

Olerup SSP® HLA-B*55

Product number:	101.570-06 – including <i>Taq</i> polymerase
Lot number:	78K
Expiry date:	2013-July-01
Number of tests:	6
Number of wells per test:	30
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. 78K.

CHANGES COMPARED TO THE PREVIOUS *OLERUP SSP*® HLA-B*55 LOT

The HLA-B*55 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP*® HLA-B*55 lot was made (**Lot No. 06G**).

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

Well	5'-primer	3'-primer	rationale
2	Added	-	Primer added for the B*55:01:06 allele.
8	Added	Added	Primer pair added for the B*55:43 allele.
11	-	Added	Primer added for the B*55:48 allele.
17	Moved	Moved	One primer pair moved to well 25.
19	Added	-	Primer added for the B*55:36 allele, exchanged positive control primer pair.
22	Moved	Moved	Primer pairs moved to well 25 for improved allelic resolution.
25	Added	Added	Primer pairs from wells 17 and 22.
26	New	New	New primer pairs for the B*55:42, 55:45 and 55:47 alleles.
27	New	New	New primer pairs for the B*55:43 and 55:46 alleles.
28	New	New	New primer pairs for the B*55:41 and 55:44 alleles.
29	New	New	New primer pair for the B*55:39 allele.
30	New	New	New primer pair for the B*55:38 allele.

Change in revision R01 compared to R00:

1. The B*55:25 allele is weakly amplified by primer mixes 9 and 18. This has been revised in the Specificity and Interpretation Tables.

PRODUCT DESCRIPTION

HLA-B*55 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*55:01 to B*55:48 alleles.

PLATE LAYOUT

Each test consists of 30 PCR reactions in a 32 well PCR plate. Wells 31 and 32 are empty.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	empty	empty

The 32 well PCR plate is marked with 'HLA-B*55' in silver/gray ink.

Well No. 1 is marked with the Lot No. '78K'.

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 32 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-B*55 SSP subtypings will be influenced by most B*07, most B*08, the B*13, two B*14, several B*15, most B*18, the B*27:14, the B*35, the B*37, two B*38, thirteen B*39, several B*40, the B*41, the B*42, twelve B*44, the B*45, the B*46, two B*48, the B*49, the B*50, the B*51, the B*52, the B*53, the B*54, the B*56, ten B*57, the B*58, the B*59, the B*67, the B*73, the B*78, the B*81, the B*82 and the B*83:01 alleles when present on the other haplotype. In addition, the C*03:70 allele will be amplified by primer mix 19, the C*03:81 allele will be amplified by primer mix 7, the C*05:30 allele will be amplified by primer mix 10, the C*06:20 and C*07:81 alleles will be amplified by primer mix 2 and the C*08:08 allele will be amplified by primer mix 5.

UNIQUELY IDENTIFIED ALLELES

All the HLA-B*55 alleles, i.e. **B*55:01 to B*55:48**, recognized by the HLA Nomenclature Committee in October 2010¹ will give rise to unique amplification patterns by the primers in the HLA-B*55 subtyping kit.

The HLA-B*55 subtyping kit cannot separate the B*55:01:01-55:01:06 alleles or the *55:02:01-55:02:06 alleles.

¹HLA-B alleles listed on the IMGT/HLA web page 2010-October-15, release 3.2.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 57 alleles generate 47 amplification patterns that can be combined in 1128 homozygous and heterozygous combinations. 531 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.

++++-----	+-----+	-----	-----	*55:03, *55:11 = *55:03, *55:14
++++-----	-----+	-----	-----	*55:03, *55:22 = *55:03, *55:48
++++-----	-----+	-----	-----	*55:03, *55:15 = *55:03, *55:24
++++-----	-----+	-----	-+-----	*55:03, *55:42 = *55:03, *55:47
++++-----	-----+	+-----	-----	*55:03, *55:17 = *55:03, *55:28
++++-----	-----+	-----+	-----	*55:03, *55:32 = *55:03, *55:33
++++-----	-----+	-----	-----	*55:01:01, *55:03 = *55:03, *55:03
++++-----	+-----+	-----	-----	*55:05, *55:11 = *55:05, *55:14
++++-----	-----+	-----	-----	*55:05, *55:22 = *55:05, *55:48
++++-----	-----+	-----	-----	*55:05, *55:15 = *55:05, *55:24
++++-----	-----+	-----	-+-----	*55:05, *55:42 = *55:05, *55:47
++++-----	-----+	+-----	-----	*55:05, *55:17 = *55:05, *55:28
++++-----	-----+	-----+	-----	*55:05, *55:32 = *55:05, *55:33
++++-----	-----+	-----	-----	*55:01:01, *55:05 = *55:05, *55:05
++++-----	-----+	-----	-+-----	*55:15, *55:43 = *55:24, *55:43
++++-----	-----+	-----	-----	*55:12, *55:15 = *55:12, *55:24
++++-----	-----+	-----+	-----	*55:13, *55:15 = *55:13, *55:24
++++-----	-----+	-----+	-----	*55:01:01, *55:13 = *55:13, *55:33
++++-----	+-----+	-+-----	-----	*55:22, *55:25 = *55:25, *55:48
++++-----	+-----+	-----	-----	*55:11, *55:22 = *55:11, *55:48
++++-----	+-----+	-+-----	-----	*55:15, *55:25 = *55:24, *55:25
++++-----	+-----+	-----	-----	*55:11, *55:15 = *55:11, *55:24 = *55:14, *55:15
++++-----	+-----+	-+-----	+-----	*55:11, *55:18 = *55:18, *55:25 = *55:25, *55:35
++++-----	+-----+	-+-----	-+-----	*55:25, *55:42 = *55:25, *55:47
++++-----	+-----+	-+-----	-----	*55:02:01, *55:25 = *55:11, *55:19 = *55:19, *55:25
++++-----	+-----+	-----	-+-----	*55:11, *55:42 = *55:11, *55:47
++++-----	+-----+	+-----	-----	*55:17, *55:25 = *55:25, *55:28
++++-----	+-----+	+-----	-----	*55:11, *55:17 = *55:11, *55:28
++++-----	+-----+	-+-----+	-----	*55:25, *55:32 = *55:25, *55:33
++++-----	+-----+	-+-----	-----	*55:01:01, *55:25 = *55:11, *55:25 = *55:11, *55:31 = *55:14, *55:25 = *55:14, *55:31 = *55:25, *55:25 = *55:25, *55:31
++++-----	+-----+	-----+	-----	*55:11, *55:36 = *55:14, *55:36
++++-----	+-----+	-----+	-----	*55:11, *55:29 = *55:14, *55:29
++++-----	+-----+	-----+	-----	*55:11, *55:32 = *55:11, *55:33 = *55:14, *55:33
++++-----	+-----+	-----	+-----	*55:11, *55:40 = *55:14, *55:40
++++-----	+-----+	-----	-+-----	*55:11, *55:45 = *55:14, *55:45
++++-----	+-----+	-----	-----+	*55:11, *55:44 = *55:14, *55:44
++++-----	+-----+	-----	-----	*55:01:01, *55:11 = *55:01:01, *55:14 = *55:11, *55:11 = *55:11, *55:14
++++-----	+-----+	-----	-----	*55:07, *55:15 = *55:07, *55:24
++++-----	+-----+	-----	-----	*55:10, *55:15 = *55:10, *55:24
++++-----	+-----+	-+-----	+-----	*55:15, *55:18 = *55:18, *55:24
++++-----	+-----+	-+-----	-----	*55:15, *55:19 = *55:19, *55:24 = *55:22, *55:31 = *55:31, *55:48
++++-----	+-----+	-+-----	-----	*55:15, *55:30 = *55:22, *55:36 = *55:24, *55:30 = *55:36, *55:48
++++-----	+-----+	-+-----	-----	*55:15, *55:26 = *55:24, *55:26
++++-----	+-----+	-+-----	-+-----	*55:09, *55:42 = *55:09, *55:47
++++-----	+-----+	-+-----	-----	*55:02:01, *55:09 = *55:09, *55:37 = *55:09, *55:48 = *55:15, *55:37 = *55:24, *55:37
++++-----	+-----+	-+-----	-----	*55:15, *55:16 = *55:16, *55:24 = *55:22, *55:29 = *55:29, *55:48
++++-----	+-----+	-+-----	-----	*55:22, *55:33 = *55:33, *55:48
++++-----	+-----+	-+-----	+-----	*55:15, *55:34 = *55:24, *55:34
++++-----	+-----+	-+-----	+-----	*55:15, *55:35 = *55:22, *55:40 = *55:24, *55:35 = *55:40, *55:48
++++-----	+-----+	-+-----	-+-----	*55:15, *55:42 = *55:15, *55:47 = *55:22, *55:45 = *55:24, *55:42 = *55:24, *55:47 = *55:45, *55:48

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Lot-specific information

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+++-----	--+--+--	-----	---+--	*55:15, *55:41 = *55:22, *55:44 = *55:24, *55:41 = *55:44, *55:48
+++-----	--+--+--	-----	---+--	*55:15, *55:39 = *55:24, *55:39
+++-----	--+--+--	-----	---+--	*55:22, *55:38 = *55:38, *55:48
+++-----	--+--+--	-----	---+--	*55:01:01, *55:22 = *55:01:01, *55:48 = *55:02:01, *55:15 = *55:02:01, *55:24 = *55:15, *55:22 = *55:15, *55:48 = *55:24, *55:48
+++-----	--+--+--	+++-----	-----	*55:15, *55:20 = *55:20, *55:24
+++-----	--+--+--	+++-----	-----	*55:09, *55:27 = *55:15, *55:27 = *55:24, *55:27
+++-----	--+--+--	+++-----	-----	*55:09, *55:17 = *55:09, *55:28
+++-----	--+--+--	+++-----	-----	*55:15, *55:17 = *55:15, *55:28 = *55:17, *55:24 = *55:24, *55:28
+++-----	--+--+--	+++-----	-----	*55:15, *55:31 = *55:24, *55:31
+++-----	--+--+--	+++-----	-----	*55:15, *55:36 = *55:24, *55:36
+++-----	--+--+--	+++-----	-----	*55:09, *55:21 = *55:09, *55:29 = *55:15, *55:21 = *55:21, *55:24
+++-----	--+--+--	+++-----	-----	*55:09, *55:23 = *55:09, *55:32 = *55:09, *55:33 = *55:15, *55:23 = *55:23, *55:24
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:09 = *55:09, *55:15
+++-----	--+--+--	+++-----	-----	*55:15, *55:29 = *55:24, *55:29
+++-----	--+--+--	+++-----	-----	*55:15, *55:32 = *55:15, *55:33 = *55:24, *55:32 = *55:24, *55:33
+++-----	--+--+--	+++-----	-----	*55:15, *55:40 = *55:24, *55:40
+++-----	--+--+--	+++-----	-----	*55:15, *55:45 = *55:24, *55:45
+++-----	--+--+--	+++-----	-----	*55:15, *55:46 = *55:24, *55:46
+++-----	--+--+--	+++-----	-----	*55:15, *55:44 = *55:24, *55:44
+++-----	--+--+--	+++-----	-----	*55:15, *55:38 = *55:24, *55:38
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:15 = *55:01:01, *55:24 = *55:15, *55:15 = *55:15, *55:24
+++-----	--+--+--	+++-----	-----	*55:09, *55:09 = *55:09, *55:24
+++-----	--+--+--	+++-----	-----	*55:19, *55:36 = *55:30, *55:31
+++-----	--+--+--	+++-----	-----	*55:16, *55:31 = *55:19, *55:29
+++-----	--+--+--	+++-----	-----	*55:18, *55:45 = *55:31, *55:34
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:18 = *55:18, *55:31 = *55:18, *55:40 = *55:19, *55:40 = *55:31, *55:35
+++-----	--+--+--	+++-----	-----	*55:19, *55:45 = *55:31, *55:42 = *55:31, *55:47
+++-----	--+--+--	+++-----	-----	*55:19, *55:44 = *55:31, *55:41
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:19 = *55:02:01, *55:31 = *55:19, *55:31
+++-----	--+--+--	+++-----	-----	*55:16, *55:36 = *55:29, *55:30
+++-----	--+--+--	+++-----	-----	*55:30, *55:40 = *55:35, *55:36
+++-----	--+--+--	+++-----	-----	*55:30, *55:45 = *55:36, *55:42 = *55:36, *55:47
+++-----	--+--+--	+++-----	-----	*55:30, *55:44 = *55:36, *55:41
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:30 = *55:02:01, *55:36 = *55:30, *55:36
+++-----	--+--+--	+++-----	-----	*55:16, *55:40 = *55:29, *55:35
+++-----	--+--+--	+++-----	-----	*55:16, *55:45 = *55:29, *55:42 = *55:29, *55:47
+++-----	--+--+--	+++-----	-----	*55:16, *55:44 = *55:29, *55:41
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:16 = *55:02:01, *55:29 = *55:16, *55:29
+++-----	--+--+--	+++-----	-----	*55:33, *55:42 = *55:33, *55:47
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:34 = *55:34, *55:40 = *55:34, *55:45 = *55:35, *55:45 = *55:40, *55:42 = *55:40, *55:47
+++-----	--+--+--	+++-----	-----	*55:35, *55:44 = *55:40, *55:41
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:35 = *55:02:01, *55:40 = *55:35, *55:40
+++-----	--+--+--	+++-----	-----	*55:41, *55:45 = *55:42, *55:44 = *55:44, *55:47
+++-----	--+--+--	+++-----	-----	*55:38, *55:42 = *55:38, *55:47
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:42 = *55:01:01, *55:47 = *55:02:01, *55:45 = *55:42, *55:45 = *55:45, *55:47
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:41 = *55:02:01, *55:44 = *55:41, *55:44
+++-----	--+--+--	+++-----	-----	*55:17, *55:31 = *55:28, *55:31
+++-----	--+--+--	+++-----	-----	*55:17, *55:36 = *55:28, *55:36
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:27 = *55:27, *55:33
+++-----	--+--+--	+++-----	-----	*55:17, *55:29 = *55:28, *55:29
+++-----	--+--+--	+++-----	-----	*55:17, *55:33 = *55:28, *55:33
+++-----	--+--+--	+++-----	-----	*55:17, *55:40 = *55:28, *55:40
+++-----	--+--+--	+++-----	-----	*55:17, *55:45 = *55:28, *55:45
+++-----	--+--+--	+++-----	-----	*55:17, *55:44 = *55:28, *55:44
+++-----	--+--+--	+++-----	-----	*55:01:01, *55:17 = *55:01:01, *55:28
+++-----	--+--+--	+++-----	-----	*55:31, *55:32 = *55:31, *55:33

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+++-----	-----+	-+-----	-----	*55:01:01, *55:31 = *55:31, *55:31
+++-----	-----+	-+-----	-----	*55:32, *55:36 = *55:33, *55:36
+++-----	-----+	-+-----	-----	*55:01:01, *55:36 = *55:36, *55:36
+++-----	-----+	-----++	-----	*55:21, *55:33 = *55:23, *55:29
+++-----	-----+	-----++	-----	*55:01:01, *55:21 = *55:21, *55:29
+++-----	-----+	-----++	-----	*55:01:01, *55:23 = *55:23, *55:33
+++-----	-----+	-----++	-----	*55:29, *55:32 = *55:29, *55:33
+++-----	-----+	-----++	-----	*55:01:01, *55:29 = *55:29, *55:29
+++-----	-----+	-----+	+-----	*55:32, *55:40 = *55:33, *55:40
+++-----	-----+	-----+	+-----	*55:32, *55:45 = *55:33, *55:45
+++-----	-----+	-----+	+-----	*55:32, *55:44 = *55:33, *55:44
+++-----	-----+	-----+	+-----	*55:32, *55:38 = *55:33, *55:38
+++-----	-----+	-----+	-----	*55:01:01, *55:32 = *55:01:01, *55:33 = *55:32, *55:33 = *55:33, *55:33
+++-----	-----+	-----+	+-----	*55:01:01, *55:40 = *55:40, *55:40
+++-----	-----+	-----+	+-----	*55:01:01, *55:45 = *55:45, *55:45
+++-----	-----+	-----+	+-----	*55:01:01, *55:44 = *55:44, *55:44
+++-----	-----+	-----+	+-----	*55:04, *55:42 = *55:04, *55:47
+++-----	-----+	-----+	+-----	*55:08, *55:42 = *55:08, *55:47
+++-----	-----+	-----+	+-----	*55:13, *55:22 = *55:13, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:43 = *55:43, *55:48
+++-----	-----+	-----+	+-----	*55:12, *55:22 = *55:12, *55:48
+++-----	-----+	-----+	+-----	*55:17, *55:43 = *55:28, *55:43
+++-----	-----+	-----+	+-----	*55:12, *55:17 = *55:12, *55:28
+++-----	-----+	-----+	+-----	*55:12, *55:23 = *55:13, *55:37
+++-----	-----+	-----+	+-----	*55:13, *55:42 = *55:13, *55:47
+++-----	-----+	-----+	+-----	*55:13, *55:43 = *55:32, *55:43
+++-----	-----+	-----+	+-----	*55:02:01, *55:13 = *55:12, *55:13 = *55:12, *55:32
+++-----	-----+	-----+	+-----	*55:42, *55:43 = *55:43, *55:47
+++-----	-----+	-----+	+-----	*55:12, *55:42 = *55:12, *55:47
+++-----	-----+	-----+	+-----	*55:02:01, *55:43 = *55:12, *55:43 = *55:12, *55:46 = *55:43, *55:43 = *55:43, *55:46
+++-----	-----+	-----+	+-----	*55:02:01, *55:12 = *55:12, *55:12
+++-----	-----+	-----+	+-----	*55:13, *55:17 = *55:13, *55:28
+++-----	-----+	-----+	+-----	*55:13, *55:13 = *55:13, *55:32
+++-----	-----+	-----+	+-----	*55:14, *55:42 = *55:14, *55:47
+++-----	-----+	-----+	+-----	*55:07, *55:22 = *55:07, *55:48
+++-----	-----+	-----+	+-----	*55:07, *55:17 = *55:07, *55:28
+++-----	-----+	-----+	+-----	*55:07, *55:42 = *55:07, *55:47
+++-----	-----+	-----+	+-----	*55:02:01, *55:07 = *55:07, *55:07
+++-----	-----+	-----+	+-----	*55:10, *55:22 = *55:10, *55:48
+++-----	-----+	-----+	+-----	*55:20, *55:22 = *55:20, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:27 = *55:27, *55:48
+++-----	-----+	-----+	+-----	*55:17, *55:22 = *55:17, *55:48 = *55:22, *55:28 = *55:28, *55:48
+++-----	-----+	-----+	+-----	*55:18, *55:22 = *55:18, *55:48
+++-----	-----+	-----+	+-----	*55:19, *55:22 = *55:19, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:30 = *55:30, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:26 = *55:26, *55:48
+++-----	-----+	-----+	+-----	*55:21, *55:22 = *55:21, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:23 = *55:23, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:37 = *55:37, *55:48
+++-----	-----+	-----+	+-----	*55:16, *55:22 = *55:16, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:32 = *55:32, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:34 = *55:34, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:35 = *55:35, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:42 = *55:22, *55:47 = *55:42, *55:48 = *55:47, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:46 = *55:46, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:41 = *55:41, *55:48
+++-----	-----+	-----+	+-----	*55:22, *55:39 = *55:39, *55:48
+++-----	-----+	-----+	+-----	*55:02:01, *55:22 = *55:02:01, *55:48 = *55:22, *55:48 = *55:48, *55:48
+++-----	-----+	-----+	+-----	*55:10, *55:17 = *55:10, *55:28
+++-----	-----+	-----+	+-----	*55:10, *55:42 = *55:10, *55:47

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++-----	----++--	-----+	-----	*55:02:01, *55:10 = *55:10, *55:10
++-----	----++--	++-----	-----	*55:17, *55:18 = *55:18, *55:28
++-----	----++--	++-----	-----	*55:17, *55:19 = *55:19, *55:28
++-----	----++--	++-----	-----	*55:17, *55:30 = *55:28, *55:30
++-----	----++--	++-----	-----	*55:20, *55:42 = *55:20, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:20 = *55:17, *55:26 = *55:20, *55:26 = *55:26, *55:28
++-----	----++--	++-----	-----	*55:27, *55:42 = *55:27, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:27 = *55:27, *55:37
++-----	----++--	++-----	-----	*55:17, *55:37 = *55:28, *55:37
++-----	----++--	++-----	-----	*55:16, *55:17 = *55:16, *55:28
++-----	----++--	++-----	-----	*55:17, *55:34 = *55:28, *55:34
++-----	----++--	++-----	-----	*55:17, *55:35 = *55:28, *55:35
++-----	----++--	++-----	-----	*55:17, *55:42 = *55:17, *55:47 = *55:28, *55:42 = *55:28, *55:47
++-----	----++--	++-----	-----	*55:17, *55:41 = *55:28, *55:41
++-----	----++--	++-----	-----	*55:17, *55:39 = *55:28, *55:39
++-----	----++--	++-----	-----	*55:02:01, *55:17 = *55:02:01, *55:28
++-----	----++--	++-----	-----	*55:18, *55:42 = *55:19, *55:34
++-----	----++--	++-----	-----	*55:02:01, *55:18 = *55:18, *55:19 = *55:18, *55:35 = *55:19, *55:35
++-----	----++--	++-----	-----	*55:19, *55:42 = *55:19, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:19 = *55:19, *55:19
++-----	----++--	++-----	-----	*55:30, *55:42 = *55:30, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:30 = *55:30, *55:30
++-----	----++--	++-----	-----	*55:26, *55:42 = *55:26, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:26 = *55:26, *55:26
++-----	----++--	++-----	-----	*55:21, *55:42 = *55:21, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:21 = *55:16, *55:21 = *55:16, *55:37 = *55:21, *55:37
++-----	----++--	++-----	-----	*55:23, *55:42 = *55:23, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:23 = *55:23, *55:37 = *55:32, *55:37
++-----	----++--	++-----	-----	*55:37, *55:42 = *55:37, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:37 = *55:37, *55:37
++-----	----++--	++-----	-----	*55:16, *55:42 = *55:16, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:16 = *55:16, *55:16
++-----	----++--	++-----	-----	*55:32, *55:42 = *55:32, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:34 = *55:34, *55:35 = *55:34, *55:42 = *55:35, *55:42 = *55:35, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:35 = *55:35, *55:35
++-----	----++--	++-----	-----	*55:42, *55:46 = *55:46, *55:47
++-----	----++--	++-----	-----	*55:41, *55:42 = *55:41, *55:47
++-----	----++--	++-----	-----	*55:39, *55:42 = *55:39, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:42 = *55:02:01, *55:47 = *55:42, *55:42 = *55:42, *55:47
++-----	----++--	++-----	-----	*55:02:01, *55:41 = *55:41, *55:41
++-----	----++--	++-----	-----	*55:02:01, *55:39 = *55:39, *55:39
++-----	----++--	++-----	-----	*55:20, *55:23 = *55:20, *55:27
++-----	----++--	++-----	-----	*55:17, *55:21 = *55:21, *55:28
++-----	----++--	++-----	-----	*55:17, *55:23 = *55:17, *55:27 = *55:23, *55:27 = *55:23, *55:28 = *55:27, *55:27 = *55:27, *55:28 = *55:27, *55:32
++-----	----++--	++-----	-----	*55:17, *55:32 = *55:28, *55:32
++-----	----++--	++-----	-----	*55:17, *55:46 = *55:28, *55:46
++-----	----++--	++-----	-----	*55:17, *55:28 = *55:28, *55:28
++-----	----++--	++-----	-----	*55:21, *55:23 = *55:21, *55:32
++-----	----++--	++-----	-----	*55:23, *55:23 = *55:23, *55:32
++-----	----++--	++-----	-----	*55:17, *55:20 = *55:20, *55:20
++-----	----++--	++-----	-----	*55:18, *55:34 = *55:18, *55:47
++-----	----++--	++-----	-----	*55:34, *55:34 = *55:34, *55:47

*55:01:01 = *55:01:01-55:01:06

*55:02:01 = *55:02:01-55:02:06

SPECIFICITY TABLE

HLA-B*55 SSP subtyping

Specificities and sizes of the PCR products of the 30 primer mixes used for HLA-B*55 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*55 alleles	Other amplified HLA Class I alleles ³
1⁵	400 bp	800 bp	*55:01:01-55:05, 55:07-55:17, 55:19-55:33, 55:35-55:46, 55:48	*07:65, 35:76, 44:90, 54:01-54:06, 54:08N-54:23, 56:01:01-56:07, 56:08 ^w , 56:09-56:13, 56:15-56:16, 56:18-56:22, 56:24-56:30, 81:01, 81:03 [?] -81:04N [?] , 82:01-82:03, 83:01
2⁴	125 bp	1070 bp	*55:01:01-55:03, 55:05, 55:07, 55:09-55:13, 55:15-55:16, 55:18-55:19, 55:21-55:37, 55:39-55:48	*13:01:01-13:04, 13:06-13:09, 13:11-13:20, 13:22:01-13:23, 13:25-13:34, 13:36-13:40, 15:16, 15:20, 15:34, 15:42, 15:62, 15:67, 15:85-15:86, 15:95, 15:137, 15:194, 18:22, 18:52, 27:14, 35:01:01-35:08:04, 35:10-35:11:02, 35:13-35:15, 35:19-35:21, 35:23-35:30, 35:33-35:38, 35:40N-35:42:02, 35:45-35:50, 35:52, 35:54-35:58, 35:60, 35:62-35:63, 35:65Q-35:66, 35:68:01-35:72, 35:74-35:78, 35:80-35:85, 35:89-35:98, 35:100-35:101:02, 35:103-35:112, 35:115-35:116, 35:119-35:124, 35:126-35:134N, 35:136-35:148, 35:150-35:151, 40:28, 44:10, 44:15, 44:18, 44:48, 45:01-45:13, 46:11, 46:18, 48:02:01-48:02:02, 49:01:01-49:15, 50:01:01, 50:02, 50:05-50:12, 51:15, 51:56, 53:01:01-53:06, 53:08:01-53:24, 54:01-54:05N, 54:07-54:08N, 54:10, 54:12-54:14, 54:16-54:23, 56:01:01-56:01:03, 56:02, 56:07-56:11, 56:13-56:17, 56:19N, 56:22-56:26, 56:28N-56:30, 57:05, 58:01:01-58:01:02, 58:01:04-58:02, 58:04-58:07, 58:09, 58:11-58:13, 58:15-58:19, 58:21-58:26, 58:28-58:31N, 59:01, 59:03-59:05, 82:01-82:03, C*06:20, C*07:81
3	150 bp	1070 bp	*55:01:01-55:01:06, 55:03, 55:05,	*07:78 ^w , 13:16, 13:20, 15:42, 51:62, 51:106, 54:20 ^w , 56:25

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			55:09 ^w , 55:11, 55:15, 55:24-55:25, 55:29, 55:31, 55:33, 55:36, 55:38, 55:40, 55:44-55:45	
4	235 bp	1070 bp	*55:03	*08:15, 35:74, 40:73, 46:01:01- 46:04, 46:06-46:26
5	235 bp	800 bp	*55:04	*07:19, 07:31, 07:34, 07:43, 08:01:01-08:05, 08:07-08:08N, 08:10, 08:13-08:15, 08:17-08:20, 08:22-08:24, 08:26-08:39, 08:41- 08:48, 08:50-08:59, 08:61-08:66, 14:05, 14:13, 18:14, 18:22 ^w , 35:87, 37:09, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:39, 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, C*08:08
6^{4,6}	100 bp	1070 bp	*55:05	
7	180 bp	1070 bp	*55:08	*07:20, 07:24, 07:60, 07:100, 08:21, 08:25, 15:09-15:10:02, 15:30, 15:37, 15:45, 15:48, 15:63, 15:90, 15:99, 15:150, 35:02:01-35:02:04, 35:04:01-35:04:03, 35:09:01- 35:09:02, 35:12:01-35:12:02, 35:18, 35:22, 35:34, 35:39, 35:44, 35:81, 35:83, 35:95, 35:129N, 35:149, 40:05, 40:26, 40:28, 40:63, 40:92, 44:62, 44:77, 44:82, 44:107, 51:01:01-51:01:14, 51:01:16- 51:09:02, 51:11N-51:12, 51:18- 51:20, 51:22-51:24:04, 51:26-51:30, 51:32-51:33, 51:35, 51:38-51:41N, 51:43-51:44N, 51:46, 51:48-51:61, 51:64-51:80, 51:83-51:84, 51:86- 51:91, 51:94-51:96, 51:98N-51:100, 51:102-51:105, 52:01:01-52:07, 52:09-52:13, 52:15-52:22, 53:19, 56:05:01-56:06, 56:15, 56:21, 57:02:01-57:03:02, 57:05, 57:07, 57:09, 57:12, 57:17, 57:28N, 58:08, 58:28, 78:01-78:06, C*03:81
8^{4,8}	105 bp, 170 bp, 425 bp	800 bp	*55:12-55:13, 55:43	*15:137, 39:06:01-39:06:02, 39:33- 39:34, 39:50, 39:57, 39:62, 40:86, 45:02, 50:09, 51:13:01-51:13:02, 51:92, 52:14, 56:22, 59:03, 73:01- 73:02

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9^{5,9}	215 bp, 375 bp	1070 bp	*55:11, 55:14, 55:25 ^w	
10	140 bp	1070 bp	*55:07	*54:01, 54:03-54:04, 54:06-54:23, C*05:30
11^{4,10}	90 bp, 125 bp, 180 bp	1070 bp	*55:09, 55:15, 55:22, 55:24, 55:48	*07:78, 13:01:01-13:02:09, 13:07N- 13:09, 13:11, 13:14-13:20, 13:22:01-13:23, 13:25, 13:27-13:34, 13:36-13:40, 40:48, 45:10, 49:07
12	210 bp	1070 bp	*55:10	*07:02:01-07:02:20, 07:04-07:07, 07:09, 07:11-07:12, 07:14-07:15, 07:17-07:26, 07:28, 07:30-07:31, 07:33-07:36, 07:39-07:49N, 07:51- 07:64, 07:66-07:68:02, 07:73-07:82, 07:84, 07:87-07:117, 38:26, 42:01:01-42:01:02, 42:04-42:06, 42:08, 42:10, 42:12-42:14, 67:01:01-67:01:02, 67:03, 81:01- 81:04N
13	150 bp	1070 bp	*55:02:01-55:02:06, 55:07, 55:10, 55:12, 55:16, 55:18-55:19, 55:22, 55:26, 55:30, 55:34-55:35, 55:37 ^w , 55:39, 55:41-55:43, 55:47- 55:48	*13:01:01-13:03, 13:06-13:09, 13:11-13:12, 13:14-13:15, 13:17, 13:18 ^w , 13:19, 13:22:01-13:23, 13:25, 13:27-13:30, 13:32-13:34, 13:36-13:40, 15:86, 35:60, 40:48, 40:71, 44:10, 46:11, 46:18, 49:11, 51:15, 54:01-54:03, 54:05N, 54:07- 54:08N, 54:10 ^w , 54:12-54:13, 54:17- 54:19, 54:21-54:23, 56:01:01-56:02, 56:04, 56:07-56:08, 56:10, 56:14, 56:16-56:17, 56:19N-56:20, 56:23- 56:24, 56:26-56:29, 59:01, 59:04- 59:05
14	215 bp	800 bp		*07:02:19, 15:01:04, 37:01:04, 40:94, 51:01:18, 54:01-54:23, 58:01:08
15	245 bp	1070 bp	*55:01:01-55:03, 55:05, 55:07, 55:10- 55:13, 55:15-55:21, 55:23, 55:25-55:48	*08:09, 15:42, 15:83, 35:60, 39:06:01-39:06:02, 39:34, 39:57, 39:62, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 42:04, 45:08, 46:18, 51:21, 51:36, 51:101, 54:01- 54:02, 54:04-54:05N, 54:07-54:08N, 54:10-54:23, 56:23, 59:01-59:03, 59:05, 78:07
16	245 bp	1070 bp		*13:03-13:04, 15:04, 15:16, 15:67, 15:95, 15:137, 15:155, 35:37, 39:33, 44:15, 44:18, 44:20, 44:47, 44:100, 45:01-45:07, 45:09, 45:11- 45:13, 46:11, 49:01:01-49:06, 49:08-49:15, 50:01:01-50:02,

				50:04-50:11, 51:01:01-51:03, 51:05, 51:07:01-51:09:02, 51:11N-51:15, 51:17-51:20, 51:22-51:24:04, 51:26-51:30, 51:32-51:33, 51:35, 51:37-51:41N, 51:43-51:44N, 51:48-51:55, 51:57-51:58, 51:60-51:61, 51:63, 51:65-51:80, 51:83-51:92, 51:94-51:100, 51:102-51:106, 52:01:01-52:07, 52:09-52:22, 54:03, 56:01:01-56:01:04, 56:05:01-56:08, 56:13-56:17, 56:20-56:22, 56:24-56:30, 58:08, 59:04, 78:01-78:06
17⁴	105 bp	1070 bp	*55:17, 55:20, 55:27-55:28	*07:84, 08:09, 13:35, 15:83, 27:14, 40:06:01:01-40:06:03, 40:44, 40:53, 40:70, 40:75, 40:83, 40:93, 40:95-40:96, 40:103, 40:109-40:110, 40:127, 40:131, 40:148, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 42:04, 44:20, 44:47, 44:100, 51:01:01-51:03, 51:05, 51:07:01-51:12, 51:14, 51:16-51:24:04, 51:26-51:34, 51:36, 51:38-51:41N, 51:43-51:44N, 51:48-51:55, 51:57-51:58, 51:60-51:61, 51:65-51:80, 51:82-51:91, 51:93-51:96, 51:98N, 51:100-51:105, 52:01:01-52:13, 52:15-52:22, 54:04, 54:11, 54:15, 56:05:01-56:06, 56:15, 56:21, 58:08, 59:02, 78:01-78:07
18^{5,6,11}	215 bp, 310 bp, 415 bp	800 bp	*55:18-55:19, 55:25 ^w , 55:31	*56:23, 59:01-59:05
19	205 bp	1070 bp	*55:30, 55:36	*39:54, C*03:70
20^{4,12}	95 bp, 220 bp	1070 bp	*55:20, 55:26	*08:09, 15:83, 35:143, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 42:04, 44:15, 44:18, 44:20, 44:100, 45:01-45:13, 51:08, 51:20, 51:36, 51:44N, 51:73, 51:97, 52:19, 56:13
21	270 bp	800 bp	*55:10	*18:01:01-18:03, 18:05-18:15, 18:18-18:28, 18:30-18:52, 35:25, 35:124-35:125, 35:142, 37:01:01-37:21, 37:23-37:25, 40:149 [?] , 52:16, 54:21, 56:16, 58:12, 81:01, 81:03 [?] -81:05 [?] , 82:01-82:03, 83:01
22^{4,13}	95 bp, 225 bp	800 bp	*55:09, 55:21, 55:23, 55:27, 55:37	*07:78, 07:84, 13:04, 13:18, 13:31, 13:35, 15:04, 15:16, 15:67, 15:95, 15:137, 15:155, 35:37, 39:33,

				40:44, 44:20, 44:47, 44:100, 45:09, 49:04-49:05, 51:05, 51:29, 51:37, 51:54, 51:61, 51:82, 51:90, 51:92, 52:12, 52:21, 54:10, 54:14-54:15, 54:20
23¹⁴	165 bp, 220 bp	1070 bp	*55:16, 55:21, 55:29	*13:31, 15:04, 15:137, 42:02, 42:09, 45:06, 51:61, 52:21, 54:02
24^{4,15}	100 bp, 235 bp	1070 bp	*55:13, 55:23, 55:27, 55:32-55:33	*07:84, 13:04, 13:35, 15:04, 15:16, 15:67, 15:95, 15:137, 15:155, 35:37, 39:06:01-39:06:02, 39:33-39:34, 39:50, 39:57, 39:62, 40:44, 40:86, 44:20, 44:47, 44:100, 45:02, 45:09, 49:04-49:05, 50:09, 51:13:01-51:13:02, 51:37, 51:63, 51:90, 51:92, 51:97, 52:12, 52:14, 54:14-54:15, 56:22, 59:03, 73:01-73:02
25¹⁶	285 bp, 380 bp	1070 bp	*55:18, 55:34-55:35, 55:40	*56:03, 56:06
26^{4,6,17}	75 bp, 310 bp, 400 bp	1070 bp	*55:34, 55:42, 55:45, 55:47	
27^{4,18}	95 bp, 170 bp	1070 bp	*55:43, 55:46	*54:16
28^{4,7,19}	95 bp, 110 bp	800 bp	*55:41, 55:44	*44:15, 44:18, 45:01, 45:04-45:08, 45:10-45:13, 49:01:01-49:03, 49:06-49:15, 50:01:01-50:02, 50:04-50:08, 50:10-50:11
29⁴	110 bp	1070 bp	*55:39	
30⁴	80 bp	1070 bp	*55:38	*56:27

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-B*55 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.

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 430 base pairs, for most wells, or a band of 515 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in

order to help in the correct orientation of the HLA-B*55 subtyping.

In addition, wells number 5, 8, 14, 18, 21, 22 and 28 contain the primer pair giving rise to the longer, 515 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.

³Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B*55 alleles will be amplified by primer mixes 1 to 5, 7, 8, 10 to 25, 27, 28 and 30. In addition, the C*03:70 allele will be amplified by primer mix 19, the C*03:81 allele will be amplified by primer mix 7, the C*05:30 allele will be amplified by primer mix 10, the C*06:20 and C*07:81 alleles will be amplified by primer mix 2 and the C*08:08 allele will be amplified by primer mix 5.

⁴Specific PCR fragments shorter than 125 base pairs have a lower intensity than longer PCR bands.

⁵Primer mixes 1, 9 and 18 might have a tendency of giving rise to primer oligomer formation.

⁶Primer mixes 6, 18 and 26 have a tendency of giving rise to non-specific amplifications.

⁷Primer mix 28 might give a lower yield of specific PCR product than the other B*55 primer mixes.

⁸Primer mix 8: Specific PCR fragment of 105 bp in the B*55:13 and in the B*15:137, 39:06:01-39:06:02, 39:33-39:34, 39:50, 39:57, 39:62, 40:86, 45:02, 50:09, 51:13:01-51:13:02, 51:92, 52:14, 56:22, 59:03 and 73:01-73:02 alleles. PCR fragment of 170 bp in the *55:43 allele. Specific PCR fragment of 425 bp in the B*55:12 allele.

⁹Primer mix 9: Specific PCR fragment of 215 bp in the B*55:25^w allele. Specific PCR fragment of 375 bp in the B*55:11 and 55:14 alleles.

¹⁰Primer mix 11: Specific PCR fragment of 90 bp in the B*55:48 allele. Specific PCR fragment of 125 bp in the B*55:15 allele. Specific PCR fragment of 180 bp in the B*55:09, 55:22 and 55:24 and in the B*07:78, 13:01:01-13:02:09, 13:07N-13:09, 13:11, 13:14-13:20, 13:22:01-13:23, 13:25, 13:27-13:34, 13:36-13:40, 40:48, 45:10 and 49:07 alleles.

¹¹Primer mix 18: Specific PCR fragment of 215 bp in the B*55:25^w allele. Specific PCR fragment of 310 bp in the B*55:19 allele. Specific PCR fragment of 415 bp in the B*55:18 and 55:31 and in the B*56:23 and 59:01-59:05 alleles.

¹²Primer mix 20: Specific PCR fragment of 95 bp in the B*55:26 and in the B*35:143 and 51:73 alleles. Specific PCR fragment of 220 bp in the B*55:20 and in the B*08:09, 15:83, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 42:04, 44:15, 44:18, 44:20, 44:100, 45:01-45:13, 51:08, 51:20, 51:36, 51:44N, 51:97, 52:19 and 56:13 alleles.

¹³Primer mix 22: Specific PCR fragment of 95 bp in the B*55:23 and 55:27 and in the B*13:04, 13:35, 15:16, 15:67, 15:95, 15:155, 35:37, 40:44, 44:20, 44:47, 44:100, 45:09, 49:04-49:05, 51:37, 51:90, 51:92, 52:12 and 54:14-54:15 alleles. Specific PCR fragment of 225 bp in the B*55:09, 55:21 and 55:37 and in the B*07:78, 13:18, 13:31, 15:137, 39:33, 51:05, 51:29, 51:54, 51:61, 51:82, 52:21, 54:10 and 54:20 alleles. Specific PCR fragment of 95 and 225 bp in the B*07:84 and 15:04 alleles.

¹⁴Primer mix 23: Specific PCR fragment of 165 bp in the B*55:29 allele. Specific PCR fragment of 220 bp in the B*55:16 and 55:21 and in the B*13:31, 15:04, 15:137, 51:61 and 52:21 alleles.

¹⁵Primer mix 24: Specific PCR fragment of 100 bp in the B*55:13, 55:23, 55:27 and 55:32 and in the B*07:84, 13:04, 13:35, 15:04, 15:16, 15:67, 15:95, 15:137, 15:155, 35:37, 39:06:01-39:06:02, 39:33-39:34, 39:50, 39:57, 39:62, 40:44, 40:86, 44:20, 44:47, 44:100, 45:02, 45:09, 49:04-49:05, 50:09, 51:13:01-51:13:02, 51:37, 51:63, 51:90, 51:92, 51:97, 52:12, 52:14, 54:14-54:15, 56:22, 59:03 and 73:01-73:02 alleles. Specific PCR fragment of 235 bp in the B*55:33 allele.

¹⁶Primer mix 25: Specific PCR fragment of 285 bp in the B*55:35 and in the B*56:03 and 56:06 alleles. Specific PCR fragment of 380 bp in the B*55:18, 55:34 and 55:40 alleles.

¹⁷Primer mix 26: Specific PCR fragment of 75 bp in the B*55:42 allele. Specific PCR fragment of 310 bp in the B*55:45 allele. Specific PCR fragment of 400 bp in the B*55:34 and 55:47 alleles.

¹⁸Primer mix 27: Specific PCR fragment of 95 bp in the B*55:46 and in the B*54:16 alleles. Specific PCR fragment of 170 bp in the B*55:43 allele.

¹⁹Primer mix 28: Specific PCR fragment of 95 bp in the B*55:41 and in the B*44:15, 44:18, 45:01, 45:04-45:08, 45:10-45:13, 49:01:01-49:03, 49:06-49:15, 50:01:01-50:02, 50:04-50:08 and 50:10-50:11 alleles. Specific PCR fragment of 110 bp in the B*55:44 allele.

?, nucleotide sequence of the primer matching region is not known.

^w, may be weakly amplified.

INTERPRETATION TABLE																
HLA-B*55 SSP subtyping																
Amplification patterns of the B*55:01 to B*55:48 alleles																
	Well⁵															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170 425	375		125 180					
Length of int. pos. control¹	800	1070	1070	1070	800	1070	1070	800	1070	1070	1070	1070	1070	800	1070	1070
5'-primer(s)²	41	379	420	106	363	245	419	48	48	106	186	103	420	1 st	357	357
	5'-CTg 3'	5'-ACC 3'	5'-TTA 3'	5'-CCA 3'	5'-AgC 3'	5'-ggC 3'	5'-gTA 3'	5'-gCC 3'	5'-gCC 3'	5'-CCA 3'	5'-AgA 3'	5'-CCT 3'	5'-TTA 3'	5'-Cag 3'	5'-Tgg 3'	5'-Tgg 3'
		379						357	272		420					
		5'-ACC 3'						5'-Tgg 3'	5'-CTA 3'		5'-TTA 3'					
3'-primer(s)³	272	463	527	299	559	302	559	302	94	206	272	272	527	175	559	559
	5'-TgT 3'	5'-gCT 3'	5'-CCT 3'	5'-TCA 3'	5'-CgT 3'	5'-ggC 3'	5'-CAG 3'	5'-ggT 3'	5'-gAC 3'	5'-CCC 3'	5'-TgT 3'	5'-TgT 3'	5'-CCA 3'	5'-CCg 3'	5'-CgT 3'	5'-CAG 3'
								419	362		469					
								5'-CgA 3'	5'-TCA 3'		5'-CCg 3'					
								487			559					
								5'-CgT 3'			5'-CTC 3'					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HLA-B allele⁴																
*55:01:01-55:01:06	1	2	3												15	
*55:02:01-55:02:06	1	2											13		15	
*55:03	1	2	3	4											15	
*55:04	1				5											
*55:05	1	2	3			6									15	
*55:07	1	2								10			13		15	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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Lot No.: **78K**

Lot-specific information

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Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*55:08	1						7									
*55:09	1	2	w								11					
*55:10	1	2										12	13		15	
*55:11	1	2	3						9						15	
*55:12	1	2						8					13		15	
*55:13	1	2						8							15	
*55:14	1								9							
*55:15	1	2	3								11				15	
*55:16	1	2											13		15	
*55:17	1														15	
*55:18		2											13		15	
*55:19	1	2											13		15	
*55:20	1														15	
*55:21	1	2													15	
*55:22	1	2									11		13			
*55:23	1	2													15	
*55:24	1	2	3								11					
*55:25	1	2	3						w						15	
*55:26	1	2											13		15	
*55:27	1	2													15	
*55:28	1	2													15	
*55:29	1	2	3												15	
*55:30	1	2											13		15	
*55:31	1	2	3												15	
*55:32	1	2													15	
*55:33	1	2	3												15	
*55:34		2											13		15	
*55:35	1	2											13		15	
*55:36	1	2	3												15	
*55:37	1	2											w		15	
*55:38	1		3												15	
*55:39	1	2											13		15	
*55:40	1	2	3												15	
*55:41	1	2											13		15	
*55:42	1	2											13		15	
*55:43	1	2						8					13		15	
*55:44	1	2	3												15	
*55:45	1	2	3												15	
*55:46	1	2													15	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)	
	310		220		225	220	235	380	310	170	110				
	415								400						
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	
														*55:08	
					22									*55:09	
				21										*55:10	
														*55:11	
														*55:12	
							24							*55:13	
														*55:14	
														*55:15	
						23								*55:16	
17														*55:17	
	18							25						*55:18	
	18													*55:19	
17			20											*55:20	
					22	23								*55:21	
														*55:22	
					22		24							*55:23	
														*55:24	
	w													*55:25	
			20											*55:26	
17					22		24							*55:27	
17														*55:28	
						23								*55:29	
		19												*55:30	
	18													*55:31	
							24							*55:32	
							24							*55:33	
								25	26					*55:34	
								25						*55:35	
		19												*55:36	
					22									*55:37	
													30	*55:38	
												29		*55:39	
								25						*55:40	
											28			*55:41	
									26					*55:42	
										27				*55:43	
											28			*55:44	
									26					*55:45	
										27				*55:46	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	

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Lot-specific information

www.olerup-ssp.com

Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*55:47		2											13		15	
*55:48	1	2									11		13		15	
*07:02:01-07:02:18, 07:02:20, 07:04-07:07, 07:09, 07:11-07:12, 07:14-07:15, 07:17-07:18:02, 07:21-07:23, 07:25-07:26, 07:28, 07:30, 07:33, 07:35-07:36, 07:39- 07:42, 07:44-07:49N, 07:51- 07:59, 07:61-07:64, 07:66- 07:68:02, 07:73-07:77, 07:79- 07:82, 07:87-07:99, 07:101- 07:117, 38:26, 42:13, 67:01:01- 67:01:02, 67:03, 81:02											12					
*07:02:19												12		14		
*07:19, 07:31, 07:34, 07:43, 42:01:01-42:01:02, 42:05:01- 42:06, 42:08, 42:10, 42:12, 42:14					5							12				
*07:20, 07:24, 07:60, 07:100							7					12				
*07:65, 44:90, 56:12, 56:18	1															
*07:78			w								11	12				
*07:84												12				
*08:01:01-08:05, 08:07-08:08N, 08:10, 08:13-08:14, 08:17-08:20, 08:22-08:24, 08:26-08:39, 08:41- 08:48, 08:50-08:59, 08:61-08:66, 14:05, 14:13, 35:87, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:39, 41:02:01-41:02:03, 41:04, 41:10- 41:11, 41:13, 41:15, 42:07, 42:11, C*08:08					5											
*08:09, 15:83, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 51:36															15	
*08:15				4	5											
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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Lot-specific information

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105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)
	310		220		225	220	235	380	310	170	110			
	415								400					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.
									26					*55:47
														*55:48
														*07:02:01-07:02:18, 07:02:20, 07:04-07:07, 07:09, 07:11-07:12, 07:14-07:15, 07:17-07:18:02, 07:21-07:23, 07:25-07:26, 07:28, 07:30, 07:33, 07:35-07:36, 07:39- 07:42, 07:44-07:49N, 07:51- 07:59, 07:61-07:64, 07:66- 07:68:02, 07:73-07:77, 07:79- 07:82, 07:87-07:99, 07:101- 07:117, 38:26, 42:13, 67:01:01- 67:01:02, 67:03, 81:02
														*07:02:19
														*07:19, 07:31, 07:34, 07:43, 42:01:01-42:01:02, 42:05:01- 42:06, 42:08, 42:10, 42:12, 42:14
														*07:20, 07:24, 07:60, 07:100
														*07:65, 44:90, 56:12, 56:18
					22									*07:78
17					22		24							*07:84
														*08:01:01-08:05, 08:07-08:08N, 08:10, 08:13-08:14, 08:17-08:20, 08:22-08:24, 08:26-08:39, 08:41- 08:48, 08:50-08:59, 08:61-08:66, 14:05, 14:13, 35:87, 38:19, 39:03, 39:14, 39:24, 39:29, 39:37, 40:39, 41:02:01-41:02:03, 41:04, 41:10- 41:11, 41:13, 41:15, 42:07, 42:11, C*08:08
17			20											*08:09, 15:83, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 51:36
														*08:15
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.

Lot No.: **78K**

Lot-specific information

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Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*08:21, 08:25, 15:09-15:10:02, 15:30, 15:37, 15:45, 15:48, 15:63, 15:90, 15:99, 15:150, 35:09:01- 35:09:02, 35:12:01-35:12:02, 35:18, 35:22, 35:39, 35:44, 35:149, 40:05, 40:26, 40:63, 40:92, 44:62, 44:77, 44:82, 44:107, 51:04, 51:06, 51:46, 51:59, 51:64, 57:02:01-57:03:02, 57:07, 57:09, 57:12, 57:17, 57:28N, C*03:81							7									
*13:01:01-13:02:09, 13:07N- 13:09, 13:11, 13:14-13:15, 13:17, 13:19, 13:22:01-13:23, 13:25, 13:27-13:30, 13:32-13:34, 13:36- 13:40		2									11		13			
*13:03, 51:15, 56:14, 56:17		2											13			16
*13:04, 15:16, 15:67, 15:95, 35:37, 49:04-49:05		2														16
*13:06, 13:12, 15:86, 44:10		2											13			
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **78K**

Lot-specific information

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105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)
	310		220		225	220	235	380	310	170	110			
	415								400					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.
														*08:21, 08:25, 15:09-15:10:02, 15:30, 15:37, 15:45, 15:48, 15:63, 15:90, 15:99, 15:150, 35:09:01- 35:09:02, 35:12:01-35:12:02, 35:18, 35:22, 35:39, 35:44, 35:149, 40:05, 40:26, 40:63, 40:92, 44:62, 44:77, 44:82, 44:107, 51:04, 51:06, 51:46, 51:59, 51:64, 57:02:01-57:03:02, 57:07, 57:09, 57:12, 57:17, 57:28N, C*03:81
														*13:01:01-13:02:09, 13:07N- 13:09, 13:11, 13:14-13:15, 13:17, 13:19, 13:22:01-13:23, 13:25, 13:27-13:30, 13:32-13:34, 13:36- 13:40
														*13:03, 51:15, 56:14, 56:17
					22		24							*13:04, 15:16, 15:67, 15:95, 35:37, 49:04-49:05
														*13:06, 13:12, 15:86, 44:10
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.

Lot No.: **78K**

Lot-specific information

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Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*13:13, 13:26, 15:20, 15:34, 15:62, 15:85, 15:194, 35:01:01- 35:01:22, 35:03:01-35:03:07, 35:05:01-35:08:04, 35:10- 35:11:02, 35:13-35:15, 35:19- 35:21, 35:23-35:24:02, 35:26- 35:30, 35:33, 35:35-35:36, 35:38, 35:40N-35:42:02, 35:45-35:50, 35:52, 35:54-35:58, 35:62-35:63, 35:65Q-35:66, 35:68:01-35:72, 35:75, 35:77-35:78, 35:80, 35:82, 35:84-35:85, 35:89-35:94, 35:96- 35:98, 35:100-35:101:02, 35:103- 35:112, 35:115-35:116, 35:119- 35:123, 35:126-35:128, 35:130N- 35:134N, 35:136-35:141, 35:144- 35:148, 35:150-35:151, 44:48, 48:02:01-48:02:02, 50:12, 53:01:01-53:06, 53:08:01-53:18, 53:20-53:24, 58:01:01-58:01:02, 58:01:04-58:01:07, 58:02, 58:04- 58:07, 58:09, 58:11, 58:13, 58:15- 58:19, 58:21-58:26, 58:29- 58:31N, C*06:20, C*07:81		2														
*13:16, 13:20		2	3								11					
*13:18		2									11		w			
*13:31		2									11					
*13:35, 40:44																
*15:01:04, 40:94													14			
*15:04																16
*15:42		2	3												15	
*15:137		2						8								16
*15:155, 51:37																16
*18:01:01-18:03, 18:05-18:13, 18:15, 18:18-18:21, 18:23N- 18:28, 18:30-18:51, 35:125, 37:01:01-37:01:03, 37:01:05- 37:08, 37:10-37:21, 37:23-37:25																
*18:14, 37:09					5											
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **78K**

Lot-specific information

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105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)
	310		220		225	220	235	380	310	170	110			
	415								400					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.
														*13:13, 13:26, 15:20, 15:34, 15:62, 15:85, 15:194, 35:01:01:01- 35:01:22, 35:03:01-35:03:07, 35:05:01-35:08:04, 35:10- 35:11:02, 35:13-35:15, 35:19- 35:21, 35:23-35:24:02, 35:26- 35:30, 35:33, 35:35-35:36, 35:38, 35:40N-35:42:02, 35:45-35:50, 35:52, 35:54-35:58, 35:62-35:63, 35:65Q-35:66, 35:68:01-35:72, 35:75, 35:77-35:78, 35:80, 35:82, 35:84-35:85, 35:89-35:94, 35:96- 35:98, 35:100-35:101:02, 35:103- 35:112, 35:115-35:116, 35:119- 35:123, 35:126-35:128, 35:130N- 35:134N, 35:136-35:141, 35:144- 35:148, 35:150-35:151, 44:48, 48:02:01-48:02:02, 50:12, 53:01:01-53:06, 53:08:01-53:18, 53:20-53:24, 58:01:01-58:01:02, 58:01:04-58:01:07, 58:02, 58:04- 58:07, 58:09, 58:11, 58:13, 58:15- 58:19, 58:21-58:26, 58:29- 58:31N, C*06:20, C*07:81
														*13:16, 13:20
					22									*13:18
					22	23								*13:31
17					22		24							*13:35, 40:44
														*15:01:04, 40:94
					22	23	24							*15:04
														*15:42
					22	23	24							*15:137
					22		24							*15:155, 51:37
				21										*18:01:01-18:03, 18:05-18:13, 18:15, 18:18-18:21, 18:23N- 18:28, 18:30-18:51, 35:125, 37:01:01-37:01:03, 37:01:05- 37:08, 37:10-37:21, 37:23-37:25
				21										*18:14, 37:09
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*18:22		2			w											
*18:52, 35:25, 35:124, 35:142, 58:12		2														
*27:14		2														
*35:02:01-35:02:04, 35:04:01-35:04:03, 35:34, 35:81, 35:83, 35:95, 35:129N, 40:28, 51:56, 53:19, 57:05, 58:28		2					7									
*35:60		2											13		15	
*35:74		2		4												
*35:76, 56:09, 56:11	1	2														
*35:143		2														
*37:01:04														14		
*39:06:01-39:06:02, 39:34, 39:57, 39:62								8							15	
*39:33, 51:92								8								16
*39:50, 40:86, 73:01-73:02								8								
*39:54, C*03:70																
*40:06:01:01-40:06:03, 40:53, 40:70, 40:75, 40:83, 40:93, 40:95-40:96, 40:103, 40:109-40:110, 40:127, 40:131, 40:148, 51:10, 51:16, 51:31, 51:34, 51:93, 52:08																
*40:48											11		13			
*40:71													13			
*40:73, 46:01:01-46:04, 46:06-46:10, 46:12-46:17, 46:19-46:26				4												
*40:149, 81:05																
*42:02, 42:09					5											
*42:04											12				15	
*44:15, 44:18, 45:01, 45:04-45:05, 45:07, 45:11-45:13		2														16
*44:20, 44:100																16
*44:47																16
*45:02		2						8								16
*45:03		2														16
*45:06		2														16
*45:08		2													15	
*45:09		2														16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)	
	310		220		225	220	235	380	310	170	110				
	415								400						
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	
				21										*18:22	
				21										*18:52, 35:25, 35:124, 35:142, 58:12	
17														*27:14	
														*35:02:01-35:02:04, 35:04:01- 35:04:03, 35:34, 35:81, 35:83, 35:95, 35:129N, 40:28, 51:56, 53:19, 57:05, 58:28	
														*35:60	
														*35:74	
														*35:76, 56:09, 56:11	
			20											*35:143	
				21										*37:01:04	
							24							*39:06:01-39:06:02, 39:34, 39:57, 39:62	
					22		24							*39:33, 51:92	
							24							*39:50, 40:86, 73:01-73:02	
		19												*39:54, C*03:70	
17														*40:06:01:01-40:06:03, 40:53, 40:70, 40:75, 40:83, 40:93, 40:95- 40:96, 40:103, 40:109-40:110, 40:127, 40:131, 40:148, 51:10, 51:16, 51:31, 51:34, 51:93, 52:08	
														*40:48	
														*40:71	
														*40:73, 46:01:01-46:04, 46:06- 46:10, 46:12-46:17, 46:19-46:26	
				?										*40:149, 81:05	
						23								*42:02, 42:09	
17			20											*42:04	
			20								28			*44:15, 44:18, 45:01, 45:04-45:05, 45:07, 45:11-45:13	
17			20		22		24							*44:20, 44:100	
17					22		24							*44:47	
			20				24							*45:02	
			20											*45:03	
			20			23					28			*45:06	
			20								28			*45:08	
			20		22		24							*45:09	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*45:10		2									11					
*46:11		2		4									13			16
*46:18		2		4									13		15	
*49:01:01-49:03, 49:06, 49:08-49:10, 49:12-49:15, 50:01:01, 50:02, 50:05-50:08, 50:10-50:11		2														16
*49:07		2									11					
*49:11		2											13			16
*50:01:02, 50:04																16
*50:09		2						8								16
*51:01:01-51:01:14, 51:01:16-51:01:17, 51:01:19-51:03, 51:07:01-51:07:02, 51:09:01-51:09:02, 51:11N-51:12, 51:18-51:19, 51:22-51:24:04, 51:26-51:28, 51:30, 51:32-51:33, 51:38-51:41N, 51:43, 51:48-51:53, 51:55, 51:57-51:58, 51:60, 51:65-51:72, 51:74-51:80, 51:83-51:84, 51:86-51:89, 51:91, 51:94-51:96, 51:98N, 51:100, 51:102-51:105, 52:01:01-52:07, 52:09-52:11, 52:13, 52:15, 52:17-52:18, 52:20, 52:22, 58:08, 78:01-78:06							7									16
*51:01:15, 51:14, 51:17, 51:85																16
*51:01:18							7							14		16
*51:05, 51:29, 51:54							7									16
*51:08, 51:20, 51:44N, 51:73, 52:19							7									16
*51:13:01-51:13:02, 52:14								8								16
*51:21, 51:101, 78:07															15	
*51:35, 51:99							7									16
*51:61, 52:21							7									16
*51:62			3													
*51:63																16
*51:82																
*51:90, 52:12							7									16
*51:97																16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)
	310		220		225	220	235	380	310	170	110			
	415								400					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.
			20								28			*45:10
														*46:11
														*46:18
											28			*49:01:01-49:03, 49:06, 49:08- 49:10, 49:12-49:15, 50:01:01, 50:02, 50:05-50:08, 50:10-50:11
											28			*49:07
											28			*49:11
											28			*50:01:02, 50:04
							24							*50:09
17														*51:01:01-51:01:14, 51:01:16- 51:01:17, 51:01:19-51:03, 51:07:01-51:07:02, 51:09:01- 51:09:02, 51:11N-51:12, 51:18- 51:19, 51:22-51:24:04, 51:26- 51:28, 51:30, 51:32-51:33, 51:38- 51:41N, 51:43, 51:48-51:53, 51:55, 51:57-51:58, 51:60, 51:65- 51:72, 51:74-51:80, 51:83-51:84, 51:86-51:89, 51:91, 51:94-51:96, 51:98N, 51:100, 51:102-51:105, 52:01:01-52:07, 52:09-52:11, 52:13, 52:15, 52:17-52:18, 52:20, 52:22, 58:08, 78:01-78:06
17														*51:01:15, 51:14, 51:17, 51:85
17														*51:01:18
17					22									*51:05, 51:29, 51:54
17			20											*51:08, 51:20, 51:44N, 51:73, 52:19
							24							*51:13:01-51:13:02, 52:14
17														*51:21, 51:101, 78:07
														*51:35, 51:99
17					22	23								*51:61, 52:21
														*51:62
							24							*51:63
17					22									*51:82
17					22		24							*51:90, 52:12
			20				24							*51:97
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*51:106			3													16
*52:16							7									16
*54:01, 54:08N, 54:12-54:13, 54:17-54:19, 54:22-54:23	1	2								10			13	14	15	
*54:02	1	2											13	14	15	
*54:03	1	2								10			13	14		16
*54:04	1	2								10				14	15	
*54:05N	1	2											13	14	15	
*54:06, 54:09	1									10				14		
*54:07		2								10			13	14	15	
*54:10	1	2								10			w	14	15	
*54:11	1									10				14	15	
*54:14	1	2								10				14	15	
*54:15	1									10				14	15	
*54:16	1	2								10				14	15	
*54:20	1	2	w							10				14	15	
*54:21	1	2								10			13	14	15	
*56:01:01-56:01:03, 56:07, 56:24, 56:26, 56:28N-56:29	1	2											13			16
*56:01:04, 56:20	1												13			16
*56:02, 56:10, 56:19N	1	2											13			
*56:03	1															
*56:04	1												13			
*56:05:01-56:05:02, 56:21	1						7									16
*56:06	1						7									16
*56:08	w	2											13			16
*56:13	1	2														16
*56:15	1	2					7									16
*56:16	1	2											13			16
*56:22	1	2						8								16
*56:23, 59:01, 59:05		2											13		15	
*56:25	1	2	3													16
*56:27	1												13			16
*56:30	1	2														16
*58:01:08		2												14		
*59:02															15	
*59:03		2						8							15	
*59:04		2											13			16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **78K**

Lot-specific information

www.olerup-ssp.com

105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)	
	310		220		225	220	235	380	310	170	110				
	415								400						
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	
														*51:106	
17				21										*52:16	
														*54:01, 54:08N, 54:12-54:13, 54:17-54:19, 54:22-54:23	
						23								*54:02	
														*54:03	
17														*54:04	
														*54:05N	
														*54:06, 54:09	
														*54:07	
					22									*54:10	
17														*54:11	
					22		24							*54:14	
17					22		24							*54:15	
										27				*54:16	
					22									*54:20	
				21										*54:21	
														*56:01:01-56:01:03, 56:07, 56:24, 56:26, 56:28N-56:29	
														*56:01:04, 56:20	
														*56:02, 56:10, 56:19N	
								25						*56:03	
														*56:04	
17														*56:05:01-56:05:02, 56:21	
17								25						*56:06	
														*56:08	
			20											*56:13	
17														*56:15	
				21										*56:16	
							24							*56:22	
	18													*56:23, 59:01, 59:05	
														*56:25	
												30		*56:27	
														*56:30	
														*58:01:08	
17	18													*59:02	
	18						24							*59:03	
	18													*59:04	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.	

Length of spec.	400	125	150	235	235	100	180	105	215	140	90	210	150	215	245	245
PCR product(s)								170	375		125					
								425			180					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*81:01	1											12				
*81:03-81:04N	?											12				
*82:01-82:03	1	2														
*83:01	1															
C*05:30										10						
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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 430 base pairs, for most wells, or a band of 515 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in order to help in the correct orientation of the HLA-B*55 subtyping.

In addition, wells number 5, 8, 14, 18, 21, 22 and 28 contain the primer pair giving rise to the longer, 515 bp, internal positive control band in order to allow kit identification.

²The codon, in the 1st, 2nd or 3rd exon or the 1st intron, matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

³The codon, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

⁴The B*5506 sequence shown to contain errors and be identical to B*55:04.

105	215	205	95	270	95	165	100	285	75	95	95	110	80	Length of spec. PCR product(s)
	310		220		225	220	235	380	310	170	110			
	415								400					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.
				21										*81:01
				?										*81:03-81:04N
				21										*82:01-82:03
				21										*83:01
														C*05:30
17	18	19	20	21	22	23	24	25	26	27	28	29	30	Well No.

⁵Primer mix 8: Specific PCR fragment of 105 bp in the B*55:13 and in the B*15:137, 39:06:01-39:06:02, 39:33-39:34, 39:50, 39:57, 39:62, 40:86, 45:02, 50:09, 51:13:01-51:13:02, 51:92, 52:14, 56:22, 59:03 and 73:01-73:02 alleles. PCR fragment of 170 bp in the *55:43 allele. Specific PCR fragment of 425 bp in the B*55:12 allele.

Primer mix 9: Specific PCR fragment of 215 bp in the B*55:25^w allele. Specific PCR fragment of 375 bp in the B*55:11 and 55:14 alleles.

Primer mix 11: Specific PCR fragment of 90 bp in the B*55:48 allele. Specific PCR fragment of 125 bp in the B*55:15 allele. Specific PCR fragment of 180 bp in the B*55:09, 55:22 and 55:24 and in the B*07:78, 13:01:01-13:02:09, 13:07N-13:09, 13:11, 13:14-13:20, 13:22:01-13:23, 13:25, 13:27-13:34, 13:36-13:40, 40:48, 45:10 and 49:07 alleles.

Primer mix 18: Specific PCR fragment of 215 bp in the B*55:25^w allele. Specific PCR fragment of 310 bp in the B*55:19 allele. Specific PCR fragment of 415 bp in the B*55:18 and 55:31 and in the B*56:23 and 59:01-59:05 alleles.

Primer mix 20: Specific PCR fragment of 95 bp in the B*55:26 and in the B*35:143 and 51:73 alleles. Specific PCR fragment of 220 bp in the B*55:20 and in the B*08:09, 15:83, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 42:04, 44:15, 44:18, 44:20, 44:100, 45:01-45:13, 51:08, 51:20, 51:36, 51:44N, 51:97, 52:19 and 56:13 alleles.

Primer mix 22: Specific PCR fragment of 95 bp in the B*55:23 and 55:27 and in the B*13:04, 13:35, 15:16, 15:67, 15:95, 15:155, 35:37, 40:44, 44:20, 44:47, 44:100, 45:09, 49:04-49:05, 51:37, 51:90, 51:92, 52:12 and 54:14-54:15 alleles. Specific PCR fragment of 225 bp in the B*55:09, 55:21 and 55:37 and in the B*07:78, 13:18, 13:31, 15:137, 39:33, 51:05, 51:29, 51:54, 51:61, 51:82, 52:21, 54:10 and 54:20 alleles. Specific PCR fragment of 95 and 225 bp in the B*07:84 and 15:04 alleles.

Primer mix 23: Specific PCR fragment of 165 bp in the B*55:29 allele. Specific PCR fragment of 220 bp in the B*55:16 and 55:21 and in the B*13:31, 15:04, 15:137, 51:61 and 52:21 alleles.

Primer mix 24: Specific PCR fragment of 100 bp in the B*55:13, 55:23, 55:27 and 55:32 and in the B*07:84, 13:04, 13:35, 15:04, 15:16, 15:67, 15:95, 15:137, 15:155, 35:37, 39:06:01-39:06:02, 39:33-39:34, 39:50, 39:57, 39:62, 40:44, 40:86, 44:20, 44:47, 44:100, 45:02, 45:09, 49:04-49:05, 50:09, 51:13:01-51:13:02, 51:37, 51:63, 51:90, 51:92, 51:97, 52:12, 52:14, 54:14-54:15, 56:22, 59:03 and 73:01-73:02 alleles. Specific PCR fragment of 235 bp in the B*55:33 allele.

Primer mix 25: Specific PCR fragment of 285 bp in the B*55:35 and in the B*56:03 and 56:06 alleles. Specific PCR fragment of 380 bp in the B*55:18, 55:34 and 55:40 alleles.

Primer mix 26: Specific PCR fragment of 75 bp in the B*55:42 allele. Specific PCR fragment of 310 bp in the B*55:45 allele. Specific PCR fragment of 400 bp in the B*55:34 and 55:47 alleles.

Primer mix 27: Specific PCR fragment of 95 bp in the B*55:46 and in the B*54:16 alleles. Specific PCR fragment of 170 bp in the B*55:43 allele.

Primer mix 28: Specific PCR fragment of 95 bp in the B*55:41 and in the B*44:15, 44:18, 45:01, 45:04-45:08, 45:10-45:13, 49:01:01-49:03, 49:06-49:15, 50:01:01-50:02, 50:04-50:08 and 50:10-50:11 alleles. Specific PCR fragment of 110 bp in the B*55:44 allele.

‘w’, may be weakly amplified.

‘?’, the nucleotide sequence of the primer matching region is not know.

CELL LINE VALIDATION SHEET																			
HLA-B*55 SSP subtyping kit																			
					Well														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Prod. No.:	200732701	201080102	200845903	200732704	200732705	200732706	200732707	201080108	201080109	200732710	201080111	200845912	200732713	200732714	200732715
	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	9025 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 SSTS		*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																																											
HLA-B*55 SSP subtyping kit																																											
																														Well													
																														17	18	19	20	21	22	23	24	25	26	27	28	29	30

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-B*55 SSP

Product number: 101.570-06 – including *Taq* polymerase
Lot number: 78K
Expiry date: 2013-July-01
Number of tests: 6
Number of wells per test: 30

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2007-327-01	13	2007-327-13	25	2010-801-25
2	2010-801-02	14	2007-327-14	26	2010-801-26
3	2008-459-03	15	2007-327-15	27	2010-801-27
4	2007-327-04	16	2007-327-16	28	2010-801-28
5	2007-327-05	17	2010-801-17	29	2010-801-29
6	2007-327-06	18	2009-615-18	30	2010-801-30
7	2007-327-07	19	2010-801-19		
8	2010-801-08	20	2008-459-20		
9	2010-801-09	21	2007-327-21		
10	2007-327-10	22	2010-801-22		
11	2010-801-11	23	2009-615-23		
12	2008-459-12	24	2010-801-24		

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, 9, 19, 26, 27, 29 and 30 were available. The specificities of the primers in primer solutions 19, 26, 27 and 30 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solution 6 it was only possible to test the 3'-primer, the 5'-primer was not possible to test. In primer solutions 9 and 29 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 2, 11, 19 and 26 one 5'primer was not possible to test, and in primer solutions 8, 11, 18, 20, 23, 24, 26 and 27 one or two 3'-primers were not possible to test. Additional primers in primer solutions 8, 11, 18, 20 and 25 were tested by separately adding one additional 3'-primer and/or one additional 5'-primer.

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

Date of approval: 2011-January-21

Approved by:

Quality Control, Supervisor

Declaration of Conformity

Product name: Olerup SSP® HLA-B*55
Product number: 101.570-06
Lot number: 78K

Intended use: HLA-B*55 high resolution histocompatibility testing

Manufacturer: Olerup SSP AB
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SE-112 51 Stockholm, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, Olerup SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2003, 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, Franzengatan 5, SE-112 51 Stockholm, Sweden.

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.: **78K**

Lot-specific information

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