26:11N = *26:11N, *26:20
++-----	-----	-----	-----	---	*26:14, *26:22 = *26:14, *26:40
++-----	-----	-----	-----	---	*26:14, *26:34 = *26:14, *26:42
++-----	-----	-----	-----	---	*26:01:01, *26:14 = *26:11N, *26:14 = *26:14, *26:14 = *26:14, *26:16
++-----	-----	-----	-----	---	*26:11N, *26:22 = *26:11N, *26:40
++-----	-----	-----	-----	---	*26:11N, *26:34 = *26:11N, *26:42
++-----	-----	-----	-----	---	*26:01:01, *26:11N = *26:11N, *26:11N
++-----	-----	-----	-----	---	*26:07:01, *26:29 = *26:20, *26:29
++-----	-----	-----	-----	---	*26:07:01, *26:49 = *26:20, *26:49

Lot No.: 14L

Lot-specific information

www.olerup-ssp.com

++-----	++-----	-----	-----	-----	---	*26:07:01, *26:12 = *26:12, *26:20
++-----	+-----+	-----	-----+	+-----	---	*26:13, *26:29 = *26:29, *26:33 = *26:33, *26:49
++-----	+-----	-+-----	-----+	+-----	---	*26:22, *26:29 = *26:29, *26:40
++-----	+-----	-+-----	-----+	+-----	---	*26:22, *26:49 = *26:40, *26:49
++-----	+-----	-+-----	-----+	+-----	---	*26:12, *26:22 = *26:12, *26:40
++-----	+-----	-+-----	-----+	+-----	---	*26:26, *26:29 = *26:29, *26:56 = *26:49, *26:56
++-----	+-----	-+-----	-----+	+-----	---	*26:29, *26:34 = *26:29, *26:42
++-----	+-----	-+-----	-----+	+-----	---	*26:34, *26:49 = *26:42, *26:49
++-----	+-----	-+-----	-----+	+-----	---	*26:12, *26:34 = *26:12, *26:42
++-----	+-----	-+-----	-----+	+-----	---	*26:01:01, *26:29 = *26:12, *26:29 = *26:15, *26:29 = *26:15, *26:49 = *26:29, *26:29 = *26:29, *26:47 = *26:29, *26:49
++-----	+-----	-+-----	-----+	+-----	---	*26:01:01, *26:49 = *26:12, *26:47 = *26:12, *26:49 = *26:47, *26:49 = *26:49, *26:49
++-----	+-----	-+-----	-----+	+-----	---	*26:01:01, *26:12 = *26:12, *26:12
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:16 = *26:16, *26:20
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:17 = *26:17, *26:20
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:10 = *26:10, *26:20
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:33 = *26:20, *26:33
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:13 = *26:13, *26:20
++-----	-+-----	-----	-----	-----	---	*26:07:01, *26:09 = *26:09, *26:20
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:22 = *26:07:01, *26:40 = *26:20, *26:22 = *26:20, *26:40
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:23 = *26:20, *26:23
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:24 = *26:20, *26:24
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:25N = *26:20, *26:25N
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:56 = *26:20, *26:56
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:26 = *26:20, *26:26
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:32 = *26:20, *26:32
++-----	-+-----	-+-----	-----	-----	---	*26:07:01, *26:65 = *26:20, *26:65
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:34 = *26:07:01, *26:42 = *26:20, *26:34 = *26:20, *26:42
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:35 = *26:20, *26:35
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:36 = *26:20, *26:36
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:37 = *26:20, *26:37
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:15 = *26:15, *26:20
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:39 = *26:20, *26:39
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:43:01 = *26:20, *26:43:01
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:46 = *26:20, *26:46
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:47 = *26:20, *26:47
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:59 = *26:20, *26:59
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:54 = *26:20, *26:54
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:64 = *26:20, *26:64
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:50 = *26:20, *26:50
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:51 = *26:20, *26:51
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:62 = *26:20, *26:62
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:60N = *26:20, *26:60N
++-----	-+-----	-+-----	-+-----	-----	---	*26:07:01, *26:58 = *26:20, *26:58
++-----	-+-----	-+-----	-+-----	-----	---	*26:01:01, *26:07:01 = *26:01:01, *26:20 = *26:07:01, *26:20 = *26:20, *26:20
++-----	-+-----	-+-----	-+-----	-----	---	*26:19, *26:22 = *26:19, *26:40
++-----	-+-----	-+-----	-+-----	-----	---	*26:19, *26:34 = *26:19, *26:42
++-----	-+-----	-+-----	-+-----	-----	---	*26:15, *26:19 = *26:19, *26:33
++-----	-+-----	-+-----	-+-----	-----	---	*26:01:01, *26:19 = *26:13, *26:19
++-----	-+-----	-+-----	-+-----	-----	---	*26:16, *26:22 = *26:16, *26:40
++-----	-+-----	-+-----	-+-----	-----	---	*26:16, *26:34 = *26:16, *26:42
++-----	-+-----	-+-----	-+-----	-----	---	*26:01:01, *26:16 = *26:16, *26:16
++-----	-+-----	-+-----	-+-----	-----	---	*26:17, *26:22 = *26:17, *26:40
++-----	-+-----	-+-----	-+-----	-----	---	*26:17, *26:34 = *26:17, *26:42
++-----	-+-----	-+-----	-+-----	-----	---	*26:01:01, *26:17 = *26:17, *26:17
++-----	-+-----	-+-----	-+-----	-----	---	*26:10, *26:22 = *26:10, *26:40
++-----	-+-----	-+-----	-+-----	-----	---	*26:10, *26:34 = *26:10, *26:42
++-----	-+-----	-+-----	-+-----	-----	---	*26:01:01, *26:10 = *26:10, *26:10
++-----	-+-----	-+-----	-+-----	-----	---	*26:22, *26:33 = *26:33, *26:40
++-----	-+-----	-+-----	-+-----	-----	---	*26:13, *26:22 = *26:13, *26:40

Lot No.: 14L

Lot-specific information

www.olerup-ssp.com

++-----	-----++	-----+-	-----+-	-----	---	*26:13, *26:56 = *26:26, *26:33 = *26:33, *26:56
++-----	-----++	-----	-+-----	-----	---	*26:33, *26:34 = *26:33, *26:42
++-----	-----++	-----	-+-----	-----	---	*26:13, *26:34 = *26:13, *26:42
++-----	-----++	-----+-	-----+-	-----	---	*26:01:01, *26:33 = *26:13, *26:15 = *26:13, *26:33 = *26:15, *26:33 = *26:33, *26:33
++-----	-----++	-----	-----	-----	---	*26:01:01, *26:13 = *26:13, *26:13
++-----	-----	-+-----	-----	-----	---	*26:22, *26:31 = *26:31, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:31, *26:34 = *26:31, *26:42
++-----	-----	-+-----	-----	-----	---	*26:22, *26:23 = *26:23, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:24 = *26:24, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:25N = *26:25N, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:56 = *26:40, *26:56
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:26 = *26:26, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:32 = *26:32, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:65 = *26:40, *26:65
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:34 = *26:22, *26:42 = *26:40, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:35 = *26:35, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:36 = *26:36, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:37 = *26:37, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:15, *26:22 = *26:15, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:39 = *26:39, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:43:01 = *26:40, *26:43:01
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:46 = *26:40, *26:46
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:47 = *26:40, *26:47
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:59 = *26:40, *26:59
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:54 = *26:40, *26:54
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:64 = *26:40, *26:64
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:50 = *26:40, *26:50
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:51 = *26:40, *26:51
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:62 = *26:40, *26:62
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:57 = *26:40, *26:57
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:60N = *26:40, *26:60N
++-----	-----	-+-----	-+-----	-----	---	*26:22, *26:58 = *26:40, *26:58
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:22 = *26:01:01, *26:40 = *26:22, *26:22 = *26:22, *26:40
++-----	-----	-+-----	-+-----	-----	---	*26:23, *26:34 = *26:23, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:23 = *26:23, *26:23
++-----	-----	-+-----	-+-----	-----	---	*26:24, *26:34 = *26:24, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:24 = *26:24, *26:24
++-----	-----	-+-----	-+-----	-----	---	*26:25N, *26:34 = *26:25N, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:25N = *26:25N, *26:25N
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:56 = *26:42, *26:56
++-----	-----	-+-----	-+-----	-----	---	*26:26, *26:34 = *26:26, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:56 = *26:15, *26:26 = *26:15, *26:56 = *26:26, *26:56 = *26:56, *26:56
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:26 = *26:26, *26:26
++-----	-----	-+-----	-+-----	-----	---	*26:32, *26:34 = *26:32, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:32 = *26:32, *26:32
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:65 = *26:42, *26:65
++-----	-----	-+-----	-+-----	-----	---	*26:01:01, *26:65 = *26:65, *26:65
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:35 = *26:35, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:36 = *26:36, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:37 = *26:37, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:15, *26:34 = *26:15, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:39 = *26:39, *26:42
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:43:01 = *26:42, *26:43:01
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:46 = *26:42, *26:46
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:47 = *26:42, *26:47
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:59 = *26:42, *26:59
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:54 = *26:42, *26:54
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:64 = *26:42, *26:64
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:50 = *26:42, *26:50
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:51 = *26:42, *26:51
++-----	-----	-+-----	-+-----	-----	---	*26:34, *26:62 = *26:42, *26:62

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

++-----	-----	-----	-+-----	-----+	---	*26:34, *26:57 = *26:42, *26:57
++-----	-----	-----	-+-----	-----	+-	*26:34, *26:60N = *26:42, *26:60N
++-----	-----	-----	-+-----	-----	-+	*26:34, *26:58 = *26:42, *26:58
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:34 = *26:01:01, *26:42 = *26:34, *26:42 = *26:42, *26:42
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:35 = *26:35, *26:35
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:36 = *26:36, *26:36
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:37 = *26:37, *26:37
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:15 = *26:15, *26:15
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:39 = *26:39, *26:39
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:43:01 = *26:43:01, *26:43:01
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:46 = *26:46, *26:46
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:47 = *26:47, *26:47
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:59 = *26:59, *26:59
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:54 = *26:54, *26:54
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:64 = *26:50, *26:62 = *26:50, *26:64 = *26:62, *26:64 = *26:64, *26:64
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:50 = *26:50, *26:50
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:51 = *26:51, *26:51
++-----	-----	-----	-+-----	-----	---	*26:01:01, *26:62 = *26:62, *26:62
++-----	-----	-----	-+-----	-----	+-	*26:01:01, *26:60N = *26:60N, *26:60N
++-----	-----	-----	-+-----	-----	-+	*26:01:01, *26:58 = *26:58, *26:58
+---+-----	--+-----	-----	-+-----	-----	---	*26:03:01, *26:19 = *26:06, *26:19
+---+-----	--+-----	-+-----	-+-----	-----	---	*26:06, *26:21 = *26:06, *26:31
+---+-----	-----	-+-----	-+-----	-----	---	*26:03:01, *26:21 = *26:03:01, *26:31 = *26:21, *26:21 = *26:21, *26:31

- *26:01:01 = *26:01:01-26:01:21
- *26:03:01 = *26:03:01-26:03:02
- *26:07:01 = *26:07:01-26:07:02
- *26:17 = *26:17 and *26:45
- *26:24 = *26:24 and *26:41
- *26:25N = *26:25N and *26:38
- *26:37 = *26:37 and *26:43:02
- *26:43:01 = *26:43:01 and *26:61
- *26:46 = *26:46 and *26:53
- *26:54 = *26:54 and *26:55
- *26:62 = *26:62 and *26:63

SPECIFICITY TABLE

HLA-A*26 SSP subtyping

Specificities and sizes of the PCR products of the 43 primer mixes used for HLA-A*26 SSP subtyping.

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*26 alleles ³	Other amplified HLA-A alleles ⁴
1	180 bp	800 bp	*26:01:01-26:01:21, 26:03:01-26:03:02, 26:05, 26:07:01-26:08, 26:10-26:28, 26:29 ^w , 26:30-26:33, 26:35-26:39, 26:41-26:43:02, 26:45-26:48, 26:49 ^w , 26:50-26:65	*02:135, 25:01:01-25:05, 25:07-25:16, 31:24-31:25, 32:26, 43:01, 66:01, 66:04-66:09, 66:10 ^w , 66:11-66:15
2⁵	80 bp	800 bp	*26:01:01-26:02, 26:04, 26:08-26:18, 26:20, 26:22-26:29, 26:32-26:43:02, 26:45-26:56, 26:58-26:65	*01:51, 33:13
3	140 bp	1070 bp	*26:02	
4	255 bp	800 bp	*26:03:01-26:03:02, 26:06, 26:21, 26:30	*03:09, 03:108, 11:06, 11:18, 29:19, 30:13, 30:16, 30:44, 30:46, 33:24, 68:05, 68:15, 68:20, 74:06
5	180 bp	1070 bp	*26:04	
6^{5,9}	80 bp, 160 bp	1070 bp	*26:05, 26:27	
7	155 bp	800 bp	*26:08, 26:28, 26:48, 26:52	*25:04
8	135 bp	1070 bp	*26:11N, 26:14, 26:18, 26:28, 26:52	*03:01:19, 25:09, 31:03-31:04, 34:03, 34:06
9¹⁰	145 bp, 190 bp	1070 bp	*26:12, 26:18, 26:29, 26:49	*31:03-31:04, 34:06, 66:06, 66:10
10^{5,11}	85 bp, 260 bp	1070 bp	*26:07:01-26:07:02, 26:20	*01:01:13, 01:83, 02:146
11	140 bp	800 bp	*26:06, 26:19	*31:03
12¹²	135 bp, 240 bp	1070 bp	*26:14, 26:16, 26:18, 26:28, 26:52	*01:02, 01:20, 03:01:19, 24:04, 24:109, 24:129, 25:09, 31:03-31:04, 34:03, 34:06
13^{5,13}	110 bp, 255 bp	1070 bp	*26:17, 26:45	

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

14	145 bp	1070 bp	*26:10	*02:38, 02:101:01, 02:154, 23:10, 24:10, 24:46, 68:61
15⁵	100 bp	800 bp	*26:13, 26:19, 26:33	*01:13, 01:17, 03:63, 03:88, 11:01:01-11:11, 11:13-11:16, 11:20-11:27, 11:29-11:39, 11:41-11:93, 25:02, 34:01:01-34:06, 34:08, 66:01, 66:04, 66:06-66:11, 66:13-66:14
16	430 bp	1070 bp	*26:13, 26:19, 26:33	*02:34 ^w , 02:35:01-02:35:03, 02:56:01 ^w -02:56:02 ^w , 02:62 ^w , 02:78, 02:103 ^w , 23:13, 24:07, 24:19, 24:24, 24:112, 24:131, 34:01:01-34:09, 66:01-66:02, 66:04, 66:06-66:14, 66:16, 68:01:01:01-68:02:04, 68:06-68:14, 68:16-68:19, 68:21:01-68:30, 68:32--68:56, 68:58-68:72, 69:01
17	175 bp	1070 bp	*26:09	*03:01:19, 25:06, 31:03-31:04, 34:01:01-34:09
18^{5,6,14}	125 bp, 205 bp	800 bp	*26:21, 26:31	*01:60
19¹⁵	190 bp, 245 bp	800 bp	*26:22, 26:40	*01:20 ^w , 01:66 ^w , 02:38, 02:101:01, 66:09
20⁷	210 bp	1070 bp	*26:23	
21^{5,16}	115 bp, 205 bp	1070 bp	*26:24, 26:41	*02:241, 33:31
22^{5,17}	100 bp, 220 bp	1070 bp	*26:25N, 26:38	
23¹⁸	130 bp, 165 bp	1070 bp	*26:26, 26:56	
24	305 bp	1070 bp	*26:32	*01:03, 11:26, 33:13, 36:03, 74:10
25⁸	360 bp	1070 bp	*26:30, 26:65	*02:135, 03:01:19, 25:13, 31:04, 34:09, 66:02-66:03, 66:12, 66:16
26¹⁹	150 bp, 175 bp	1070 bp	*26:34, 26:42	
27	275 bp	1070 bp	*26:35	
28⁵	90 bp	1070 bp	*26:03:01-26:03:02, 26:06, 26:21, 26:36	*11:06, 25:11, 80:01
29²⁰	155 bp, 330 bp	1070 bp	*26:37, 26:43:02	*34:02:02
30^{5,21}	125 bp, 235 bp	1070 bp	*26:15, 26:29, 26:33, 26:56	*11:91, B*35:108:01

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

31	210 bp	800 bp	*26:39	
32^{5,22}	90 bp, 155 bp	1070 bp	*26:43:01, 26:61	*03:01:19, 31:03-31:04, 34:02:01, 34:03-34:04, 34:06-34:09, 66:06
33^{5,23}	105 bp, 200 bp	1070 bp	*26:46, 26:53	
34²⁴	135 bp, 190 bp	1070 bp	*26:29, 26:47, 26:49	*25:08, 66:10
35^{5,25}	110 bp, 245 bp	1070 bp	*26:48, 26:59	*34:01:01-34:01:02, 34:05
36^{5,26}	125 bp, 215 bp	1070 bp	*26:54-26:55	*25:05
37^{6,7,27}	245 bp, 410 bp	1070 bp	*26:50, 26:64	
38	190 bp	1070 bp	*26:51	
39²⁸	220 bp, 410 bp	1070 bp	*26:62-26:64	*23:09, 24:129
40⁵	90 bp	1070 bp	*26:57	
41	140 bp	1070 bp	*26:60N	
42	460 bp	1070 bp	*26:58	*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 23:01:01-23:36, 24:02:01:01-24:02:32, 24:02:34- 24:03:02, 24:05-24:11N, 24:13:01-24:15, 24:17-24:18, 24:20-24:25, 24:27, 24:29-24:43, 24:45N-24:64, 24:66-24:88, 24:90N-24:99, 24:101-24:108, 24:110-24:128, 24:130-24:171, 25:01:01-25:16, 68:36
43	135 bp	1070 bp	*26:14, 26:18, 26:28	*03:01:19, 25:09, 31:03-31:04, 34:03, 34:06

¹Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of HLA-A*26 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.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

²The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base 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-A*26 subtyping.

In addition, wells number 2, 4, 7, 11, 15, 18, 19 and 31 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.

³The A*26:17 and A*26:45 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 13.

The A*26:24 and A*26:41 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

The A*26:25N and A*26:38 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 22.

The A*26:37 and A*26:43:02 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 29.

The A*26:43:01 and A*26:61 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 32.

The A*26:46 and A*26:53 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 33.

The A*26:54 and A*26:55 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

The A*26:62 and A*26:63 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 39.

⁴Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*26 alleles will be amplified by primer mixes 1, 2, 4, 7 to 12, 14 to 19, 21, 24, 25, 28 to 30, 32, 34 to 36, 39, 42 and 43. In addition, primer mix 30 will amplify the B*35:108:01 allele.

⁵Specific PCR fragments shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR bands.

⁶Primer mixes 18 and 37 may have tendencies of primer oligomer formation.

⁷Primer mixes 20 and 37 may give rise to nonspecific amplification.

⁸Primer mix 25 may yield less specific PCR product than the other A*26 primer mixes.

⁹Primer mix 6: Specific PCR fragment of 80 bp in the A*26:05 allele. Specific PCR fragment of 160 bp in the A*26:27 allele.

¹⁰Primer mix 9: Specific PCR fragment of 145 bp in the A*26:12 and 26:18 and in the A*31:03-31:04, 34:06 and 66:06 alleles. Specific PCR fragment of 190 bp in the A*26:29 and 26:49 and in the A*66:10 alleles.

¹¹Primer mix 10: Specific PCR fragment of 85 bp in the A*26:07:01-26:07:02 and in the A*01:83 alleles. Specific PCR fragment of 260 bp in the A*26:20 and in the A*01:01:13 alleles. Specific PCR fragments of 85 and 260 bp in the A*02:146 allele.

¹²Primer mix 12: Specific PCR fragment of 135 bp in the A*26:14, 26:18, 26:28 and 26:52 and in the A*03:01:19, 25:09, 31:03-31:04, 34:03 and 34:06 alleles. Specific PCR fragment of 240 bp in the A*26:16 and in the A*01:02, 01:20, 24:04, 24:109 and 24:129 alleles.

¹³Primer mix 13: Specific PCR fragment of 110 bp in the A*26:45 allele. Specific PCR fragment of 255 bp in the A*26:17 allele.

¹⁴Primer mix 18: Specific PCR fragment of 125 bp in the A*26:31 and the A*01:60 alleles. Specific PCR fragment of 205 bp in the A*26:21 allele.

¹⁵Primer mix 19: Specific PCR fragment of 190 bp in the A*26:40 allele. Specific PCR fragment of 245 bp in the A*26:22 and in the A*01:20^w, 01:66^w, 02:38, 02:101:01 and 66:09 alleles.

¹⁶Primer mix 21: Specific PCR fragment of 115 bp in the A*26:24 and the A*02:241 and 33:31 alleles. Specific PCR fragment of 205 bp in the A*26:41 allele.

¹⁷Primer mix 22: Specific PCR fragment of 100 bp in the A*26:25N allele. Specific PCR fragment of 220 bp in the A*26:38 allele.

¹⁸Primer mix 23: Specific PCR fragment of 130 bp in the A*26:56 allele. Specific PCR fragment of 165 bp in the A*26:26 allele.

¹⁹Primer mix 26: Specific PCR fragment of 150 bp in the A*26:42 allele. Specific PCR fragment of 175 bp in the A*26:34 allele.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

²⁰Primer mix 29: Specific PCR fragment of 155 bp in the A*26:43:02 and the A*34:02:02 alleles. Specific PCR fragment of 330 bp in the A*26:37 allele.

²¹Primer mix 30: Specific PCR fragment of 125 bp in the A*26:15, 26:29 and 26:56 and in the A*11:91 and the B*35:108:01 alleles. Specific PCR fragment of 235 bp in the A*26:33 allele.

²²Primer mix 32: Specific PCR fragment of 90 bp in the A*26:61 allele. Specific PCR fragment of 155 bp in the A*26:43:01 and the A*03:01:19 and the A*31:03-31:04, 34:02:01, 34:03-34:04, 34:06-34:09 and 66:06 alleles.

²³Primer mix 33: Specific PCR fragment of 105 bp in the A*26:46 allele. Specific PCR fragment of 200 bp in the A*26:53 allele.

²⁴Primer mix 34: Specific PCR fragment of 135 bp in the A*26:47 and the A*25:08 alleles. Specific PCR fragment of 190 bp in the A*26:29 and 26:49 and the A*66:10 alleles.

²⁵Primer mix 35: Specific PCR fragment of 110 bp in the A*26:48 and in the A*34:01:01-34:01:02 and 34:05 alleles. Specific PCR fragment of 245 bp in the A*26:59 allele.

²⁶Primer mix 36: Specific PCR fragment of 125 bp in the A*26:54 and the A*25:05 alleles. Specific PCR fragment of 215 bp in the A*26:55 allele.

²⁷Primer mix 37: Specific PCR fragment of 245 bp in the A*26:50 allele. Specific PCR fragment of 410 bp in the A*26:64 allele.

²⁸Primer mix 39: Specific PCR fragment of 220 bp in the A*26:63 allele. Specific PCR fragment of 410 bp in the A*26:62 and 26:64 and the A*23:09 and 24:129 allele.

‘w’, may be weakly amplified.

INTERPRETATION TABLE																								
HLA-A*26 SSP subtyping																								
Amplification patterns of the A*26:01 to 26:65 alleles																								
	Well ¹³																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec.	180	80	140	255	180	80	155	135	145	85	140	135	110	145	100	430	175	125	190	210	115	100	130	305
PCR product(s)						160			190	260		240	255					205	245		205	220	165	
Length of int.	800	800	1070	800	1070	1070	800	1070	1070	1070	800	1070	1070	1070	800	1070	1070	800	800	1070	1070	1070	1070	1070
pos. control ¹																								
5'-primer(s) ²	418	261	418	74	423	261	423	423	423	78	243	98	228	453	282	28	423	257	355	392	395	160	652	341
	5'-Agg 3'	5'-AAC 3'	5'-AgA 3'	5'-C 3'	5'-gCT 3'	5'-AAC 3'	5'-gCT 3'	5'-gCT 3'	5'-gCT 3'	5'-TCT 3'	5'-CCT 3'	5'-CTC 3'	5'-ATg 3'	5'-AAA 3'	5'-CAG 3'	5'-TCg 3'	5'-gCT 3'	5'-CCC 3'	5'-CCg 3'	5'-CgA 3'	5'-gCA 3'	5'-ACT 3'	5'-CTg 3'	5'-ggA 3'
				78		423				257	416	423	346					423	410		652	280		
				5'-TCC 3'		5'-gCT 3'				5'-Cgg 3'	5'-gCg 3'	5'-gCT 3'	5'-gTA 3'					5'-gCT 3'	5'-gTT 3'		5'-CTg 3'	5'-CCC 3'		
3'-primer(s) ³	559	299	517	292	560	299	524	517	527	299	341	299	299	559	341	282	559	341	559	559	559	341	743	362
	5'-CCg 3'	5'-TCg 3'	5'-CgT 3'	5'-gTg 3'	5'-ACA 3'	5'-TCT 3'	5'-CAC 3'	5'-CgC 3'	5'-CCA 3'	5'-TCg 3'	5'-CgT 3'	5'-TCg 3'	5'-TCg 3'	5'-CCg 3'	5'-CgT 3'	5'-gAC 3'	5'-CgT 3'	5'-CgT 3'	5'-CCg 3'	5'-CCg 3'	5'-CCg 3'	5'-CgT 3'	5'-TCC 3'	5'-TCA 3'
	559					542	538	519	570		517	517	559	559		290		589			728		776	
	5'-CCT 3'					5'-CTT 3'	5'-CTg 3'	5'-ggA 3'	5'-CCg 3'		5'-CgT 3'	5'-CgC 3'	5'-CCg 3'	5'-CCg 3'		5'-gAA 3'		5'-CTT 3'			5'-CCT 3'		5'-CAA 3'	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
HLA-A allele ⁴																								
*26:01:01-26:01:21	1	2																						
*26:02		2	3																					
*26:03:01-26:03:02	1			4																				
*26:04		2			5																			
*26:05	1					6																		
*26:06				4							11													
*26:07:01-26:07:02	1									10														
*26:08	1	2					7																	
*26:09		2															17							
*26:10	1	2												14										
*26:11N	1	2						8																
*26:12	1	2							9															
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

INTERPRETATION TABLE																			
HLA-A*26 SSP subtyping																			
Amplification patterns of the A*26:01 to 26:65 alleles																			
Well ¹³																			
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
360	150	275	90	155	125	210	90	105	135	110	125	245	190	220	90	140	460	135	Length of spec.
	175			330	235			200	190	245	215	410		410					PCR product(s)
1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	Length of int.
																			pos. control ¹
5'-ggC ^{3'}	5'-CTA ^{3'}	5'-CCA ^{3'}	5'-CTC ^{3'}	5'-TCg ^{3'}	5'-CTA ^{3'}	5'-ACC ^{3'}	5'-gCT ^{3'}	5'-CCA ^{3'}	5'-gCT ^{3'}	5'-gCC ^{3'}	5'-gCT ^{3'}	5'-TCg ^{3'}	5'-CgA ^{3'}	5'-TCg ^{3'}	5'-AAC ^{3'}	5'-CCT ^{3'}	5'-TCg ^{3'}	5'-gCT ^{3'}	5'-primer(s) ²
	423			423	652			495		270		353							
	5'-gCT ^{3'}			5'-gCT ^{3'}	5'-CTg ^{3'}			5'-CAC ^{3'}		5'-AAA ^{3'}		5'-Cag ^{3'}							
5'-gTC ^{3'}	5'-CCA ^{3'}	5'-CgT ^{3'}	5'-CgT ^{3'}	5'-TCC ^{3'}	5'-TCC ^{3'}	5'-CCg ^{3'}	5'-ggC ^{3'}	5'-CCg ^{3'}	5'-CCA ^{3'}	5'-CgT ^{3'}	5'-TgT ^{3'}	5'-CCA ^{3'}	5'-CgT ^{3'}	5'-ggC ^{3'}	5'-gga ^{3'}	5'-TCC ^{3'}	5'-gCg ^{3'}	5'-CgC ^{3'}	3'-primer(s) ³
	418	208	341	186	180	559	472	559	518	341	506	265	341	77	311	426	319	517	
	559			538	290		538		570		595	559		265					
	5'-CCA ^{3'}			5'-Cag ^{3'}	5'-gAA ^{3'}		5'-CAA ^{3'}		5'-CCg ^{3'}		5'-CCA ^{3'}	5'-CCg ^{3'}		5'-CCA ^{3'}					
				5'-TCC ^{3'}	5'-TCC ^{3'}														
				743										271					
														5'-CAT ^{3'}					
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
																			HLA-A allele ⁴
																			*26:01:01-26:01:21
																			*26:02
			28																*26:03:01-26:03:02
																			*26:04
																			*26:05
			28																*26:06
																			*26:07:01-26:07:02
																			*26:08
																			*26:09
																			*26:10
																			*26:11N
																			*26:12
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

Length of spec.	180	80	140	255	180	80	155	135	145	85	140	135	110	145	100	430	175	125	190	210	115	100	130	305	
PCR product(s)						160			190	260		240	255					205	245		205	220	165		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
*26:13	1	2													15	16									
*26:14	1	2						8				12													
*26:15	1	2																							
*26:16	1	2										12													
*26:17, 26:45 ⁵	1	2											13												
*26:18	1	2						8	9			12													
*26:19	1										11				15	16									
*26:20	1	2								10															
*26:21	1			4														18							
*26:22	1	2																	19						
*26:23	1	2																		20					
*26:24, 26:41 ⁶	1	2																			21				
*26:25N, 26:38 ⁷	1	2																				22			
*26:26	1	2																					23		
*26:27	1	2				6																			
*26:28	1	2					7	8				12													
*26:29	w	2							9																
*26:30	1			4																					
*26:31	1																	18							
*26:32	1	2																						24	
*26:33	1	2													15	16									
*26:34		2																							
*26:35	1	2																							
*26:36	1	2																							
*26:37, 26:43:02 ⁸	1	2																							
*26:39	1	2																							
*26:40		2																	19						
*26:42	1	2																							
*26:43:01, 26:61 ⁹	1	2																							
*26:46, 26:53 ¹⁰	1	2																							
*26:47	1	2																							
*26:48	1	2					7																		
*26:49	w	2							9																
*26:50	1	2																							
*26:51	1	2																							
*26:52	1	2					7	8				12													
*26:54, 26:55 ¹¹	1	2																							
*26:56	1	2																						23	
*26:57	1																								
*26:58	1	2																							
*26:59	1	2																							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

360	150	275	90	155	125	210	90	105	135	110	125	245	190	220	90	140	460	135	Length of spec.
	175			330	235		155	200	190	245	215	410		410					PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
																			*26:13
																		43	*26:14
					30														*26:15
																			*26:16
																			*26:17, 26:45 ⁵
																		43	*26:18
																			*26:19
																			*26:20
			28																*26:21
																			*26:22
																			*26:23
																			*26:24, 26:41 ⁶
																			*26:25N, 26:38 ⁷
																			*26:26
																			*26:27
																		43	*26:28
					30				34										*26:29
25																			*26:30
																			*26:31
																			*26:32
					30														*26:33
	26																		*26:34
		27																	*26:35
			28																*26:36
				29															*26:37, 26:43:02 ⁸
						31													*26:39
																			*26:40
	26																		*26:42
							32												*26:43:01, 26:61 ⁹
								33											*26:46, 26:53 ¹⁰
									34										*26:47
										35									*26:48
									34										*26:49
												37							*26:50
													38						*26:51
																			*26:52
											36								*26:54, 26:55 ¹¹
					30														*26:56
															40				*26:57
																	42		*26:58
										35									*26:59
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

Length of spec.	180	80	140	255	180	80	155	135	145	85	140	135	110	145	100	430	175	125	190	210	115	100	130	305
PCR product(s)						160			190	260		240	255					205	245		205	220	165	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*26:60N	1	2																						
*26:62, 26:63 ¹²	1	2																						
*26:64	1	2																						
*26:65	1	2																						
*01:01:13, 01:83, 02:146									10															
*01:02, 24:04, 24:109												12												
*01:03, 36:03, 74:10																								24
*01:13, 01:17, 03:63, 03:88, 11:01:01-11:05, 11:07-11:11, 11:13-11:16, 11:20-11:25, 11:27, 11:29- 11:39, 11:41-11:90, 11:92- 11:93															15									
*01:20												12							w					
*01:51		2																						
*01:60																		18						
*01:66																			w					
*02:34, 02:56:01- 02:56:02, 02:62, 02:103																w								
*02:35:01-02:35:03, 02:78, 24:19, 68:01:01:01- 68:02:04, 68:06-68:14, 68:16-68:19, 68:21:01- 68:30, 68:32-68:35, 68:37- 68:56, 68:58-68:60, 68:62- 68:72, 69:01																16								
*02:38, 02:101:01													14					19						
*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 23:01:01-23:08N, 23:11N- 23:12, 23:14-23:36, 24:02:01:01-24:02:32, 24:02:34-24:03:02, 24:05- 24:06, 24:08-24:09N, 24:11N, 24:13:01-24:15, 24:17-24:18, 24:20-24:23, 24:25, 24:27, 24:29- 24:43, 24:45N, 24:47- 24:64, 24:66-24:88, 24:90N-24:99, 24:101- 24:108, 24:110-24:111, 24:113-24:128, 24:130, 24:132N-24:171																								
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

360	150	275	90	155	125	210	90	105	135	110	125	245	190	220	90	140	460	135	Length of spec.
	175			330	235		155	200	190	245	215	410		410					PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
																41			*26:60N
															39				*26:62, 26:63 ¹²
												37		39					*26:64
25																			*26:65
																			*01:01:13, 01:83, 02:146
																			*01:02, 24:04, 24:109
																			*01:03, 36:03, 74:10
																			*01:13, 01:17, 03:63, 03:88, 11:01:01-11:05, 11:07-11:11, 11:13-11:16, 11:20-11:25, 11:27, 11:29- 11:39, 11:41-11:90, 11:92- 11:93
																			*01:20
																			*01:51
																			*01:60
																			*01:66
																			*02:34, 02:56:01- 02:56:02, 02:62, 02:103
																			*02:35:01-02:35:03, 02:78, 24:19, 68:01:01:01- 68:02:04, 68:06-68:14, 68:16-68:19, 68:21:01- 68:30, 68:32-68:35, 68:37- 68:56, 68:58-68:60, 68:62- 68:72, 69:01
																			*02:38, 02:101:01
																	42		*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 23:01:01-23:08N, 23:11N- 23:12, 23:14-23:36, 24:02:01:01-24:02:32, 24:02:34-24:03:02, 24:05- 24:06, 24:08-24:09N, 24:11N, 24:13:01-24:15, 24:17-24:18, 24:20-24:23, 24:25, 24:27, 24:29- 24:43, 24:45N, 24:47- 24:64, 24:66-24:88, 24:90N-24:99, 24:101- 24:108, 24:110-24:111, 24:113-24:128, 24:130, 24:132N-24:171
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

Length of spec.	180	80	140	255	180	80	155	135	145	85	140	135	110	145	100	430	175	125	190	210	115	100	130	305	
PCR product(s)						160			190	260		240	255					205	245		205	220	165		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
*02:135	1																								
*02:154														14											
*02:241, 33:31																					21				
*03:01:19								8				12					17								
*03:09, 03:108, 11:18, 29:19, 30:13, 30:16, 30:44, 30:46, 33:24, 68:05, 68:15, 68:20, 74:06				4																					
*11:06				4											15										
*11:26															15									24	
*11:91															15										
*23:09																									
*23:10, 24:10, 24:46														14											
*23:13, 24:07, 24:24, 24:112, 24:131, 68:36																16									
*24:129												12													
*25:01:01-25:01:04, 25:03, 25:07, 25:10, 25:12N, 25:14-25:16	1																								
*25:02	1														15										
*25:04	1						7																		
*25:05	1																								
*25:06																	17								
*25:08	1																								
*25:09	1							8				12													
*25:11	1																								
*25:13	1																								
*31:03								8	9	11	12						17								
*31:04								8	9		12						17								
*31:24-31:25, 32:26, 43:01, 66:05, 66:15	1																								
*33:13		2																							24
*34:01:01-34:01:02, 34:05															15	16	17								
*34:02:01, 34:04, 34:08															15	16	17								
*34:02:02															15	16	17								
*34:03								8				12			15	16	17								
*34:06								8	9			12			15	16	17								
*34:07																	16	17							
*34:09																	16	17							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

360	150	275	90	155	125	210	90	105	135	110	125	245	190	220	90	140	460	135	Length of spec.
	175			330	235		155	200	190	245	215	410		410					PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
25																			*02:135
																			*02:154
																			*02:241, 33:31
25							32											43	*03:01:19
																			*03:09, 03:108, 11:18, 29:19, 30:13, 30:16, 30:44, 30:46, 33:24, 68:05, 68:15, 68:20, 74:06
			28																*11:06
																			*11:26
					30														*11:91
														39			42		*23:09
																	42		*23:10, 24:10, 24:46
																	42		*23:13, 24:07, 24:24, 24:112, 24:131, 68:36
															39				*24:129
																	42		*25:01:01-25:01:04, 25:03, 25:07, 25:10, 25:12N, 25:14-25:16
																	42		*25:02
																	42		*25:04
											36						42		*25:05
																	42		*25:06
									34								42		*25:08
																	42	43	*25:09
			28														42		*25:11
25																	42		*25:13
							32											43	*31:03
25							32											43	*31:04
																			*31:24-31:25, 32:26, 43:01, 66:05, 66:15
																			*33:13
										35									*34:01:01-34:01:02, 34:05
							32												*34:02:01, 34:04, 34:08
				29															*34:02:02
							32											43	*34:03
							32											43	*34:06
							32												*34:07
25							32												*34:09
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

Length of spec.	180	80	140	255	180	80	155	135	145	85	140	135	110	145	100	430	175	125	190	210	115	100	130	305	
PCR product(s)						160			190	260		240	255					205	245		205	220	165		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
*66:01, 66:04, 66:07-66:08, 66:11, 66:13-66:14	1														15	16									
*66:02, 66:16																16									
*66:03																									
*66:06	1								9						15	16									
*66:09	1														15	16			19						
*66:10	w								9						15	16									
*66:12	1															16									
*68:61														14		16									
*80:01																									
B*35:108:01																									
HLA-A allele																									
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A*26 subtyping. .

In addition, wells number 2, 4, 7, 11, 15, 19 and 31 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

²The nucleotide position, in the 1st, 2nd, 3rd or 4th exons, matching the specificity-determining 3'-end of the primer is given. Nuclotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

³The nucleotide position, in the 2nd, 3rd or 4th exons or in the 2nd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nuclotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

⁴The A*26:44 sequence has been renamed A*26:43:02.

⁵The A*26:17 and A*26:45 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 13.

⁶The A*26:24 and A*26:41 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

⁷The A*26:25N and A*26:38 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 22.

⁸The A*26:37 and A*26:43:02 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 29.

⁹The A*26:43:01 and A*26:61 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 32.

¹⁰The A*26:46 and A*26:53 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 33.

¹¹The A*26:54 and A*26:55 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

¹²The A*26:62 and A*26:63 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 39.

¹³Primer mix 6: Specific PCR fragment of 80 bp in the A*26:05 allele. Specific PCR fragment of 160 bp in the A*26:27 allele.

Primer mix 9: Specific PCR fragment of 145 bp in the A*26:12 and 26:18 and in the A*31:03-31:04, 34:06 and 66:06 alleles. Specific PCR fragment of 190 bp in the A*26:29 and 26:49 and in the A*66:10 alleles.

Primer mix 10: Specific PCR fragment of 85 bp in the A*26:07:01-26:07:02 and in the A*01:83 alleles. Specific PCR fragment of 260 bp in the A*26:20 and in the A*01:01:13 alleles. Specific PCR fragments of 85 and 260 bp in the A*02:146 allele.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

360	150	275	90	155	125	210	90	105	135	110	125	245	190	220	90	140	460	135	Length of spec.
	175			330	235		155	200	190	245	215	410		410					PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
																			*66:01, 66:04, 66:07-66:08, 66:11, 66:13-66:14
25																			*66:02, 66:16
25																			*66:03
							32												*66:06
																			*66:09
									34										*66:10
25																			*66:12
																			*68:61
			28																*80:01
					30														<i>B</i> *35:108:01
																			HLA-A allele
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

Primer mix 12: Specific PCR fragment of 135 bp in the A*26:14, 26:18, 26:28 and 26:52 and in the A*03:01:19, 25:09, 31:03-31:04, 34:03 and 34:06 alleles. Specific PCR fragment of 240 bp in the A*26:16 and in the A*01:02, 01:20, 24:04, 24:109 and 24:129 alleles.

Primer mix 13: Specific PCR fragment of 110 bp in the A*26:45 allele. Specific PCR fragment of 255 bp in the A*26:17 allele.

Primer mix 18: Specific PCR fragment of 125 bp in the A*26:31 and the A*01:60 alleles. Specific PCR fragment of 205 bp in the A*26:21 allele.

Primer mix 19: Specific PCR fragment of 190 bp in the A*26:40 allele. Specific PCR fragment of 245 bp in the A*26:22 and in the A* 01:20^w, 01:66^w, 02:38, 02:101:01 and 66:09 alleles.

Primer mix 21: Specific PCR fragment of 115 bp in the A*26:24 and the A*02:241 and 33:31 alleles. Specific PCR fragment of 205 bp in the A*26:41 allele.

Primer mix 22: Specific PCR fragment of 100 bp in the A*26:25N allele. Specific PCR fragment of 220 bp in the A*26:38 allele.

Primer mix 23: Specific PCR fragment of 130 bp in the A*26:56 allele. Specific PCR fragment of 165 bp in the A*26:26 allele.

Primer mix 26: Specific PCR fragment of 150 bp in the A*26:42 allele. Specific PCR fragment of 175 bp in the A*26:34 allele.

Primer mix 29: Specific PCR fragment of 155 bp in the A*26:43:02 and the A*34:02:02 alleles. Specific PCR fragment of 330 bp in the A*26:37 allele.

Primer mix 30: Specific PCR fragment of 125 bp in the A*26:15, 26:29 and 26:56 and in the A*11:91 and the B*35:108:01 alleles. Specific PCR fragment of 235 bp in the A*26:33 allele.

Primer mix 32: Specific PCR fragment of 90 bp in the A*26:61 allele. Specific PCR fragment of 155 bp in the A*26:43:01 and the A*03:01:19 and the A*31:03-31:04, 34:02:01, 34:03-34:04, 34:06-34:09 and 66:06 alleles.

Primer mix 33: Specific PCR fragment of 105 bp in the A*26:46 allele. Specific PCR fragment of 200 bp in the A*26:53 allele.

Primer mix 34: Specific PCR fragment of 135 bp in the A*26:47 and the A*25:08 alleles. Specific PCR fragment of 190 bp in the A*26:29 and 26:49 and the A*66:10 alleles.

Primer mix 35: Specific PCR fragment of 110 bp in the A*26:48 and in the A*34:01:01-34:01:02 and 34:05 alleles. Specific PCR fragment of 245 bp in the A*26:59 allele.

Primer mix 36: Specific PCR fragment of 125 bp in the A*26:54 and the A*25:05 alleles. Specific PCR fragment of 215 bp in the A*26:55 allele.

Primer mix 37: Specific PCR fragment of 245 bp in the A*26:50 allele. Specific PCR fragment of 410 bp in the A*26:64 allele.

Primer mix 39: Specific PCR fragment of 220 bp in the A*26:63 allele. Specific PCR fragment of 410 bp in the A*26:62 and 26:64 and the A*23:09 and 24:129 allele.

'w', may be weakly amplified.

CELL LINE VALIDATION SHEET																				
HLA-A*26 SSP subtyping kit																				
				Well																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	201183101	201072702	201072703	201072704	201072705	201072706	201072707	201072708	201072709	201072710	201072711	201072712	201072713	201072714	201072715	201072716
	IHWC cell line		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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-

CELL LINE VALIDATION SHEET																					
HLA-A*26 SSP subtyping kit																					
				Prod. No.:	Well																
					17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
					201072717	201183118	201072719	201072720	201072721	201072722	201183123	201072724	201072725	201072726	201072727	201072728	201072729	201183130	201072731	201183132	
	IHWC cell line		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	9007 DEM		*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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CELL LINE VALIDATION SHEET															
HLA-A*26 SSP subtyping kit															
			Prod. No.:	Well											
				33	34	35	36	37	38	39	40	41	42	43	
				201183133	201183134	201183135	201183136	201183137	201183138	201183139	201183140	201183141	201183142	201183143	
	IHWC cell line	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	9007 DEM	*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 OLG A	*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	-	-	-	-	-	-	-	-	-	-	-	

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-A*26 SSP

Product number: 101.424-12u – without *Taq* polymerase
Lot number: 14L
Expiry date: 2013-September-01
Number of tests: 12
Number of wells per test: 43

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2011-831-01	17	2010-727-17	33	2011-831-33
2	2010-727-02	18	2011-831-18	34	2011-831-34
3	2010-727-03	19	2010-727-19	35	2011-831-35
4	2010-727-04	20	2010-727-20	36	2011-831-36
5	2010-727-05	21	2010-727-21	37	2011-831-37
6	2010-727-06	22	2010-727-22	38	2011-831-38
7	2010-727-07	23	2011-831-23	39	2011-831-39
8	2010-727-08	24	2010-727-24	40	2011-831-40
9	2010-727-09	25	2010-727-25	41	2011-831-41
10	2010-727-10	26	2010-727-26	42	2011-831-42
11	2010-727-11	27	2010-727-27	43	2011-831-43
12	2010-727-12	28	2010-727-28		
13	2010-727-13	29	2010-727-29		
14	2010-727-14	30	2011-831-30		
15	2010-727-15	31	2010-727-31		
16	2010-727-16	32	2011-831-32		

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 6, 8 to 11, 13, 18 to 23, 26, 27, 29 to 31, 33, 34, 36-41 and 43 were available.

The specificities of the primers in primer solutions 6, 8 to 11, 18, 19, 21, 29, 34, 36, 37, 39 and 43 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 23, 26, 30, 40 and 41 it was only possible to test the 5'-primers. In primer solutions 13, 20, 22, 27 and 31 it was only possible to test the 3'-primer. In primer solutions 1, 6, 8, 16, 21, 29, 32, 34, 36, 37 and 39 one or two of the 3'-primers were not possible to test. In primer solutions 4, 10, 11, 18, 19, 21, 35 and 37 one of the 5'-primers was not possible to test. Additional primers in primer solutions 7 and 12 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer.

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

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

Date of approval: 2012-May-10

Approved by:

Production Quality Control

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

Declaration of Conformity

Product name: *Olerup* SSP® HLA-A*26
Product number: 101.424-12u
Lot number: 14L

Intended use: HLA-A*26 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.)

Stockholm, Sweden
2012-May-10

Ann-Cathrin Jareman
Head of QA and Regulatory Affairs

Lot No.: **14L**

Lot-specific information

www.olerup-ssp.com

ADDRESSES:

Manufacturer:

Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

Tel: +46-8-717 88 27

Fax: +46-8-717 88 18

E-mail: 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

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

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

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