

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
“Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

***Olerup SSP*[®] HLA-B*44**

Product number:	101.563-24/03 – including <i>Taq</i> pol. 101.563-24u/03u – without <i>Taq</i> pol.
Lot number:	69R
Expiry date:	2015-July-01
Number of tests:	24 tests – Product No. 101.563-24/24u 3 tests – Product No. 101.563-03/03u
Number of wells per test:	56
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. 69R.

CHANGES COMPARED TO THE PREVIOUS *OLERUP SSP*[®] HLA-B*44 LOT (52N).

The HLA-B*44 kit is updated for new alleles to enable separation of:

- Confirmed¹ alleles as listed in the IMGT/HLA database
- Polymorphisms in exons outside of the region encoding the peptide binding domain
- Null and Alternatively expressed alleles

¹As described in section Uniquely Identified Alleles.

The HLA-B*44 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP*[®] HLA-B*44 lot was made (Lot No. 52N).

Change in revision R01 compared to R00:

1. Primer mix 4 may weakly amplify the B*44:29 and 44:89 alleles. A foot note has been added to the Specificity Table.

Change in revision R02 compared to R01:

1. Primer mix 2 amplifies the B*44:07 and the B*40:83, 40:170 and 50:07 alleles. This has been corrected in the Specificity and Interpretation Tables.

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

Well	5'-primer	3'-primer	rationale
2	-	Added	3'-primer added for the B*44:03:16 allele.
11	Added	-	5'-primer added for the B*44:02:13 allele.
29	Added	Added	Primer pair added for the B*44:117 allele.
36	Added	Added	Primer pair added for the B*44:142Q allele.
50	Added	Added	Primer pair added for the B*44:148 allele.
52	Added	Added	Primer pair added for the B*44:143 allele.
54	-	Added	3'-primer added for the B*44:126:02 allele.
55	Added	-	5'-primer added for the B*44:110 allele.
56	-	Added	3'-primer added for the B*44:148 allele.

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PRODUCT DESCRIPTION

HLA-B*44 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*44:02 to B*44:165 alleles.

PLATE LAYOUT

Each test consists of 56 PCR reactions in a 64 well cut PCR plate. Wells 57 to 64 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	44	45	46	47	48
49	50	51	52	53	54	55	56
empty	empty	empty	empty	empty	empty	empty	empty

The 64 well cut PCR plate is marked with ‘HLA-B*44’ in silver/gray ink.

Well No. 1 is marked with the Lot No. ‘69R’.

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.

INTERPRETATION

The interpretation of HLA-B*44 SSP subtypings will be influenced many other HLA-B alleles when present on the other haplotype. In addition, the A*23:31 allele will be amplified by primer mixes 4 and 33, the A*24:106 allele will be amplified by primer mix 33, the A*24:137 allele will be amplified by primer mix 26, the A*30:29 and A*31:61 alleles will be amplified by primer mix 31, the C*03:96 and C*15:52 alleles will be amplified by primer mix 54, the C*03:147 allele will be amplified by primer mix 48, the C*05:10, C*08:44 and C*08:61 alleles will be amplified by primer mixes 50 and 56, the C*05:62, C*07:68, C*07:140, C*07:151 and C*07:199:01-07:199:02 alleles will be amplified by primer mixes 38 and 39, the C*07:04:01-07:04:08, C*07:11-07:12, C*07:45, C*07:63, C*07:101, C*07:139, C*07:142, C*07:181 and C*07:272 alleles will be amplified by primer mix 39, the C*07:69 and C*08:68 alleles will be amplified by primer mix 42, the C*07:231 allele will be amplified by primer mixes 4, 33, 35 and 44, the C*15:25 allele will be amplified by primer mixes 1, 3, 6 and 40, and the C*16:10 allele will be amplified by primer mixes 33, 35 and 44.

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UNIQUELY IDENTIFIED ALLELES

All the HLA-B*44 alleles, i.e. **B*44:02 to B*44:165**, recognized by the HLA Nomenclature Committee in October 2012¹ will be amplified by the primers in the HLA-B*44 subtyping kit².

The HLA-B*44 kit enables separation of the confirmed HLA-B*44 alleles as listed in the IMGT/HLA database. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA-B*44 alleles is listed below.

The HLA-B*44 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles

The HLA-B*44 subtyping cannot distinguish the following silent mutations: the B*44:02:01:01, 44:02:01:03-44:02:09 and 44:02:11-44:02:26 alleles, the B*44:03:01-44:03:19 alleles, the B* 44:05:01-44:05:04 alleles, the B*44:27:01-44:27:02 allele, the B*44:28:01-B*44:28:02 alleles, the B*44:41:01-44:41:02 allele or the B*44:43:01-44:43:02 alleles.

¹HLA-B alleles listed on the IMGT/HLA web page 2012-October-17, release 3.10.0, www.ebi.ac.uk/imgt/hla.

²The B*44:32 and 44:124 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.
The B*44:58N and 44:139 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 47.
The B*44:69 and 44:85 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 26.
The B*44:72 and 44:93 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 47.
The B*44:94 and 44:98 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 31.

RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 221 alleles generate 141 amplification patterns that can be combined in 10011 homozygous and heterozygous combinations. 3959 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.

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ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
B*44:02:01:01	Confirmed	B*44:05:03	Confirmed	B*44:48	Unconfirmed	B*44:96	Confirmed	B*44:145	Unconfirmed
B*44:02:01:02S	Unconfirmed	B*44:05:04	Unconfirmed	B*44:49	Unconfirmed	B*44:97	Confirmed	B*44:146	Unconfirmed
B*44:02:01:03	Unconfirmed	B*44:06	Confirmed	B*44:50	Confirmed	B*44:98	Confirmed	B*44:147	Unconfirmed
B*44:02:02	Confirmed	B*44:07	Confirmed	B*44:51	Unconfirmed	B*44:99	Unconfirmed	B*44:148	Confirmed
B*44:02:03	Unconfirmed	B*44:08	Confirmed	B*44:52N	Unconfirmed	B*44:100	Unconfirmed	B*44:149N	Unconfirmed
B*44:02:04	Unconfirmed	B*44:09	Confirmed	B*44:53	Confirmed	B*44:101	Unconfirmed	B*44:150	Unconfirmed
B*44:02:05	Confirmed	B*44:10	Confirmed	B*44:54	Unconfirmed	B*44:102	Unconfirmed	B*44:151	Unconfirmed
B*44:02:06	Confirmed	B*44:11	Unconfirmed	B*44:55	Confirmed	B*44:103	Unconfirmed	B*44:152	Unconfirmed
B*44:02:07	Confirmed	B*44:12	Unconfirmed	B*44:56N	Unconfirmed	B*44:104	Confirmed	B*44:153	Unconfirmed
B*44:02:08	Unconfirmed	B*44:13	Confirmed	B*44:57	Confirmed	B*44:105	Unconfirmed	B*44:154	Unconfirmed
B*44:02:09	Confirmed	B*44:14	Unconfirmed	B*44:58N	Unconfirmed	B*44:106	Unconfirmed	B*44:155	Unconfirmed
B*44:02:10	Confirmed	B*44:15	Confirmed	B*44:59:01	Unconfirmed	B*44:107	Confirmed	B*44:156	Unconfirmed
B*44:02:11	Unconfirmed	B*44:16	Confirmed	B*44:59:02	Unconfirmed	B*44:108N	Unconfirmed	B*44:157	Unconfirmed
B*44:02:12	Confirmed	B*44:17	Unconfirmed	B*44:60	Confirmed	B*44:109	Unconfirmed	B*44:158	Unconfirmed
B*44:02:13	Unconfirmed	B*44:18	Confirmed	B*44:61N	Unconfirmed	B*44:110	Confirmed	B*44:159	Confirmed
B*44:02:14	Unconfirmed	B*44:19N	Unconfirmed	B*44:62	Confirmed	B*44:111	Confirmed	B*44:160	Unconfirmed
B*44:02:15	Unconfirmed	B*44:20	Confirmed	B*44:63	Unconfirmed	B*44:112	Unconfirmed	B*44:161	Unconfirmed
B*44:02:16	Unconfirmed	B*44:21	Confirmed	B*44:64:01	Confirmed	B*44:113	Unconfirmed	B*44:162	Unconfirmed
B*44:02:17	Unconfirmed	B*44:22	Confirmed	B*44:64:02	Confirmed	B*44:114	Unconfirmed	B*44:163	Unconfirmed
B*44:02:18	Unconfirmed	B*44:23N	Confirmed	B*44:65	Confirmed	B*44:115	Confirmed	B*44:164	Unconfirmed
B*44:02:19	Unconfirmed	B*44:24	Confirmed	B*44:66	Unconfirmed	B*44:116	Unconfirmed	B*44:165	Unconfirmed
B*44:02:20	Unconfirmed	B*44:25	Unconfirmed	B*44:67	Unconfirmed	B*44:117	Confirmed		
B*44:02:21	Unconfirmed	B*44:26	Unconfirmed	B*44:68	Confirmed	B*44:118	Unconfirmed		
B*44:02:22	Unconfirmed	B*44:27:01	Confirmed	B*44:69	Confirmed	B*44:119	Unconfirmed		
B*44:02:23	Unconfirmed	B*44:27:02	Unconfirmed	B*44:70	Unconfirmed	B*44:120	Confirmed		
B*44:02:24	Unconfirmed	B*44:28:01	Confirmed	B*44:71	Unconfirmed	B*44:121	Unconfirmed		
B*44:02:25	Unconfirmed	B*44:28:02	Confirmed	B*44:72	Unconfirmed	B*44:122	Confirmed		
B*44:02:26	Unconfirmed	B*44:29	Confirmed	B*44:73	Confirmed	B*44:123	Unconfirmed		
B*44:03:01	Confirmed	B*44:30	Confirmed	B*44:74	Confirmed	B*44:124	Unconfirmed		
B*44:03:02	Confirmed	B*44:31	Unconfirmed	B*44:75	Unconfirmed	B*44:125	Unconfirmed		
B*44:03:03	Unconfirmed	B*44:32	Unconfirmed	B*44:76	Confirmed	B*44:126:01	Confirmed		
B*44:03:04	Unconfirmed	B*44:33	Unconfirmed	B*44:77	Confirmed	B*44:126:02	Unconfirmed		
B*44:03:05	Unconfirmed	B*44:34:01	Unconfirmed	B*44:78	Unconfirmed	B*44:127	Unconfirmed		
B*44:03:06	Unconfirmed	B*44:34:02	Unconfirmed	B*44:79	Confirmed	B*44:128	Unconfirmed		
B*44:03:07	Unconfirmed	B*44:35	Unconfirmed	B*44:80	Confirmed	B*44:129	Unconfirmed		
B*44:03:08	Confirmed	B*44:36	Unconfirmed	B*44:81	Unconfirmed	B*44:130	Unconfirmed		
B*44:03:09	Unconfirmed	B*44:37:01	Unconfirmed	B*44:82	Unconfirmed	B*44:131	Unconfirmed		
B*44:03:10	Unconfirmed	B*44:37:02	Unconfirmed	B*44:83	Confirmed	B*44:132	Confirmed		
B*44:03:11	Confirmed	B*44:38	Unconfirmed	B*44:84	Unconfirmed	B*44:133	Unconfirmed		
B*44:03:12	Unconfirmed	B*44:39	Unconfirmed	B*44:85	Unconfirmed	B*44:134	Unconfirmed		
B*44:03:13	Confirmed	B*44:40	Unconfirmed	B*44:86	Confirmed	B*44:135	Confirmed		
B*44:03:14	Unconfirmed	B*44:41:01	Confirmed	B*44:87	Confirmed	B*44:136	Unconfirmed		
B*44:03:15	Unconfirmed	B*44:41:02	Unconfirmed	B*44:88	Confirmed	B*44:137	Unconfirmed		
B*44:03:16	Unconfirmed	B*44:42	Confirmed	B*44:89	Unconfirmed	B*44:138Q	Unconfirmed		
B*44:03:17	Unconfirmed	B*44:43:01	Confirmed	B*44:90	Unconfirmed	B*44:139	Confirmed		
B*44:03:18	Unconfirmed	B*44:43:02	Unconfirmed	B*44:91	Confirmed	B*44:140	Unconfirmed		
B*44:03:19	Unconfirmed	B*44:44	Unconfirmed	B*44:92	Confirmed	B*44:141	Unconfirmed		
B*44:04	Confirmed	B*44:45	Unconfirmed	B*44:93	Unconfirmed	B*44:142Q	Unconfirmed		
B*44:05:01	Confirmed	B*44:46	Confirmed	B*44:94	Unconfirmed	B*44:143	Confirmed		
B*44:05:02	Unconfirmed	B*44:47	Unconfirmed	B*44:95	Unconfirmed	B*44:144	Unconfirmed		

¹ Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2012-October-17, release 3.10.0, www.ebi.ac.uk/imgt/hla.

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SPECIFICITY TABLE

HLA-B*44 SSP subtyping

Specificities and sizes of the PCR products of the 56 primer mixes used for HLA-B*44 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*44 alleles ³	Other amplified HLA Class I alleles ⁴
1	260 bp	800 bp	*44:02:01:01-44:14, 44:17, 44:19N, 44:21-44:30, 44:32-44:36, 44:38-44:40, 44:43:01-44:46, 44:48-44:53, 44:55-44:63, 44:66-44:90, 44:92-44:98, 44:102-44:105, 44:107-44:131, 44:133-44:134, 44:136-44:137, 44:139-44:149N, 44:151-44:157, 44:159-44:165	*35:45, 35:71, 35:169, 51:42, 53:22, 57:07, 83:01, C*15:25
2⁵	90 bp	800 bp	*44:02:01:01-44:02:09, 44:02:11-44:05:04, 44:07, 44:09-44:33, 44:35-44:38, 44:41:01-44:43:02, 44:45-44:56N, 44:58N-44:59:02, 44:61N-44:80, 44:82, 44:84-44:110, 44:112-44:129, 44:131-44:133, 44:135-44:144, 44:146-44:155, 44:157-44:165	*15:53, 15:212, 35:63, 35:217, 40:01:01-40:01:10, 40:01:12-40:09, 40:11:01-40:11:02, 40:13-40:16, 40:18-40:20, 40:22N-40:40, 40:42-40:45, 40:47-40:57, 40:59-40:92, 40:94-40:136, 40:138-40:148, 40:150-40:176, 40:178-40:184, 40:186-40:208, 40:210-40:214, 40:216N-40:226, 41:01-41:11, 41:13-41:21, 41:23-41:25, 45:01-45:14, 47:01:01:01-47:08, 49:01:01-49:02, 49:04-49:24, 50:01:01-50:02, 50:04-50:19, 57:51
3	225 bp	800 bp	*44:02:01:01-44:02:26, 44:05:01-44:06, 44:08-44:09, 44:11-44:12, 44:14, 44:16-44:17, 44:19N, 44:21-44:25, 44:27:01-44:27:02, 44:33-44:34:02, 44:42, 44:44, 44:48-44:49, 44:51-44:53, 44:55, 44:58N-44:59:02, 44:62-44:63, 44:66-44:68, 44:70-44:75, 44:78, 44:80, 44:83-44:84, 44:86-44:91, 44:93, 44:95, 44:97, 44:101-44:102,	*08:49, 08:60, 08:76, 35:38, 35:115, 35:169, 37:01:01-37:01:07, 37:01:09, 37:03N-37:06, 37:08, 37:10-37:37, 42:13, 53:22, 57:09, 57:24, 83:01, C*15:25

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			44:104, 44:112-44:113, 44:116-44:119, 44:121, 44:123, 44:126:01-44:127, 44:131-44:134, 44:136- 44:137, 44:139-44:140, 44:142Q, 44:145, 44:148- 44:149N, 44:151-44:152, 44:162	
4³⁷	160 bp	1070 bp	*44:03:01-44:03:19, 44:07, 44:13, 44:26, 44:30, 44:32, 44:36-44:40, 44:46-44:47, 44:50, 44:54, 44:57, 44:60- 44:61N, 44:64:01-44:65, 44:69, 44:79, 44:81, 44:85, 44:92, 44:94, 44:96, 44:98, 44:103, 44:105, 44:108N- 44:111, 44:114-44:115, 44:120, 44:122, 44:124- 44:125, 44:128-44:130, 44:141, 44:143, 44:153- 44:157, 44:159-44:161, 44:163-44:165	*51:42, 52:26, A*23:31, C*07:231
5^{5,11}	75 bp, 255 bp	1070 bp	*44:04, 44:28:01-44:28:02, 44:56N, 44:70, 44:76	*07:20, 07:140, 07:153, 35:45
6^{6,12}	170 bp, 195 bp	1070 bp	*44:05:01-44:05:04, 44:10, 44:15, 44:17-44:18, 44:25, 44:31, 44:39, 44:43:01- 44:43:02, 44:58N, 44:62, 44:70, 44:75, 44:77-44:78, 44:82, 44:107, 44:117, 44:123, 44:134, 44:136, 44:139-44:140, 44:144, 44:158	*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 35:169, 40:132, 40:178, 45:01-45:02, 45:05-45:07, 45:09, 45:11-45:14, 46:17, 49:20, 50:02, 51:23, 51:108, 52:15, 53:22, 57:07, 58:07, 82:01-82:03, C*15:25
7	155 bp	1070 bp	*44:06, 44:29, 44:89	*18:67, 37:34, 38:06-38:07, 49:03, 51:01:01-51:24:04, 51:26-51:46, 51:48-51:53, 51:55-51:77, 51:79- 51:103, 51:105-51:111, 51:113- 51:146, 51:148, 52:01:01:01- 52:01:16, 52:03-52:15, 52:17- 52:19, 52:21-52:31, 53:01:01- 53:02, 53:04-53:08:02, 53:10, 53:14-53:29, 58:01:01-58:02, 58:04-58:16, 58:18-58:29, 58:31N- 58:35, 58:37-58:39N
8^{5,6,13}	90 bp, 115 bp, 300 bp	1070 bp	*44:07-44:08, 44:38, 44:57, 44:71	*13:58, 15:183, 18:80, 27:52, 27:67, 35:84, 35:90, 35:150, 35:184, 35:201, 40:83, 40:170,

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			40:185, 40:209, 46:10, 50:07, 51:103, 51:119
9^{5,14}	120 bp, 195 bp	1070 bp	*44:10, 44:15, 44:18, 44:23N, 44:140
10^{5,15}	125 bp, 150 bp	800 bp	*44:24, 44:92
11	150 bp	800 bp	*44:02:01:01-44:05:04, 44:07, 44:10-44:39, 44:41:01-44:43:02, 44:45, 44:47-44:56N, 44:58N-44:59:02, 44:61N-44:74, 44:76-44:82, 44:84-44:89, 44:91-44:126:02, 44:128, 44:132-44:133, 44:135-44:155, 44:157-44:165
12	145 bp	1070 bp	*44:09, 44:46, 44:75, 44:90, 44:129, 44:131
			*07:133, 15:46, 15:53, 15:106, 15:143, 15:212, 18:48, 35:19, 35:47, 35:63, 35:154, 35:217, 39:69, 40:01:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:40, 40:42-40:45, 40:48-40:75, 40:77-40:92, 40:94-40:95, 40:97-40:108, 40:111-40:116, 40:118N-40:136, 40:138-40:156, 40:158-40:184, 40:186-40:187, 40:189-40:200, 40:202-40:207, 40:210-40:226, 41:01-41:04, 41:06-41:25, 45:01-45:14, 47:02, 47:03 ^w , 50:01:01-50:02, 50:04-50:05, 50:07-50:19
13⁵	90 bp	1070 bp	*44:13, 44:67
14⁵	95 bp	800 bp	*44:12
			*07:133 ^w , 15:143, 18:48, 35:19, 35:47, 35:154, 35:217, 39:69, 40:08, 40:25, 40:68, 40:106, 40:166 ^w , 50:15, 51:112
15	170 bp	1070 bp	*44:14, 44:17, 44:51, 44:62, 44:123
			*07:04, 07:19, 07:25, 07:146, 08:01:01-08:05, 08:07-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:39, 08:41-08:48, 08:50-08:54, 08:56:01-08:69, 08:71-08:73, 08:75-08:78, 08:80-08:86N, 08:88-08:105, 15:51, 15:83, 15:179, 15:199, 15:218Q, 18:56, 35:38, 35:87, 35:115, 35:169, 37:09, 37:12, 37:35, 38:30,

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			40:136, 41:01-41:09, 41:11-41:25, 42:01:01-42:02, 42:04-42:17, 45:09, 45:14, 51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19, 53:22, 55:20, 55:56, 56:13, 57:09, 57:24, 82:01-82:03
16	145 bp	800 bp	*44:18, 44:25, 44:50, 44:95 *40:13, 40:19, 40:109, 40:117, 49:01:01-49:01:04, 49:04-49:25, 51:112, 57:45, 57:51
17	195 bp	1070 bp	*44:02:01:01-44:04, 44:06- 44:09, 44:11-44:13, 44:19N- 44:24, 44:26-44:30, 44:32- 44:36, 44:38-44:41:02, 44:44, 44:46-44:50, 44:52N- 44:57, 44:59:01-44:61N, 44:63, 44:65-44:69, 44:71- 44:74, 44:76, 44:79-44:81, 44:83-44:87, 44:89-44:90, 44:92-44:100, 44:102- 44:106, 44:108N-44:116, 44:118-44:122, 44:124- 44:131, 44:137-44:138Q, 44:141-44:143, 44:145- 44:149N, 44:151-44:157, 44:159-44:165
18^{5,16}	115 bp, 155 bp, 260 bp	1070 bp	*44:19N, 44:31, 44:74, 44:82, 44:96, 44:153 *40:132, 40:178, 57:07
19¹⁷	150 bp, 190 bp	1070 bp	*44:11, 44:30
20	130 bp	1070 bp	*44:22, 44:105 *49:24
21^{5,18}	100 bp, 180 bp	800 bp	*44:16, 44:21, 44:32, 44:64:01-44:64:02, 44:124, 44:150 *07:28
22	290 bp	800 bp	*44:26 *35:138, 47:07
23¹⁰	145 bp	800 bp	*44:02:01:01-44:05:04, 44:06 [?] , 44:07-44:09, 44:10 [?] - 44:12 [?] , 44:13, 44:14 [?] , 44:16, 44:17 [?] -44:18 [?] , 44:19N, 44:20 [?] , 44:21, 44:22 [?] , 44:23N, 44:24 [?] -44:26 [?] , 44:28:01 [?] -44:30 [?] , 44:32 [?] -44:37:01 [?] , 44:37:02, 44:38 [?] , 44:39, 44:40 [?] - 44:45 [?] , 44:46, 44:47 [?] -

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			44:48 [?] , 44:49, 44:50 [?] , 44:51- 44:53, 44:54 [?] -44:55 [?] , 44:56N-44:57, 44:58N [?] , 44:59:01-44:59:02, 44:60 [?] , 44:61N, 44:62 [?] -44:63 [?] , 44:64:01-44:66, 44:67 [?] - 44:76 [?] , 44:77, 44:78 [?] - 44:80 [?] , 44:81, 44:82 [?] , 44:83, 44:84 [?] -44:100 [?] , 44:101, 44:102 [?] -44:108N [?] , 44:109- 44:110, 44:111 [?] -44:112 [?] , 44:113, 44:114 [?] , 44:115, 44:116 [?] , 44:117-44:118, 44:119 [?] -44:126:01 [?] , 44:126:02, 44:127 [?] -44:128 [?] , 44:129-44:130, 44:131 [?] - 44:137 [?] , 44:139 [?] -44:149N [?] , 44:150-44:152, 44:153 [?] - 44:165 [?]	
24	225 bp	1070 bp	*44:02:01:02S	
25¹⁰	145 bp	1070 bp	*44:06 [?] , 44:10 [?] -44:12 [?] , 44:14 [?] , 44:15, 44:17 [?] - 44:18 [?] , 44:20 [?] , 44:22 [?] , 44:24 [?] -44:26 [?] , 44:27:01- 44:27:02, 44:28:01 [?] -44:30 [?] , 44:31, 44:32 [?] -44:34:01 [?] , 44:35 [?] -44:38 [?] , 44:40 [?] - 44:45 [?] , 44:47 [?] -44:48 [?] , 44:50 [?] , 44:54 [?] -44:55 [?] , 44:58N [?] , 44:60 [?] , 44:62 [?] - 44:64:01 [?] , 44:67 [?] -44:76 [?] , 44:78 [?] -44:80 [?] , 44:82 [?] , 44:84 [?] -44:100 [?] , 44:102 [?] - 44:108N [?] , 44:111 [?] -44:112 [?] , 44:114 [?] , 44:116 [?] , 44:119 [?] - 44:126:01 [?] , 44:127 [?] - 44:128 [?] , 44:131 [?] -44:137 [?] , 44:138Q, 44:139 [?] -44:149N [?] , 44:153 [?] -44:165 [?]	*07:02:01-07:57, 07:59-07:176, 08:01:01-08:05, 08:07-08:105, 13:01:01-13:04, 13:06-13:23, 13:25-13:63N, 14:01:01 ^W -14:32 ^W , 14:33, 15:01:01:01-15:01:04, 15:01:06-15:19, 15:20 ^W , 15:21, 15:23-15:40, 15:42-15:58, 15:60- 15:99, 15:101, 15:103-15:129, 15:131-15:200, 15:202-15:227, 15:229-15:246N, 15:248-15:264, 18:01:01:01-18:15, 18:17N-18:83, 27:01-27:21, 27:23-27:46, 27:48- 27:67, 27:69-27:99, 35:01:01:01 ^W - 35:03:11 ^W , 35:04:01 ^W -35:30 ^W , 35:31, 35:32:01 ^W -35:42:02 ^W , 35:43:01, 35:44 ^W -35:45 ^W , 35:46, 35:47 ^W -35:56 ^W , 35:57, 35:58 ^W - 35:59 ^W , 35:60, 35:61:01 ^W -35:72 ^W , 35:74 ^W -35:78 ^W , 35:79, 35:80 ^W - 35:86 ^W , 35:87, 35:88 ^W -35:167 ^W , 35:169 ^W -35:184 ^W , 35:185, 35:186 ^W - 35:220 ^W , 37:01:01-37:37, 38:01:01 ^W -38:17 ^W , 38:19 ^W -38:42 ^W , 39:01:01:01 ^W -39:01:01:03 ^W , 39:01:03 ^W -39:20 ^W , 39:22 ^W -39:75 ^W , 39:76-39:79, 40:01:01-40:16,

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26^{5,19}	100 bp, 135 bp, 225 bp	800 bp	*44:33, 44:69, 44:85	A*24:137
27²⁰	160 bp, 255 bp	800 bp	*44:02:10, 44:15, 44:18, 44:20, 44:34:01, 44:47, 44:100	*40:01:11, 40:58, 45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 49:03, 49:20, 50:02, 51:23, 51:108, 52:01:02, 52:01:04, 52:01:09, 52:02-52:03, 52:06:01-52:06:02, 52:09, 52:15, 52:21
28²¹	130 bp, 165 bp	1070 bp	*44:35, 44:68	
29^{5,8,22}	90 bp, 255 bp	800 bp	*44:15, 44:55, 44:103, 44:117	*13:23, 13:55, 14:10, 18:09, 27:01, 35:59, 37:10, 37:19, 38:20, 39:42, 40:47, 40:96, 40:157, 40:201, 49:02
30	195 bp	800 bp	*44:10, 44:15, 44:18, 44:140	*45:01, 45:05-45:07, 45:11-45:14, 49:20, 50:02, 82:01-82:03
31^{5,23}	110 bp, 195 bp, 230 bp, 260 bp	1070 bp	*44:17, 44:43:01-44:43:02, 44:94, 44:98-44:99, 44:144	*15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 45:09, 46:17, 53:22, 58:07, A*30:29, A*31:61

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32	155 bp	1070 bp	*44:02:01:01-44:02:26, 44:05:01-44:06, 44:08- 44:09, 44:11-44:12, 44:14- 44:25, 44:27:01-44:27:02, 44:33-44:34:02, 44:41:01- 44:42, 44:44, 44:48-44:49, 44:51-44:53, 44:55, 44:58N- 44:59:02, 44:62-44:63, 44:66-44:68, 44:70-44:75, 44:78, 44:80, 44:83-44:84, 44:86-44:91, 44:93, 44:95, 44:97, 44:99-44:102, 44:104, 44:106, 44:112- 44:113, 44:116-44:119, 44:121, 44:123, 44:126:01- 44:127, 44:131-44:134, 44:136-44:140, 44:142Q, 44:145, 44:148-44:149N, 44:151-44:152, 44:158, 44:162	*07:04, 07:19, 07:25, 07:146, 08:01:01-08:05, 08:07-08:12:03, 08:14-08:19N, 08:21-08:24, 08:26- 08:39, 08:41-08:42, 08:44-08:54, 08:56:01-08:69, 08:71-08:78, 08:80-08:105, 13:46, 15:51, 15:83, 15:179, 15:199, 15:218Q, 18:56, 27:47, 35:38, 35:87, 35:115, 35:169, 37:01:01-37:01:09, 37:03N-37:06, 37:08-37:37, 38:30, 40:136, 41:01-41:25, 42:01:01- 42:02, 42:04-42:17, 45:01-45:14, 51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19, 53:22, 55:20, 55:56, 56:13, 57:09, 57:24, 82:01- 82:03, 83:01
33²⁴	150 bp, 185 bp	1070 bp	*44:16, 44:37:01-44:37:02, 44:64:01-44:64:02, 44:80- 44:81, 44:91, 44:132, 44:150	*07:28, 08:87, 15:77, 15:233, 52:26, 57:04, A*23:31, A*24:106, C*07:231, C*16:10
34⁷	170 bp	800 bp	*44:15, 44:18, 44:60, 44:83- 44:84, 44:140	*07:149, 13:01:01-13:04, 13:06- 13:08Q, 13:10-13:23, 13:25-13:29, 13:31-13:38, 13:40-13:63N, 15:36, 15:89, 15:256, 37:10, 45:01, 45:04- 45:08, 45:10-45:14, 51:54, 51:78:01-51:78:02, 52:20, 53:09, 53:11-53:13, 55:56, 56:13, 82:01- 82:03
35^{5,25}	85 bp, 180 bp	800 bp	*44:04, 44:56N, 44:63, 44:132, 44:163	*08:87, C*07:231, C*16:10
36²⁶	145 bp, 235 bp	800 bp	*44:40, 44:44, 44:130, 44:142Q, 44:156	*07:149, 08:02, 15:115, 27:01, 38:02:01-38:04, 38:08, 38:15, 38:18, 38:23, 38:29, 38:35, 56:07
37⁸	210 bp	1070 bp	*44:10, 44:14, 44:17, 44:31, 44:43:01-44:43:02, 44:45, 44:51, 44:62, 44:77, 44:82, 44:87-44:88, 44:107, 44:123, 44:135	*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 35:169, 40:132, 40:178, 45:09, 45:14, 46:17, 51:23, 51:108, 52:15, 53:22, 57:07, 58:07, 82:01-82:03
38	225 bp	800 bp	*44:41:01-44:41:02, 44:106, 44:158	*07:04, 07:19, 07:25, 07:146, 08:01:01-08:05, 08:07-08:08N,

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			08:10-08:12:03, 08:14-08:19N, 08:21-08:24, 08:26, 08:28-08:39, 08:41-08:48, 08:50-08:54, 08:56:01-08:59, 08:61-08:69, 08:71-08:75, 08:77-08:78, 08:80- 08:83, 08:85-08:103, 08:105, 15:51, 15:179, 15:199, 15:218Q, 18:56, 27:47, 35:87, 37:09, 38:30, 40:136, 41:02:01-41:04, 41:08, 41:10-41:11, 41:13, 41:15, 41:18- 41:19, 41:23-41:24, 42:01:01- 42:02, 42:05:01-42:12, 42:14- 42:17, 82:01-82:03, C*05:62, C*07:68, C*07:140, C*07:151, C*07:199:01-07:199:02
39^{5,8,9}	75 bp	800 bp	*44:16, 44:42, 44:91, 44:132 *07:04, 07:19, 07:25, 07:146, 08:01:01-08:05, 08:07-08:12:03, 08:14-08:19N, 08:21-08:24, 08:26- 08:39, 08:41-08:42, 08:44-08:54, 08:56:01-08:69, 08:71-08:78, 08:80-08:85, 08:87-08:105, 13:46, 15:51, 15:83, 15:179, 15:199, 15:218Q, 35:38, 35:87, 35:115, 37:01:01-37:01:09, 37:03N-37:06, 37:08-37:31, 37:33N-37:37, 38:30, 40:136, 41:01-41:25, 42:01:01- 42:02, 42:04-42:17, 45:04, 45:08, 45:10, 51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19, 55:20, 55:56, 56:13, 57:09, 57:24, C*05:62, C*07:04:01-07:04:08, C*07:11-07:12, C*07:45, C*07:63, C*07:68, C*07:101, C*07:139- 07:140, C*07:142, C*07:151, C*07:181, C*07:199:01-07:199:02, C*07:272
40²⁷	235 bp, 260 bp	1070 bp	*44:10, 44:15, 44:18, 44:31, 44:41:01-44:41:02, 44:48, 44:54, 44:65, 44:106, 44:135, 44:158 *07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 27:47, 27:50, 35:45, 35:71, 35:169, 40:132, 40:178, 45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 46:17, 49:20, 50:02, 53:22, 58:07, 82:01-82:03, C*15:25
41	255 bp	1070 bp	*44:49, 44:156 *08:02
42²⁸	130 bp, 165 bp	800 bp	*44:14, 44:62, 44:90, 44:97 *08:01:01-08:05, 08:08N-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26-

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Lactococcus			Lactococcus	
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43^{5,29}	110 bp, 165 bp	800 bp	*44:29, 44:52N, 44:89	
44^{5,30}	85 bp, 160 bp	800 bp	*44:53, 44:73, 44:76, 44:79, 44:146 ^w , 44:150	*07:28, 08:87, 15:77 ^w , 15:233 ^w , 52:26, C*07:231, C*16:10
45^{9,31}	220 bp, 250 bp	800 bp	*44:36, 44:54, 44:86, 44:106, 44:135, 44:158	*07:20, 07:140, 07:153, 53:27
46³²	165 bp, 450 bp	1070 bp	*44:56N, 44:66	
47^{5,33}	65 bp, 115 bp, 195 bp	1070 bp	*44:58N, 44:72, 44:93, 44:139	
48^{5,34}	105 bp, 140 bp, 265 bp	1070 bp	*44:59:01, 44:61N, 44:78, 44:120	*35:204, C*03:147
49⁵	85 bp	800 bp	*44:108N	*18:23N
50^{5,35}	95 bp, 285 bp	1070 bp	*44:111, 44:148	C*05:10, C*08:44, C*08:61
51⁵	110 bp	1070 bp	*44:115	
52³⁶	130 bp, 405 bp	1070 bp	*44:118, 44:143	*39:46
53	210 bp	1070 bp	*44:122	
54	280 bp	1070 bp	*44:126:01-44:126:02, 44:159	C*03:96, C*15:52
55	260 bp	1070 bp	*44:110, 44:138Q	
56	280 bp	1070 bp	*44:104, 44:148	C*05:10, C*08:44, C*08:61

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*44 SSP typings.

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

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Lot No.: 69R**Lot-specific information**

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

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

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

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

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-B*44 subtyping.

In addition, wells number 2, 3, 10, 11, 14, 16, 21 to 23, 26, 27, 29, 30, 34 to 36, 38, 39, 42 to 45 and 49 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.

³For several HLA Class I alleles 1st and/or 4th exon(s) and beyond, as well as intron nucleotide sequences, are not available. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. We assume that unknown sequences in these regions are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B*44 alleles will be amplified by primer mixes 1 to 9, 11, 12, 14 to 18, 20 to 23, 25, 27, 29 to 42, 44, 45, 48, 49 and 52. In addition, the A*23:31 allele will be amplified by primer mixes 4 and 33, the A*24:106 allele will be amplified by primer mix 33, the A*24:137 allele will be amplified by primer mix 26, the A*30:29 and A*31:61 alleles will be amplified by primer mix 31, the C*03:96 and C*15:52 alleles will be amplified by primer mix 54, the C*03:147 allele will be amplified by primer mix 48, the C*05:10, C*08:44 and C*08:61 alleles will be amplified by primer mixes 50 and 56, the C*05:62, C*07:68, C*07:140, C*07:151 and C*07:199:01-07:199:02 alleles will be amplified by primer mixes 38 and 39, the C*07:04:01-07:04:08, C*07:11-07:12, C*07:45, C*07:63, C*07:101, C*07:139, C*07:142, C*07:181 and C*07:272 alleles will be amplified by primer mix 39, the C*07:69 and C*08:68 alleles will be amplified by primer mix 42, the C*07:231 allele will be amplified by primer mixes 4, 33, 35 and 44, the C*15:25 allele will be amplified by primer mixes 1, 3, 6 and 40, and the C*16:10 allele will be amplified by primer mixes 33, 35 and 44.

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

⁶Primer mixes 6 and 8 have a tendency to giving rise to primer oligomer formation.

⁷Primer mix 34 may give rise to a long unspecific amplification product. This should be disregarded when interpreting the B*44 typings.

⁸Primer mixes 29, 37 and 39 may have tendencies of unspecific amplifications.

⁹Primer mix 39 may give rise to a lower yield of HLA-specific PCR product than the other B*44 primer mixes.

¹⁰We assume that the fourth exon nucleotide sequences are conserved within allelic groups. Primer mix 25 amplifies the B*44:27 and B*44:31 alleles. The purpose of primer mixes 23 and 25 is to distinguish e.g. the B*44:02,44:02 and B*44:02,44:27 genotypes.

¹¹Primer mix 5: Specific PCR fragment of 75 bp in the B*44:04, 44:28:01-44:28:02, 44:56N and 44:76 and the B*07:20, 07:140, 07:153 and 35:45 alleles. Specific PCR fragment of 255 bp in the B*44:70 allele.

¹²Primer mix 6: Specific PCR fragment of 170 bp in the B*44:39 allele. Specific PCR fragment of 195 bp in the B*44:05:01-44:05:04, 44:10, 44:15, 44:17-44:18, 44:25, 44:31, 44:43:01-44:43:02, 44:58N, 44:62, 44:70, 44:75, 44:77-44:78, 44:82, 44:107, 44:117, 44:123, 44:134, 44:136, 44:139-44:140, 44:144 and 44:158 and in the B*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 35:169, 40:132, 40:178, 45:01-45:02, 45:05-45:07, 45:09, 45:11-

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45:14, 46:17, 49:20, 50:02, 51:23, 51:108, 52:15, 53:22, 57:07, 58:07 and 82:01-82:03 and the C*15:25 alleles.

¹³Primer mix 8: Specific PCR fragment of 90 bp in the B*44:07-44:08 and 44:57 and the B*13:58, 15:183, 18:80, 27:52, 27:67, 35:84, 35:90, 35:150, 35:184, 35:201, 40:83, 40:170, 40:185, 40:209, 46:10, 50:07, 51:103 and 51:119 alleles. Specific PCR fragment of 115 bp in the B*44:38 allele. Specific PCR fragment of 300 bp in the B*44:71 allele.

¹⁴Primer mix 9: Specific PCR fragment of 120 bp in the B*44:23N allele. Specific PCR fragment of 195 bp in the B*44:10, 44:15 and 44:18 and in the B*44:10, 44:15, 44:18 and 44:140 and the B*45:01, 45:05-45:07, 45:11-45:14, 49:20, 50:02, 82:01-82:03 alleles.

¹⁵Primer mix 10: Specific PCR fragment of 125 bp in the B* 44:24 allele. Specific PCR fragment of 150 bp in the B*44:92 allele.

¹⁶Primer mix 18: Specific PCR fragment of 115 bp in the B*44:31 and in the B*40:132 and 40:178 alleles. Specific PCR fragment of 155 bp in the B*44:74 allele. Specific PCR fragment of 260 bp in the B* 44:19N, 44:82, 44:96 and 44:153 and in the B*57:07 alleles.

¹⁷Primer mix 19: Specific PCR fragment of 150 bp in the B*44:11 allele. Specific PCR fragment of 190 bp in the B*44:30 allele.

¹⁸Primer mix 21: Specific PCR fragment of 100 bp in the B*44:32 allele. Specific PCR fragment of 180 bp in B*44:16, 44:21, 44:64:01-44:64:02, 44:124 and 44:150 and the B*07:28 alleles.

¹⁹Primer mix 26: Specific PCR fragment of 100 bp in the B*44:69 allele. Specific PCR fragment of 135 bp in the B*44:33 allele. Specific PCR fragment of 225 bp in the B*44:85 and the A*24:137 alleles.

²⁰Primer mix 27: Specific PCR fragment of 160 bp in the B*44:02:10 and 44:34:01 and the B*40:01:11, 40:58, 49:03, 52:01:02, 52:01:04, 52:01:09, 52:02-52:03, 52:06:01-52:06:02, 52:09 and 52:21 alleles. Specific PCR fragment of 255 bp in B*44:15, 44:18, 44:20, 44:47 and 44:100 and the B*45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 49:20, 50:02, 51:23, 51:108 and 52:15 alleles.

²¹Primer mix 28: Specific PCR fragment of 130 bp in the B*44:68 allele. Specific PCR fragment of 165 bp in the B*44:35 allele.

²²Primer mix 29: Specific PCR fragment of 90 bp in the B*44:117 and the B*14:10, 35:59, 37:19, 38:20 and 39:42 alleles. Specific PCR fragment of 255 bp in the B*44:15, 44:55 and 44:103 and the B*13:23, 13:55, 18:09, 27:01, 37:10, 40:47, 40:96, 40:157, 40:201 and 49:02 alleles.

²³Primer mix 31: Specific PCR fragment of 110 bp in the B*44:94 allele. Specific PCR fragment of 195 bp in the B*44:17, 44:43:01-44:43:02 and 44:144 and the B*15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 45:09, 46:17, 53:22 and 58:07 alleles. Specific PCR fragment of 230 bp in the B*44:98 and in the A*30:29 and A*31:61 alleles. Specific PCR fragment of 260 bp in the B*44:99 allele.

²⁴Primer mix 33: Specific PCR fragment of 150 bp in the B*44:81 allele. Specific PCR fragment of 185 bp in the B*44:16, 44:37:01-44:37:02, 44:64:01-44:64:02, 44:80, 44:91, 44:132 and 44:150 and in the B*07:28, 08:87, 15:77, 15:233, 52:26 and 57:04 and the A*23:31, A*24:106, C*07:231 and C*16:10 alleles.

²⁵Primer mix 35: Specific PCR fragment of 85 bp in the B*44:63 allele. Specific PCR fragment of 180 bp in the B*44:04, 44:56N, 44:132 and 44:163 and in the B*08:87 and the C*07:231 and C*16:10 alleles.

²⁶Primer mix 36: Specific PCR fragment of 145 bp in the B*44:40, 44:44, 44:130 and 44:156 and the B*07:149, 08:02, 15:115, 27:01, 38:02:01-38:04, 38:08, 38:15, 38:18, 38:23, 38:29, 38:35 and 56:07 alleles. Specific PCR fragment of 235 bp in the B*44:142Q allele.

²⁷Primer mix 40: Specific PCR fragment of 235 bp in the B*44:10, 44:15, 44:18 and 44:48 and in the B*35:45, 35:71, 35:169, 45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 49:20, 50:02 and 53:22 and the C*15:25 alleles. Specific PCR fragment of 260 bp in the B*44:31, 44:41:01-44:41:02, 44:54, 44:65, 44:106, 44:135 and 44:158 and the B*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 27:47, 27:50, 40:132, 40:178 and 46:17 alleles. Specific PCR fragment of 235 and 260 bp in the 58:07 and 82:01-82:03 alleles.

²⁸Primer mix 42: Specific PCR fragment of 130 bp in the B*44:90 and 44:97 and in the B*40:166 and 45:06 and the C*07:69 and C*08:68 alleles. Specific PCR fragment of 165 bp in the B*44:14 and 44:62 and the B*08:01:01-08:05, 08:08N-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:36, 08:38-08:39, 08:41-08:48, 08:50-08:54, 08:56:01-08:69, 08:71-08:73, 08:75-08:76, 08:78, 08:80-08:86N, 08:88, 08:90-08:105, 15:83, 35:87, 37:12, 38:30, 40:136,

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41:01-41:03:02, 41:05-41:09, 41:11-41:17, 41:19-41:20, 41:22-41:25, 42:01:01-42:02, 42:04-42:08, 42:10-42:15, 42:17, 45:14, 51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19, 55:20, 55:56, 56:13, 57:09 and 82:01-82:03 alleles.

²⁹Primer mix 43: Specific PCR fragment of 110 bp in the B*44:52N allele. Specific PCR fragment of 165 bp in the B*44:29 and 44:89 alleles.

³⁰Primer mix 44: Specific PCR fragment of 85 bp in the B*44:53 and in the B*08:87 and the C*07:231 and C*16:10 alleles. Specific PCR fragment of 160 bp in the B*44:73, 44:76, 44:79, 44:146^w and 44:150 and the B*15:77^w, 15:233^w and 52:26 alleles. Specific PCR fragment of 85 bp and 160 bp in the B*07:28 allele.

³¹Primer mix 45: Specific PCR fragment of 220 bp in the B*44:36 allele. Specific PCR fragment of 250 bp in the B*44:54, 44:86, 44:106, 44:135 and 44:158 and the B*07:20, 07:140, 07:153 and 53:27 alleles.

³²Primer mix 46: Specific PCR fragment of 165 bp in the B*44:66 allele. Specific PCR fragment of 450 bp in the B*44:56N allele.

³³Primer mix 47: Specific PCR fragment of 65 bp in the B*44:93 and 44:139 alleles. Specific PCR fragment of 115 bp in the B*44:72 allele. Specific PCR fragment of 195 bp in the B*44:58N allele.

³⁴Primer mix 48: Specific PCR fragment of 105 bp in the B*44:61N allele. Specific PCR fragment of 140 bp in B*44:59:01 allele. Specific PCR fragment of 265 bp in the B*44:78 and 44:120 and in the B*35:204 and C*03:147 alleles.

³⁵Primer mix 50: Specific PCR fragment of 95 bp in the B*44:111 allele. Specific PCR fragment of 285 bp in B*44:148 and the C*05:10, C*08:44 and C*08:61 alleles.

³⁶Primer mix 52: Specific PCR fragment of 130 bp in the B*44:143 allele. Specific PCR fragment of 405 bp in B*44:118 and the B*39:46 alleles.

³⁷Primer mix 4 may weakly amplify the B*44:29 and 44:89 alleles.

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

‘w’ , might be weakly amplified.

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INTERPRETATION TABLE																																			
HLA-B*44 SSP subtyping																																			
Amplification patterns of the B*44:02 to B*44:165 alleles																																			
Well ¹¹																																			
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56								
90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	165	160	250	85	95	110	130	210	280	260	280							
255	230	195		185		180	235				260		165	165	160		450	195	265		285		405												
800	800	1070	1070	1070	800	800	800	1070	800	800	1070	1070	800	800	800	800	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	1070							
97	420	353	540	185	165	142	206	400	355	540	355	97	193	418	418	107	206	142	142	610	142	503	228	404	355	355	355	355							
5'-TCC 3'	5'-TTA 3'	5'-gTA 3'	5'-gAC 3'	5'-CAA 3'	5'-ACC 3'	5'-TCA 3'	5'-AGA 3'	5'-TCA 3'	5'-CCC 3'	5'-gAC 3'	5'-CCC 3'	5'-TCg 3'	5'-CCA 3'	5'-Agg 3'	5'-Agg 3'	5'-CAC 3'	5'-gAA 3'	5'-TCA 3'	5'-TCA 3'	5'-TgT 3'	5'-TCA 3'	5'-CCC 3'	5'-ATg 3'	5'-CCA 3'	5'-TCA 3'	5'-TCC 3'	5'-TCA 3'								
369		385		207	420	418	355	409			379		412			363	649		355		646					363									
5'-TAC 3'		5'-ggT 3'		5'-AAAT 3'	5'-TTA 3'	5'-Agg 3'	5'-TCA 3'	5'-ggC 3'			5'-ACC 3'		5'-ATA 3'			5'-AgC 3'	5'-ACA 3'		5'-TCA 3'		5'-ACg 3'					5'-AgC 3'									
419	504	419		418				410								395																			
5'-gTC 3'	5'-CAC 3'			5'-Agg 3'				5'-gTg 3'								5'-gCT 3'																			
309		572	572	317	311	186	309	572	538	572	572	309	282	489	463	317	369	164	208	317	197	572	317	572	595	572	592								
5'-gTg 3'	5'-gCg 3'	5'-gCg 3'	5'-TAT 3'	5'-ggA 3'	5'-Cgg 3'	5'-TCC 3'	5'-gTg 3'	5'-gCg 3'	5'-gTC 3'	5'-gCC 3'	5'-gCg 3'	5'-gTg 3'	5'-gCC 3'	5'-gCg 3'	5'-gCg 3'	5'-ggA 3'	5'-CCT 3'	5'-gCT 3'	5'-CTA 3'	5'-TAT 3'	5'-gAT 3'	5'-gCg 3'	5'-ggA 3'	5'-gCg 3'	5'-CCg 3'	5'-gCg 3'	5'-gTC 3'								
419				572	538	559	548						538	544	527	572	774	218	453		601		916		595		601								
5'-CgA 3'				5'-gCC 3'	5'-gTC 3'	5'-CgT 3'	5'-ggC 3'						5'-gTC 3'	5'-ggT 3'	5'-CCT 3'	5'-gCg 3'	5'-ggT 3'	5'-gCT 3'	5'-TCC 3'		5'-CTT 3'		5'-gAC 3'		5'-CCT 3'		5'-CTT 3'								
															5'-AgC 3'			5'-TCA 3'	5'-TgA 3'																
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.							

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Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	195	150								260	155	190		180				225	135	255	165
HLA-B allele ^{4,5}																													
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	25	26	27	28	
*44:02:01:01, 44:02:01:03-44:02:09, 44:02:11-44:02:26, 44:59:02, 44:113, 44:151-44:152	1	2	3								11						17						23						
*44:02:01:02S	1	2	3								11						17						23	24					
*44:02:10	1		3								11						17						23				27		
*44:03:01-44:03:19, 44:109	1	2		4							11						17						23						
*44:04	1	2			5						11						17						23						
*44:05:01-44:05:04	1	2	3			6					11												23						
*44:06	1		3				7										17						?		?				
*44:07	1	2		4				8			11						17						23						
*44:08	1		3					8									17						23						
*44:09	1	2	3									12					17						23						
*44:10	1	2				6			9		11												?		?				
*44:11	1	2	3								11						17		19				?		?				
*44:12	1	2	3								11			14			17						?		?				
*44:13	1	2		4							11		13				17						23						
*44:14	1	2	3								11			15									?		?				
*44:15		2				6			9		11														25		27		
*44:16		2	3								11										21		23						
*44:17	1	2	3			6					11			15									?		?				
*44:18		2				6			9		11				16								?		?		27		
*44:19N	1	2	3								11						17	18					23						
*44:20, 44:100		2									11						17						?		?		27		
*44:21	1	2	3								11						17				21		23						
*44:22	1	2	3								11						17			20			?		?				
*44:23N	1	2	3						9		11						17						23						
*44:24	1	2	3						10		11						17						?		?				
*44:25	1	2	3			6					11				16								?		?				
*44:26	1	2		4							11						17					22	?		?				
*44:27:01-44:27:02	1	2	3								11						17								25				
*44:28:01-44:28:02	1	2			5						11						17						?		?				
*44:29	1	2					7				11						17						?		?				
*44:30	1	2		4							11						17			19			?		?				
*44:31		2				6					11							18							25				
*44:32, 44:124 ⁶	1	2		4							11						17				21		?		?				
*44:33	1	2	3								11						17						?		?	26			
*44:34:01	1		3								11						17						?		?		27		
*44:34:02	1		3								11						17						?						
*44:35	1	2									11						17						?		?			28	
*44:36	1	2		4							11						17						?		?				
*44:37:01		2		4							11												?		?				
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	25	26	27	28	

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Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	115	195	150							260	155	190		180				225	135	255	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	25	26	27	28	
*44:37:02		2		4							11												23	?					
*44:38	1	2		4				8			11						17						?	?					
*44:39	1			4		6					11						17						23						
*44:40	1			4													17						?	?					
*44:41:01-44:41:02		2									11						17						?	?					
*44:42		2	3								11												?	?					
*44:43:01-44:43:02	1	2				6					11												?	?					
*44:44	1		3														17						?	?					
*44:45	1	2									11												?	?					
*44:46, 44:129	1	2		4								12					17						23						
*44:47		2		4							11						17						?	?		27			
*44:48	1	2	3								11						17						?	?					
*44:49	1	2	3								11						17						23						
*44:50	1	2		4							11				16		17						?	?					
*44:51	1	2	3								11			15									23						
*44:52N	1	2	3								11						17						23						
*44:53	1	2	3								11						17						23						
*44:54		2		4							11						17						?	?					
*44:55	1	2	3								11						17						?	?					
*44:56N	1	2			5						11						17						23						
*44:57	1			4				8									17						23						
*44:58N, 44:139 ⁷	1	2	3			6					11												?	?					
*44:59:01	1	2	3								11						17						23						
*44:60	1			4													17						?	?					
*44:61N	1	2		4							11						17						23						
*44:62	1	2	3			6					11			15									?	?					
*44:63	1	2	3								11						17						?	?					
*44:64:01		2		4							11										21		23	?					
*44:64:02		2		4							11										21		23						
*44:65		2		4							11						17						23						
*44:66	1	2	3								11						17						23						
*44:67	1	2	3								11		13				17						?	?					
*44:68	1	2	3								11						17						?	?			28		
*44:69, 44:85 ⁸	1	2		4							11						17						?	?	?	26			
*44:70	1	2	3		5	6					11												?	?					
*44:71	1	2	3					8			11						17						?	?					
*44:72, 44:93 ⁹	1	2	3								11						17						?	?					
*44:73	1	2	3								11						17						?	?					
*44:74	1	2	3								11						17	18					?	?					
*44:75	1	2	3		6							12											?	?					
*44:76	1	2			5						11						17						?	?					
*44:77	1	2				6					11												23						
*44:78	1	2	3			6					11												?	?					
*44:79	1	2		4							11						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	25	26	27	28	

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Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	115	195	150							260	155	190		180				225	135	255	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	25	26	27	28	
*44:80	1	2	3								11						17						?	?					
*44:81	1			4							11						17						23						
*44:82	1	2				6					11							18					?	?					
*44:83	1		3														17						23						
*44:84	1	2	3								11						17						?	?					
*44:86	1	2	3								11						17						?	?					
*44:87	1	2	3								11						17						?	?					
*44:88	1	2	3								11												?	?					
*44:89	1	2	3				7				11						17						?	?					
*44:90	1	2	3									12					17						?	?					
*44:91		2	3								11												?	?					
*44:92	1	2		4						10	11						17						?	?					
*44:94, 44:98 ¹⁰	1	2		4							11						17						?	?					
*44:95	1	2	3								11					16	17						?	?					
*44:96, 44:153	1	2		4							11						17	18					?	?					
*44:97	1	2	3								11						17						?	?					
*44:99		2									11						17						?	?					
*44:101		2	3								11												23						
*44:102, 44:112, 44:116, 44:119, 44:121, 44:137, 44:149N, 44:162	1	2	3								11						17						?	?					
*44:103	1	2		4							11						17						?	?					
*44:104	1	2	3								11						17						?	?					
*44:105	1	2		4							11						17			20			?	?					
*44:106		2									11						17						?	?					
*44:107	1	2				6					11												?	?					
*44:108N	1	2		4							11						17						?	?					
*44:110	1	2		4							11						17						23						
*44:111	1			4							11						17						?	?					
*44:114, 44:125, 44:128, 44:141, 44:154-44:155, 44:157, 44:160-44:161, 44:164-44:165	1	2		4							11						17						?	?					
*44:115	1	2		4							11						17						23						
*44:117	1	2	3			6					11												23						
*44:118	1	2	3								11						17						23						
*44:120	1	2		4							11						17						?	?					
*44:122	1	2		4							11						17						?	?					
*44:123	1	2	3			6					11				15								?	?					
*44:126:01	1	2	3								11						17						?	?					
*44:126:02	1	2	3								11						17						23						
*44:127	1	2	3														17						?	?					
*44:130	1			4													17						23						
*44:131	1	2	3									12					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	25	26	27	28	

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Lot-specific information

CE
0088

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		115	195	150								260	155	190		180				225	135	255	165
								300																					
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	25	26	27	28	
*44:132		2	3								11												?	?					
*44:133	1	2	3								11												?	?					
*44:134	1		3			6																	?	?					
*44:135		2									11												?	?					
*44:136	1	2	3			6					11												?	?					
*44:138Q		2									11						17								25				
*44:140	1	2	3			6			9		11												?	?					
*44:142Q	1	2	3								11						17						?	?					
*44:143	1	2		4							11						17						?	?					
*44:144	1	2				6					11												?	?					
*44:145	1		3								11						17						?	?					
*44:146	1	2									11						17						?	?					
*44:147	1	2									11						17						?	?					
*44:148	1	2	3								11						17						?	?					
*44:150		2									11										21	23							
*44:156	1			4													17						?	?					
*44:158		2				6					11												?	?					
*44:159	1	2		4							11						17						?	?					
*44:163	1	2		4							11						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	25	26	27	28	

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230																195	265									
		260																										
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
			32	33	35					39																		*44:132
			32																									*44:133
			32																									*44:134
								37		40						45												*44:135
			32																									*44:136
			32																						55			*44:138Q
30			32		34																							*44:140
			32				36																					*44:142Q
																							52					*44:143
		31																										*44:144
			32																									*44:145
															w													*44:146
																												*44:147
			32																		50					56		*44:148
				33										44														*44:150
							36					41																*44:156
			32						38	40						45												*44:158
																									54			*44:159
					35																							*44:163
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	115	195	150							260	155	190		180				225	135	255	165
																		260											
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	25	26	27	28	
*07:02:01-07:03, 07:05:01-07:18:02, 07:21-07:24, 07:26-07:27, 07:29-07:57, 07:59-07:132, 07:134-07:139, 07:141-07:145, 07:147-07:148, 07:150-07:152, 07:154-07:176, 08:13, 08:20, 08:25, 08:40, 08:55, 08:70, 08:79, 13:09, 13:30, 13:39, 14:33, 15:01:01:01-15:01:04, 15:01:06-15:13:02, 15:15-15:19, 15:21, 15:23-15:35, 15:37-15:40, 15:42-15:45, 15:47:01-15:50, 15:52, 15:54-15:58, 15:60-15:76, 15:78:01-15:82, 15:84-15:88, 15:90, 15:92-15:99, 15:101, 15:103-15:105, 15:107-15:114, 15:116-15:129, 15:132-15:142, 15:144-15:160, 15:162-15:178, 15:180-15:182N, 15:184-15:198, 15:200, 15:202-15:211, 15:213-15:217, 15:219-15:227, 15:229-15:232, 15:234-15:246N, 15:248-15:255, 15:257-15:264, 18:01:01:01-18:08, 18:10-18:15, 18:17N-18:22, 18:24-18:47, 18:49-18:55, 18:57-18:66, 18:68-18:79, 18:81-18:83, 27:02:01-27:21, 27:23-27:46, 27:48-27:49, 27:51, 27:53-27:66N, 27:69-27:99, 35:31, 35:43:01, 35:46, 35:57, 35:60, 35:79, 35:185, 37:02, 37:07, 39:76-39:79, 40:12, 40:21, 40:46, 40:93, 40:137, 46:01:01-46:09, 46:11-46:16, 46:18-46:36, 46:38, 48:01:01-48:01:03, 48:03:01-48:28, 54:01:01-54:28, 55:01:01-55:01:02, 55:01:04-55:05, 55:07-55:19, 55:21-55:55N, 55:57, 56:01:01-56:04, 56:06, 56:08-56:12, 56:14-56:20:02, 56:22-56:38N, 57:01:01-57:03:02, 57:05-57:06, 57:08, 57:10-57:23, 57:25-57:44, 57:46-57:50, 57:52-57:60, 59:01:01:01-59:05, 67:03, 81:01-81:02, 81:04N-81:06																													
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	25	26	27	28	

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: 69R

Lot-specific information

[illegible]

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		115	195	150								260	155	190		180					225	135	255	165
								300											260											
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	25	26	27	28		
*07:04, 07:19, 07:25, 07:146, 08:07, 08:37, 08:77, 08:89, 15:51, 15:179, 15:199, 15:218Q, 37:09, 42:09, 42:16															15											25				
*07:20, 07:140, 07:153					5	6																				25				
*07:28																					21					25				
*07:133												12		w												25				
*07:149																										25				
*08:01:01-08:01:20, 08:03-08:05, 08:08N, 08:10-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26, 08:29-08:36, 08:38-08:39, 08:41-08:42, 08:44-08:48, 08:50-08:54, 08:56:01-08:59, 08:61-08:69, 08:71-08:73, 08:75, 08:78, 08:80-08:83, 08:85, 08:88, 08:90-08:103, 08:105, 35:87, 42:01:01-42:02, 42:05:01-42:08, 42:10-42:12, 42:14-42:15, 42:17															15											25				
*08:02															15											25				
*08:09, 08:27, 08:84, 08:104, 15:83, 42:04, 55:20															15											25				
*08:14, 08:28, 08:74																										25				
*08:43															15											25				
*08:49, 37:01:01-37:01:07, 37:01:09, 37:03N-37:05, 37:08, 37:11, 37:13-37:18, 37:20-37:31, 37:33N, 37:36-37:37			3																							25				
*08:60, 08:76, 37:12, 42:13, 57:09			3												15											25				
*08:86N															15											25				
*08:87																										25				
*13:01:01-13:04, 13:06-13:08Q, 13:10-13:22:02, 13:25-13:29, 13:31-13:38, 13:40-13:45, 13:47-13:54, 13:56N-13:57, 13:59-13:63N, 15:36, 15:89, 15:256																										25				
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	25	26	27	28		

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230																195	265									
		260																										
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
			32						38	39																		*07:04, 07:19, 07:25, 07:146, 08:07, 08:37, 08:77, 08:89, 15:51, 15:179, 15:199, 15:218Q, 37:09, 42:09, 42:16
								37			40					45												*07:20, 07:140, 07:153
				33										44														*07:28
																												*07:133
					34		36																					*07:149
			32						38	39			42															*08:01:01-08:01:20, 08:03- 08:05, 08:08N, 08:10- 08:12:03, 08:15-08:19N, 08:21-08:24, 08:26, 08:29- 08:36, 08:38-08:39, 08:41- 08:42, 08:44-08:48, 08:50- 08:54, 08:56:01-08:59, 08:61-08:69, 08:71-08:73, 08:75, 08:78, 08:80-08:83, 08:85, 08:88, 08:90-08:103, 08:105, 35:87, 42:01:01- 42:02, 42:05:01-42:08, 42:10-42:12, 42:14-42:15, 42:17
			32				36		38	39		41	42															*08:02
			32							39			42															*08:09, 08:27, 08:84, 08:104, 15:83, 42:04, 55:20
			32						38	39																		*08:14, 08:28, 08:74
									38				42															*08:43
			32							39																		*08:49, 37:01:01-37:01:07, 37:01:09, 37:03N-37:05, 37:08, 37:11, 37:13-37:18, 37:20-37:31, 37:33N, 37:36- 37:37
			32							39			42															*08:60, 08:76, 37:12, 42:13, 57:09
			32						38				42															*08:86N
			32	33		35			38	39				44														*08:87
																												*13:01:01-13:04, 13:06- 13:08Q, 13:10-13:22:02, 13:25-13:29, 13:31-13:38, 13:40-13:45, 13:47-13:54, 13:56N-13:57, 13:59- 13:63N, 15:36, 15:89, 15:256
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260		90		225		160		75		170		155		90		120		125		150		145		90		95		170		145		195		115		150		130		100		290		145		225		145		100		160		130																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
PCR product(s)					255		195				115		195		150		125																		260		155		190				180						225		135		255		165																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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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	25	26	27	28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
*13:23, 13:55																									25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
*13:46																									25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
*13:58								8																	25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
*14:01:01-14:09, 14:11-14:32, 15:20, 35:01:01:01-35:03:11, 35:04:01-35:18, 35:20:01-35:30, 35:32:01-35:37, 35:39-35:42:02, 35:44, 35:48-35:56, 35:58, 35:61:01-35:62, 35:64:01-35:70, 35:72, 35:74-35:78, 35:80-35:83, 35:85-35:86, 35:88-35:89, 35:91-35:114, 35:116-35:137, 35:139-35:149, 35:151-35:153, 35:155-35:167, 35:170-35:183, 35:186-35:200, 35:202-35:203, 35:205-35:216N, 35:218-35:220, 38:01:01-38:01:07, 38:05, 38:09-38:14, 38:16-38:17, 38:19, 38:21-38:22, 38:24-38:28, 38:31-38:34N, 38:36-38:42, 39:01:01:01-39:01:01:03, 39:01:03-39:20, 39:22-39:41, 39:43-39:45, 39:47-39:68, 39:70-39:75, 48:02:01-48:02:02, 51:104, 51:147, 52:16, 53:03, 56:05:01-56:05:02, 56:21, 58:17N, 58:36, 67:01:01-67:02, 78:01:01-78:07, 81:03																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230																195	265									
		260																										
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
29				34																								*13:23, 13:55
			32	34						39																		*13:46
				34																								*13:58
																												*14:01:01-14:09, 14:11-14:32, 15:20, 35:01:01:01-35:03:11, 35:04:01-35:18, 35:20:01-35:30, 35:32:01-35:37, 35:39-35:42:02, 35:44, 35:48-35:56, 35:58, 35:61:01-35:62, 35:64:01-35:70, 35:72, 35:74-35:78, 35:80-35:83, 35:85-35:86, 35:88-35:89, 35:91-35:114, 35:116-35:137, 35:139-35:149, 35:151-35:153, 35:155-35:167, 35:170-35:183, 35:186-35:200, 35:202-35:203, 35:205-35:216N, 35:218-35:220, 38:01:01-38:01:07, 38:05, 38:09-38:14, 38:16-38:17, 38:19, 38:21-38:22, 38:24-38:28, 38:31-38:34N, 38:36-38:42, 39:01:01:01-39:01:01:03, 39:01:03-39:20, 39:22-39:41, 39:43-39:45, 39:47-39:68, 39:70-39:75, 48:02:01-48:02:02, 51:104, 51:147, 52:16, 53:03, 56:05:01-56:05:02, 56:21, 58:17N, 58:36, 67:01:01-67:02, 78:01:01-78:07, 81:03
29																												*14:10, 35:59, 38:20, 39:42
		31						37		40																		*15:14, 15:91, 15:131, 15:161, 46:17
																												*15:46, 15:106, 40:10:01-40:10:02, 40:149, 40:177, 40:215
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		115	195	150								260	155	190		180				225	135	255	165
								300											260										
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	25	26	27	28	
*15:53, 15:212, 40:01:01-40:01:10, 40:01:12-40:07, 40:09, 40:11:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:24, 40:26-40:40, 40:42-40:45, 40:48-40:57, 40:59-40:67, 40:69-40:75, 40:77-40:82, 40:84-40:92, 40:94-40:95, 40:97-40:105, 40:107-40:108, 40:111-40:116, 40:118N-40:131, 40:133Q-40:135, 40:138-40:148, 40:150-40:156, 40:158-40:165, 40:167-40:169, 40:171-40:176, 40:179-40:184, 40:186-40:187, 40:189-40:200, 40:202-40:207, 40:210-40:214, 40:216N-40:226, 47:02, 50:01:01-50:01:03, 50:04-50:05, 50:08-50:14, 50:16-50:19		2										12													25				
*15:77, 15:233																									25				
*15:115, 56:07																									25				
*15:143, 18:48												12		14											25				
*15:183, 18:80, 27:52, 27:67, 40:185, 40:209, 46:10								8																	25				
*15:247																						23							
*18:09																									25				
*18:23N																									25				
*18:56						6								15											25				
*18:67, 52:07, 58:11, 58:20							7																		25				
*27:01																									25				
*27:47																						23							
*27:50																									25				
*35:19, 35:47, 35:154, 39:69											12		14												w				
*35:38, 35:115			3											15											w				
*35:45	1				5	6																			w				
*35:63		2									12														w				
*35:71	1					6																			w				
*35:84, 35:90, 35:150, 35:184, 35:201								8																	w				
*35:138																						22			w				
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	25	26	27	28	

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230				180	235				260		165	165	160	250	450	115	105		285		405					
		260																195	265									
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
																												*15:53, 15:212, 40:01:01-40:01:10, 40:01:12-40:07, 40:09, 40:11:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:24, 40:26-40:40, 40:42-40:45, 40:48-40:57, 40:59-40:67, 40:69-40:75, 40:77-40:82, 40:84-40:92, 40:94-40:95, 40:97-40:105, 40:107-40:108, 40:111-40:116, 40:118N-40:131, 40:133Q-40:135, 40:138-40:148, 40:150-40:156, 40:158-40:165, 40:167-40:169, 40:171-40:176, 40:179-40:184, 40:186-40:187, 40:189-40:200, 40:202-40:207, 40:210-40:214, 40:216N-40:226, 47:02, 50:01:01-50:01:03, 50:04-50:05, 50:08-50:14, 50:16-50:19
				33											w													*15:77, 15:233
							36																					*15:115, 56:07
																												*15:143, 18:48
																												*15:183, 18:80, 27:52, 27:67, 40:185, 40:209, 46:10
29																												*15:247
																												*18:09
																				49								*18:23N
		31	32					37	38		40																	*18:56
																												*18:67, 52:07, 58:11, 58:20
29							36																					*27:01
			32						38		40																	*27:47
											40																	*27:50
																												*35:19, 35:47, 35:154, 39:69
			32								39																	*35:38, 35:115
		31						37			40																	*35:45
																												*35:63
		31						37			40																	*35:71
																												*35:84, 35:90, 35:150, 35:184, 35:201
																												*35:138
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		115	195	150								155	115	190		180					145	100	160	130
								300										260									225	135	255	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	25	26	27	28		
*35:169	1		3			6									15											w				
*35:204																										w				
*35:217		2										12		14												w				
*37:01:08																										25				
*37:06			3								11															25				
*37:10			3																							25				
*37:19			3																							25				
*37:32			3																							25				
*37:34			3				7																			25				
*37:35, 57:24			3												15											25				
*38:02:01-38:04, 38:08, 38:15, 38:23, 38:29, 38:35																										w				
*38:06-38:07, 51:01:01-51:07:02, 51:09:01-51:19, 51:21-51:22, 51:24:01-51:24:04, 51:26-51:35, 51:37-51:41N, 51:43, 51:45-51:46, 51:48-51:50, 51:52-51:53, 51:55-51:77, 51:79-51:96, 51:98N-51:102, 51:105-51:107, 51:109-51:111, 51:113-51:118N, 51:120-51:140, 51:142-51:146, 51:148, 52:01:01:01-52:01:01:02, 52:01:03, 52:01:05-52:01:08, 52:01:10-52:01:16, 52:04-52:05, 52:08, 52:10:01-52:14, 52:17-52:18, 52:22-52:25, 52:27-52:30, 53:01:01-53:02, 53:04-53:08:02, 53:10, 53:14-53:21, 53:23-53:26, 53:28-53:29, 58:01:01-58:02, 58:04-58:06, 58:08:01-58:10N, 58:12-58:16, 58:18-58:19, 58:21-58:29, 58:31N-58:35, 58:37								7																		w				
*38:18																														
*38:30															15											w				
*39:46																										w				
*40:01:11, 40:58												12														25		27		
*40:08, 40:25, 40:68, 40:106, 50:15		2										12		14												25				
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	25	26	27	28		

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230																195	265									
		260																										
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
			32					37			40								48									*35:169
																												*35:204
																												*35:217
			32							39																		*37:01:08
			32							39																		*37:06
29		32		34						39																		*37:10
29		32								39																		*37:19
		32																										*37:32
		32								39																		*37:34
		32								39																		*37:35, 57:24
						36																						*38:02:01-38:04, 38:08, 38:15, 38:23, 38:29, 38:35
																												*38:06-38:07, 51:01:01- 51:07:02, 51:09:01-51:19, 51:21-51:22, 51:24:01- 51:24:04, 51:26-51:35, 51:37-51:41N, 51:43, 51:45- 51:46, 51:48-51:50, 51:52- 51:53, 51:55-51:77, 51:79- 51:96, 51:98N-51:102, 51:105-51:107, 51:109- 51:111, 51:113-51:118N, 51:120-51:140, 51:142- 51:146, 51:148, 52:01:01:01- 52:01:01:02, 52:01:03, 52:01:05-52:01:08, 52:01:10- 52:01:16, 52:04-52:05, 52:08, 52:10:01-52:14, 52:17-52:18, 52:22-52:25, 52:27-52:30, 53:01:01- 53:02, 53:04-53:08:02, 53:10, 53:14-53:21, 53:23- 53:26, 53:28-53:29, 58:01:01-58:02, 58:04- 58:06, 58:08:01-58:10N, 58:12-58:16, 58:18-58:19, 58:21-58:29, 58:31N-58:35, 58:37
						36																						*38:18
		32								38 39		42											52					*38:30
																												*39:46
																												*40:01:11, 40:58
																												*40:08, 40:25, 40:68, 40:106, 50:15
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	195	150								260	155	190		180				225	135	255	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	25	26	27	28	
*40:13, 40:19, 40:109, 40:117, 49:01:01-49:01:04, 49:04-49:19N, 49:22-49:23, 57:51		2									11					16									25				
*40:47, 40:96, 40:157, 40:201, 49:02		2									11														25				
*40:76, 40:208, 50:06		2																							25				
*40:83, 40:170, 50:07		2						8				12													25				
*40:110, 40:188, 47:01:01:01-47:01:02, 47:04-47:06, 47:08		2									11														25				
*40:132, 40:178		2				6						12						18							25				
*40:136, 41:02:01-41:03:02, 41:08, 41:11, 41:13, 41:15, 41:19, 41:23-41:24		2										12			15										25				
*40:166		2										12	w												25				
*41:01, 41:06-41:07, 41:09, 41:14, 41:16-41:17, 41:20, 41:25		2										12		15											25				
*41:04, 41:18		2										12		15											25				
*41:05		2												15											25				
*41:10		2										12													25				
*41:12, 41:22												12		15											25				
*41:21		2										12		15											25				
*45:01, 45:05, 45:11-45:13		2				6			9			12													25		27		
*45:02		2				6						12													25		27		
*45:03		2										12													25		27		
*45:04, 45:08, 45:10		2										12													25				
*45:06		2				6			9			12													25		27		
*45:07		2				6			9			12													w		27		
*45:09		2				6						12		15											25		27		
*45:14		2				6			9			12		15											25		27		
*47:03		2									11	w													25				
*47:07		2									11										22				25				
*49:03							7																		25		27		
*49:20		2				6			9		11				16										25		27		
*49:21		2													16										25				
*49:24		2									11				16				20						25				
*49:25, 57:45											11				16										25				
*50:02		2				6			9			12													25		27		
*51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19							7								15										w				
*51:23, 51:108, 52:15						6	7																		w		27		
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	25	26	27	28	

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

90	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	Length of spec.
255	195	110	155	150	170	85	145	210	225	75	235	255	130	110	85	220	165	65	105	85	95	110	130	210	280	260	280	PCR product(s)
		230																195	265									
		260																										
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.
																												*40:13, 40:19, 40:109, 40:117, 49:01:01-49:01:04, 49:04-49:19N, 49:22-49:23, 57:51
29																												*40:47, 40:96, 40:157, 40:201, 49:02
																												*40:76, 40:208, 50:06
																												*40:83, 40:170, 50:07
																												*40:110, 40:188, 47:01:01:01-47:01:02, 47:04- 47:06, 47:08
								37		40																		*40:132, 40:178
			32						38	39		42																*40:136, 41:02:01-41:03:02, 41:08, 41:11, 41:13, 41:15, 41:19, 41:23-41:24
												42																*40:166
			32						39			42																*41:01, 41:06-41:07, 41:09, 41:14, 41:16-41:17, 41:20, 41:25
			32					38	39																			*41:04, 41:18
			32						39			42																*41:05
			32					38	39																			*41:10
			32						39			42																*41:12, 41:22
			32						39																			*41:21
30		32		34							40																	*45:01, 45:05, 45:11-45:13
		32									40																	*45:02
		32									40																	*45:03
		32		34					39																			*45:04, 45:08, 45:10
30		32		34							40	42																*45:06
30		32		34							40																	*45:07
	31	32						37		40																		*45:09
30		32		34				37		40	42																	*45:14
																												*47:03
																												*47:07
																												*49:03
30											40																	*49:20
																												*49:21
																												*49:24
																												*49:25, 57:45
30											40																	*50:02
		32							39		42																	*51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19
								37																				*51:23, 51:108, 52:15
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	Well No.

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Length of spec.	260	90	225	160	75	170	155	90	120	125	150	145	90	95	170	145	195	115	150	150	130	100	290	145	225	145	100	160	130	
PCR product(s)					255	195		300	195	150							195	155	115	190		180					145	135	255	165
																		260									225			
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	25	26	27	28		
*51:42	1			4			7										17						23							
*51:51, 52:31, 58:38-58:39N							7																							
*51:54, 51:78:01-51:78:02, 52:20, 53:09, 53:11-53:13																									w					
*51:103, 51:119							7	8																	w					
*51:112											11			14		16									w					
*52:01:02, 52:01:04, 52:01:09, 52:03, 52:06:01- 52:06:02, 52:09, 52:21							7																		w		27			
*52:02																									w		27			
*52:26				4			7																		w					
*53:22	1		3			6	7								15										w					
*53:27							7																		w					
*55:56, 56:13															15										25					
*57:04																									25					
*57:07	1					6												18							25					
*58:07						6	7																		w					
*82:01-82:02						6			9						15										25					
*82:03						6			9						15										?					
*83:01	1		3														17								25					
A*23:31				4																										
A*24:106																														
A*24:137																										26				
A*30:29, A*31:61																														
C*03:96, C*15:52																														
C*03:147																														
C*05:10, C*08:44, C*08:61																														
C*05:62, C*07:68, C*07:140, C*07:151, C*07:199:01-07:199:02																														
C*07:04:01-07:04:08, C*07:11-07:12, C*07:45, C*07:63, C*07:101, C*07:139, C*07:142,C* 07:181, C*07:272																														
C*07:69, C*08:68																														
C*07:231				4																										
C*15:25	1		3			6																								
C*16:10																														
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	25	26	27	28		

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“Instructions for Use” (IFU)

Lot-specific information

[illegible]

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
“Instructions for Use” (IFU)

Lot No.: 69R**Lot-specific information**

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-B*44 subtyping.

In addition, wells number 2, 3, 10, 11, 14, 16, 21 to 23, 26, 27, 29, 30, 34 to 36, 38, 39, 42 to 45 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 exon or the 4th 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 nucleotide position, in 2nd, 3rd, 4th or 5th exon or 3rd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

⁴The sequence of B*4401 has been shown to be identical to B*44:02:01:01.

⁵HLA-B*44 alleles in bold lettering are listed as confirmed alleles on the on the IMGT/HLA web page www.ebi.ac.uk/imgt/hla, release 3.10.0, October 2012.

⁶The B*44:32 and 44:124 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

⁷The B*44:58N and 44:139 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 47.

⁸The B*44:69 and 44:85 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 26.

⁹The B*44:72 and 44:93 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 47.

¹⁰The B*44:94 and 44:98 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 31.

¹¹Primer mix 5: Specific PCR fragment of 75 bp in the B*44:04, 44:28:01-44:28:02, 44:56N and 44:76 and the B*07:20, 07:140, 07:153 and 35:45 alleles. Specific PCR fragment of 255 bp in the B*44:70 allele.

Primer mix 6: Specific PCR fragment of 170 bp in the B*44:39 allele. Specific PCR fragment of 195 bp in the B*44:05:01-44:05:04, 44:10, 44:15, 44:17-44:18, 44:25, 44:31, 44:43:01-44:43:02, 44:58N, 44:62, 44:70, 44:75, 44:77-44:78, 44:82, 44:107, 44:117, 44:123, 44:134, 44:136, 44:139-44:140, 44:144 and 44:158 and in the B*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 35:169, 40:132, 40:178, 45:01-45:02, 45:05-45:07, 45:09, 45:11-45:14, 46:17, 49:20, 50:02, 51:23, 51:108, 52:15, 53:22, 57:07, 58:07 and 82:01-82:03 and the C*15:25 alleles.

Primer mix 8: Specific PCR fragment of 90 bp in the B*44:07-44:08 and 44:57 and the B*13:58, 15:183, 18:80, 27:52, 27:67, 35:84, 35:90, 35:150, 35:184, 35:201, 40:83, 40:170, 40:185, 40:209, 46:10, 50:07, 51:103 and 51:119 alleles. Specific PCR fragment of 115 bp in the B*44:38 allele. Specific PCR fragment of 300 bp in the B*44:71 allele.

Primer mix 9: Specific PCR fragment of 120 bp in the B*44:23N allele. Specific PCR fragment of 195 bp in the B*44:10, 44:15 and 44:18 and in the B*44:10, 44:15, 44:18 and 44:140 and the B*45:01, 45:05-45:07, 45:11-45:14, 49:20, 50:02, 82:01-82:03 alleles.

Primer mix 10: Specific PCR fragment of 125 bp in the B* 44:24 allele. Specific PCR fragment of 150 bp in the B*44:92 allele.

Primer mix 18: Specific PCR fragment of 115 bp in the B*44:31 and in the B*40:132 and 40:178 alleles. Specific PCR fragment of 155 bp in the B*44:74 allele. Specific PCR fragment of 260 bp in the B* 44:19N, 44:82, 44:96 and 44:153 and in the B*57:07 alleles.

Primer mix 19: Specific PCR fragment of 150 bp in the B*44:11 allele. Specific PCR fragment of 190 bp in the B*44:30 allele.

Primer mix 21: Specific PCR fragment of 100 bp in the B*44:32 allele. Specific PCR fragment of 180 bp in B*44:16, 44:21, 44:64:01-44:64:02, 44:124 and 44:150 and the B*07:28 alleles.

Primer mix 26: Specific PCR fragment of 100 bp in the B*44:69 allele. Specific PCR fragment of 135 bp in the B*44:33 allele. Specific PCR fragment of 225 bp in the B*44:85 and the A*24:137 alleles.

Primer mix 27: Specific PCR fragment of 160 bp in the B*44:02:10 and 44:34:01 and the B*40:01:11, 40:58, 49:03, 52:01:02, 52:01:04, 52:01:09, 52:02-52:03, 52:06:01-52:06:02, 52:09 and 52:21 alleles.

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: 69R**Lot-specific information**

Specific PCR fragment of 255 bp in B*44:15, 44:18, 44:20, 44:47 and 44:100 and the B*45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 49:20, 50:02, 51:23, 51:108 and 52:15 alleles.

Primer mix 28: Specific PCR fragment of 130 bp in the B*44:68 allele. Specific PCR fragment of 165 bp in the B*44:35 allele.

Primer mix 29: Specific PCR fragment of 90 bp in the B*44:117 and the B*14:10, 35:59, 37:19, 38:20 and 39:42 alleles. Specific PCR fragment of 255 bp in the B*44:15, 44:55 and 44:103 and the B*13:23, 13:55, 18:09, 27:01, 37:10, 40:47, 40:96, 40:157, 40:201 and 49:02 alleles.

Primer mix 31: Specific PCR fragment of 110 bp in the B*44:94 allele. Specific PCR fragment of 195 bp in the B*44:17, 44:43:01-44:43:02 and 44:144 and the B*15:14, 15:91, 15:131, 15:161, 18:56, 35:45, 35:71, 45:09, 46:17, 53:22 and 58:07 alleles. Specific PCR fragment of 230 bp in the B*44:98 and in the A*30:29 and A*31:61 alleles. Specific PCR fragment of 260 bp in the B*44:99 allele.

Primer mix 33: Specific PCR fragment of 150 bp in the B*44:81 allele. Specific PCR fragment of 185 bp in the B*44:16, 44:37:01-44:37:02, 44:64:01-44:64:02, 44:80, 44:91, 44:132 and 44:150 and in the B*07:28, 08:87, 15:77, 15:233, 52:26 and 57:04 and the A*23:31, A*24:106, C*07:231 and C*16:10 alleles.

Primer mix 35: Specific PCR fragment of 85 bp in the B*44:63 allele. Specific PCR fragment of 180 bp in the B*44:04, 44:56N, 44:132 and 44:163 and in the B*08:87 and the C*07:231 and C*16:10 alleles.

Primer mix 36: Specific PCR fragment of 145 bp in the B*44:40, 44:44, 44:130 and 44:156 and the B*07:149, 08:02, 15:115, 27:01, 38:02:01-38:04, 38:08, 38:15, 38:18, 38:23, 38:29, 38:35 and 56:07 alleles. Specific PCR fragment of 235 bp in the B*44:142Q allele.

Primer mix 40: Specific PCR fragment of 235 bp in the B*44:10, 44:15, 44:18 and 44:48 and in the B*35:45, 35:71, 35:169, 45:01-45:03, 45:05-45:07, 45:09, 45:11-45:14, 49:20, 50:02 and 53:22 and the C*15:25 alleles. Specific PCR fragment of 260 bp in the B*44:31, 44:41:01-44:41:02, 44:54, 44:65, 44:106, 44:135 and 44:158 and the B*07:20, 07:140, 07:153, 15:14, 15:91, 15:131, 15:161, 18:56, 27:47, 27:50, 40:132, 40:178 and 46:17 alleles. Specific PCR fragment of 235 and 260 bp in the 58:07 and 82:01-82:03 alleles.

Primer mix 42: Specific PCR fragment of 130 bp in the B*44:90 and 44:97 and in the B*40:166 and 45:06 and the C*07:69 and C*08:68 alleles. Specific PCR fragment of 165 bp in the B*44:14 and 44:62 and the B*08:01:01-08:05, 08:08N-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26-08:27, 08:29-08:36, 08:38-08:39, 08:41-08:48, 08:50-08:54, 08:56:01-08:69, 08:71-08:73, 08:75-08:76, 08:78, 08:80-08:86N, 08:88, 08:90-08:105, 15:83, 35:87, 37:12, 38:30, 40:136, 41:01-41:03:02, 41:05-41:09, 41:11-41:17, 41:19-41:20, 41:22-41:25, 42:01:01-42:02, 42:04-42:08, 42:10-42:15, 42:17, 45:14, 51:08, 51:20, 51:36, 51:44N, 51:97, 51:141, 52:19, 55:20, 55:56, 56:13, 57:09 and 82:01-82:03 alleles.

Primer mix 43: Specific PCR fragment of 110 bp in the B*44:52N allele. Specific PCR fragment of 165 bp in the B*44:29 and 44:89 alleles.

Primer mix 44: Specific PCR fragment of 85 bp in the B*44:53 and in the B*08:87 and the C*07:231 and C*16:10 alleles. Specific PCR fragment of 160 bp in the B*44:73, 44:76, 44:79, 44:146^w and 44:150 and the B*15:77^w, 15:233^w and 52:26 alleles. Specific PCR fragment of 85 bp and 160 bp in the B*07:28 allele.

Primer mix 45: Specific PCR fragment of 220 bp in the B*44:36 allele. Specific PCR fragment of 250 bp in the B*44:54, 44:86, 44:106, 44:135 and 44:158 and the B*07:20, 07:140, 07:153 and 53:27 alleles.

Primer mix 46: Specific PCR fragment of 165 bp in the B*44:66 allele. Specific PCR fragment of 450 bp in the B*44:56N allele.

Primer mix 47: Specific PCR fragment of 65 bp in the B*44:93 and 44:139 alleles. Specific PCR fragment of 115 bp in the B*44:72 allele. Specific PCR fragment of 195 bp in the B*44:58N allele.

Primer mix 48: Specific PCR fragment of 105 bp in the B*44:61N allele. Specific PCR fragment of 140 bp in B*44:59:01 allele. Specific PCR fragment of 265 bp in the B*44:78 and 44:120 and in the B*35:204 and C*03:147 alleles.

Primer mix 50: Specific PCR fragment of 95 bp in the B*44:111 allele. Specific PCR fragment of 285 bp in B*44:148 and the C*05:10, C*08:44 and C*08:61 alleles.

Primer mix 52: Specific PCR fragment of 130 bp in the B*44:143 allele. Specific PCR fragment of 405 bp in B*44:118 and the B*39:46 alleles.

‘w’, might be weakly amplified.

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

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Lot-specific information

CELL LINE VALIDATION SHEET																					
HLA-B*44 SSP subtyping kit																					
						Well															
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					Prod. No.:	201185601	201311502	201185603	201185604	201311505	201185606	201185607	201185608	201311509	201185610	201311511	201185612	201185613	201185614	201185615	201185616
	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	SSTO	*44:02			+	+	+	-	-	-	-	-	-	-	+	-	-	-	-	-
36	9024	KT17	*15:01	*35:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*08:01	*27:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
40	9134	WHONP199	*13:02	*46:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*14:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*42:01	*50:01		-	+	-	-	-	-	-	-	-	-	-	+	-	-	+	-
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*51:01			-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*35:01	*44:03		+	+	-	+	-	-	-	-	-	-	+	-	-	-	-	-

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **69R**

Lot-specific information

CELL LINE VALIDATION SHEET				HLA-B*44 SSP subtyping kit																		
				Prod. No.:	Well																	
					17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
					201185617	201311518	201185619	201185620	201298921	201185622	201185623	201185624	201185625	201185626	201185627	201185628	201311529	201185630	201185631	201185632		
	IHWC cell line	B*																				
1	9001 SA	*07:02			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
2	9280 LK707	*52:01	*73:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
3	9011 E4181324	*52:01			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
4	9275 GU373	*15:10	*53:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
5	9009 KAS011	*37:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+		
6	9353 SM	*39:01	*51:01		-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
7	9020 QBL	*18:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
8	9025 DEU	*35:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
9	9026 YAR	*38:01			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
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			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
23	9124 IHL	*40:02	*56:02		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
24	9035 JBUSH	*38:01			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
25	9049 IBW9	*14:02			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
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			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
35	9302 SSTO	*44:02			+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+		
36	9024 KT17	*15:01	*35:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
37	9065 HHKB	*07:02			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
38	9099 LZL	*15:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
39	9315 CML	*08:01	*27:05		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+		
40	9134 WHONP199	*13:02	*46:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
41	9055 H0301	*14:02			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
42	9066 TAB089	*46:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
43	9076 T7526	*46:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
44	9057 TEM	*38:01			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
45	9239 SHJO	*42:01	*50:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+		
46	9013 SCHU	*07:02			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-		
47	9045 TUBO	*51:01			-	-	-	-	-	-	-	-	f	-	-	-	-	-	-	-		
48	9303 TER-ND	*35:01	*44:03		+	-	-	-	-	+	-	-	f	-	-	-	-	-	-	-		

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Lot-specific information

[illegible]

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **69R**

Lot-specific information

CELL LINE VALIDATION SHEET													
HLA-B*44 SSP subtyping kit													
					Well								
						49	50	51	52	53	54	55	56
				Prod. No.:		201311549	201311550	201298951	201311552	201298953	201311554	201311555	201311556
	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	SSTO	*44:02		-	-	-	-	-	-	-	-	-
36	9024	KT17	*15:01	*35:01	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-
38	9099	LZL	*15:01		-	-	-	-	-	-	-	-	-
39	9315	CML	*08:01	*27:05	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*13:02	*46:01	-	-	-	-	-	-	-	-	-
41	9055	H0301	*14:02		-	-	-	-	-	-	-	-	-
42	9066	TAB089	*46:01		-	-	-	-	-	-	-	-	-
43	9076	T7526	*46:01		-	-	-	-	-	-	-	-	-
44	9057	TEM	*38:01		-	-	-	-	-	-	-	-	-
45	9239	SHJO	*42:01	*50:01	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-
47	9045	TUBO	*51:01		-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*35:01	*44:03	-	-	-	-	-	-	-	-	-

101.563-24/03 – including *Taq* pol., IFU-01
 101.563-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-B*44 SSP

Product number: 101.563-24/03 – including *Taq* pol.
 101.563-24u/03u – without *Taq* pol.
 Lot number: 69R
 Expiry date: 2015-July-01
 Number of tests: 24 tests – Product No. 101.563-24/24u
 3 tests – Product No. 101.563-03/03u
 Number of wells per test: 56

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2011-856-01	21	2012-989-21	41	2011-856-41
2	2013-115-02	22	2011-856-22	42	2011-856-42
3	2011-856-03	23	2011-856-23	43	2011-856-43
4	2011-856-04	24	2011-856-24	44	2011-856-44
5	2013-115-05			45	2011-856-45
6	2011-856-06	25	2011-856-25	46	2011-856-46
7	2011-856-07	26	2011-856-26	47	2011-856-47
8	2011-856-08	27	2011-856-27	48	2011-856-48
		28	2011-856-28		
9	2013-115-09	29	2013-115-29	49	2013-115-49
10	2011-856-10	30	2011-856-30	50	2013-115-50
11	2013-115-11	31	2011-856-31	51	2012-989-51
12	2011-856-12	32	2011-856-32	52	2013-115-52
13	2011-856-13			53	2012-989-53
14	2011-856-14	33	2011-856-33	54	2013-115-54
15	2011-856-15	34	2013-115-34	55	2013-115-55
16	2011-856-16	35	2011-856-35	56	2013-115-56
		36	2013-115-36		
17	2011-856-17	37	2011-856-37		
18	2013-115-18	38	2011-856-38		
19	2011-856-19	39	2011-856-39		
20	2011-856-20	40	2011-856-40		

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 10, 18, 19, 21, 22, 24, 26, 28, 33 and 43 to 56 were available. The specificities of the primers in primer solutions 10, 18, 21, 26, 33, 44 to 46, 50, 55 and 56 were tested by separately adding one or two additional 5'-primers, respectively one or two additional 3'-primers. In primer solutions 19, 22, 28, 43, 47, 48 and 54 it was only possible to test the 5'-primer, the 3'-primer was not possible to test. In primer solutions 49 and 51 to 53 it was only possible to test the 3'-primer, the 5'-primer was not possible to test. In primer solution 24 neither the 5'-primer nor the 3'-primer was possible to test.

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

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Lot No.: 69R**Lot-specific information**

In primer solutions 5, 6, 18, 21, 26, 31, 33, 37, 45 and 46 one or two of the 5'-primers were not possible to test. In primer solutions 1, 2, 7, 8, 10, 17, 35, 36, 44, 46, 50 and 56 one or more of the 3'-primers were not possible to test.

Additional primers in primer solutions 6 to 8, 27, 29, 31, 35, 36 and 42 were tested by separately adding one 5'-primer or one 3'-primer.

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

Date of approval: 2013-February-11

Approved by:

Production Quality Control

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
“Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

Declaration of Conformity

Product name: *Olerup* SSP® HLA-B*44
Product number: 101.563-24/24u, -03/03u
Lot number: 69R

Intended use: HLA-B*44 high resolution histocompatibility testing

Manufacturer: *Olerup* SSP AB
Franzengatan 5
SE-112 51 Stockholm, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2012, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex 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
2015-January-19

Daniel Malica
Head of QA and Regulatory Affairs

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

101.563-24/03 – including *Taq* pol., IFU-01
101.563-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
“Instructions for Use” (IFU)

Lot No.: **69R**

Lot-specific information

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