

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information
Olerup SSP[®] HLA-A*03

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Product number: 101.413-24/04 – including *Taq* pol.
 101.413-24u/04u – without *Taq* pol.

Lot number: 88R

Expiry date: 2015-August-01

Number of tests: 24 tests – Product No. 101.413-24/24u
 4 tests – Product No. 101.413-04/04u

Number of wells per test: 64

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. 88R.

**CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[®]
 HLA-A*03 Lot (97N)**

The HLA-A*03 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-A*03 specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP[®]* HLA-A*03 lot was made (**Lot No. 97N**).

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

Well	5'-primer	3'-primer	rationale
1	-	Added	3'-primer added for the A*03:01:35 allele.
21	-	Added	3'-primer added for the A*03:17:02 allele.
26	-	Modified	Modified 3'-primer for improved allelic resolution.
27	Added	-	5'-primer added for the A*03:149 allele.

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49	Added	Added	Primer pair added for the A*03:161N allele.
51	-	Added	3'-primer added for improved resolution of the A*03:50 allele.
53	-	Added	3'-primer added for the A*03:150 allele, exchanged positive control primer pair.
58	-	Added	3'-primer added for the A*03:150 allele.

Change in revision R01 compared to R00:

1. Primer mix 28 does not amplify the A*03:26 and the A*11:77 and 11:126 alleles. Thus, this lot of the HLA-A*03 subtyping kit cannot distinguish the A*03:26 and the A*03:01:01:01, 03:01:01:03, 03:01:03-03:01:05, 03:01:07, 03:01:09-03:01:11, 03:01:13, 03:01:15-03:01:22, 03:01:24-03:01:29 and 03:01:31-03:01:38 alleles.

Change in revision R02 compared to R01:

1. Primer mixes 53 and 58 do not amplify the A*01:14, 36:01 and 36:05 alleles. This has been corrected in the Specificity and Interpretation Tables.

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PRODUCT DESCRIPTION

HLA-A*03 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the A*03:01 to A*03:161N alleles.

PLATE LAYOUT

Each test consists of 64 PCR reactions in a 64 well PCR plate.

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
57	58	59	60	61	62	63	64

The 64 well cut PCR plate is marked with ‘HLA-A*03’ in silver/gray ink.

Well No. 1 is marked with the Lot No. ‘88R’.

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-A*03 SSP subtypings will be influenced by most A*01, most A*02, the A*11, most A*23, most A*24, the A*25:03, nine A*26, the A*29, most A*30, most A*31, most A*32, most A*33, the A*34, the A*36, most A*66, most A*68, the A*69:01, the A*74 and the A*80 alleles when present on the other haplotype. In addition, the C*07:35 and C*08:48 alleles are amplified by primer mix 46 and the C*07:86 allele is amplified by primer mix 48.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*03 alleles, i.e. **A*03:01 to A*03:161N**, recognized by the HLA Nomenclature Committee in October 2012¹ will be amplified by the primers in the HLA-A*03 subtyping kit^{2,3}.

The HLA-A*03 kit enables separation of the confirmed HLA-A*03 alleles as listed in the IMGT/HLA database. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA-A*03 alleles is listed below.

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The HLA-A*03 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-A*03 subtyping kit cannot distinguish following silent mutations: the A*03:01:01:01, 03:01:01:03, 03:01:03-03:01:05, 03:01:07, 03:01:09-03:01:11, 03:01:13, 03:01:15-03:01:22, 03:01:24-03:01:29 and 03:01:31-03:01:38 alleles, the A*03:01:02, 03:01:06 and 03:01:14 alleles, the A*03:01:12 and 03:01:23 alleles, the A*03:02:01-03:02:03 alleles, the *03:04:01-03:04:03 alleles, the *03:17:01-03:17:02 alleles, the A*03:22:01-03:22:02 alleles and the A*03:23:01-03:23:02 alleles.

The A*03:16 and A*03:61 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 20.

The A*03:17:01-03:18:02 and A*03:74 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

The A*03:20, and A*03:47 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 43.

The A*03:22:01-03:22:02 and A*03:103 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 23.

The A*03:25 and A*03:71 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 27.

The A*03:27 and A*03:49 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 30.

The A*03:33 and A*03:70 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

The A*03:38 and A*03:68N alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 41.

The A*03:44 and A*03:53 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 46.

The A*03:78 and A*03:161N alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 49.

The A*03:118 and A*03:134 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 57.

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

²The HLA-A*03 primer set cannot separate the A*03:05:02 and A*30:55 alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the HLA-A*30 high resolution kit.

The HLA-A*03 primer set cannot separate the A*03:95 and 74:13 alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the HLA-A*74 high resolution kit.

³This lot of the HLA-A*03 subtyping kit cannot distinguish the A*03:26 and the A*03:01:01:01, 03:01:01:03, 03:01:03-03:01:05, 03:01:07, 03:01:09-03:01:11, 03:01:13, 03:01:15-03:01:22, 03:01:24-03:01:29 and 03:01:31-03:01:38 alleles.

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Lot-specific Information

www.olerup-ssp.com**ALLELE CONFIRMATION STATUS**

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

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Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*03:114	Unconfirmed	A*03:134	Unconfirmed	A*03:154	Unconfirmed
A*03:115	Unconfirmed	A*03:135	Unconfirmed	A*03:155	Unconfirmed
A*03:116	Unconfirmed	A*03:136	Unconfirmed	A*03:156	Unconfirmed
A*03:117	Unconfirmed	A*03:137	Unconfirmed	A*03:157	Unconfirmed
A*03:118	Unconfirmed	A*03:138	Unconfirmed	A*03:158	Unconfirmed
A*03:119	Unconfirmed	A*03:139	Unconfirmed	A*03:159	Unconfirmed
A*03:120	Unconfirmed	A*03:140	Unconfirmed	A*03:160	Unconfirmed
A*03:121	Unconfirmed	A*03:141	Unconfirmed	A*03:161N	Unconfirmed
A*03:122	Unconfirmed	A*03:142	Unconfirmed		
A*03:123	Confirmed	A*03:143	Confirmed		
A*03:124	Unconfirmed	A*03:144	Unconfirmed		
A*03:125	Unconfirmed	A*03:145	Unconfirmed		
A*03:126	Unconfirmed	A*03:146	Unconfirmed		
A*03:127	Confirmed	A*03:147	Unconfirmed		
A*03:128	Confirmed	A*03:148	Unconfirmed		
A*03:129N	Unconfirmed	A*03:149	Confirmed		
A*03:130	Confirmed	A*03:150	Confirmed		
A*03:131	Unconfirmed	A*03:151	Unconfirmed		
A*03:132	Unconfirmed	A*03:152	Unconfirmed		
A*03:133	Confirmed	A*03:153	Unconfirmed		

¹Allele 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.

RESOLUTION IN HOMO- AND HETEROZYGOTES

A total of 208 alleles generate 107 amplification patterns that can be combined in 5778 homozygous and heterozygous combinations. 3507 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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www.olerup-ssp.com**SPECIFICITY TABLE****HLA-A*03 SSP subtyping**

Specificities and sizes of the PCR products of the 64 primer mixes used for
 HLA-A*03 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*03 alleles ³	Other amplified HLA-A alleles ⁴
1	235 bp	800 bp	*03:01:01:01-03:01:29, 03:01:31-03:04:03, 03:06- 03:09, 03:11N-03:17:02, 03:19-03:39, 03:41, 03:43- 03:74, 03:76-03:94, 03:96- 03:97, 03:99-03:104, 03:106-03:121, 03:123- 03:134, 03:136-03:161N	*11:130, 32:04, 36:02
2 ⁶	225 bp	1070 bp	*03:01:01:01-03:01:11, 03:01:12 ^w , 03:01:13- 03:01:22, 03:01:23 ^w , 03:01:24-03:07, 03:09- 03:11N, 03:13-03:31, 03:33-03:35, 03:37-03:40, 03:42-03:56, 03:58, 03:60- 03:71, 03:73-03:87, 03:90- 03:106, 03:109-03:110, 03:112-03:141, 03:143- 03:148, 03:150-03:151, 03:153-03:161N	*01:13, 02:34 ^w -02:35:03 ^w , 02:56:01 ^w - 02:56:02 ^w , 02:62 ^w , 02:103 ^w , 30:55, 34:08, 68:71, 74:13
3 ⁶	205 bp	1070 bp	*03:01:01:01-03:01:01:03, 03:01:03-03:01:05, 03:01:07-03:01:13, 03:01:15-03:01:38, 03:03N-03:05:01, 03:06, 03:08-03:09, 03:11N- 03:17:02, 03:19-03:30, 03:33-03:41, 03:43-03:49, 03:51-03:53, 03:55-03:63, 03:67-03:72, 03:74, 03:77- 03:81, 03:83-03:89, 03:91N-03:94, 03:96- 03:105, 03:107-03:112, 03:114-03:126, 03:128- 03:132, 03:134, 03:136- 03:139, 03:141-03:152, 03:154-03:159, 03:161N	*11:25, 32:04, 34:02:01, 34:02:03- 34:04, 34:07-34:10N

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4	215 bp	800 bp	*03:02:01-03:02:03, 03:10, 03:31-03:32, 03:65, 03:69N, 03:73, 03:76, 03:82, 03:90, 03:106, 03:113, 03:160	*01:12, 01:19, 01:25, 11:01:01-11:07, 11:09-11:22, 11:27, 11:29-11:30, 11:32-11:34, 11:36-11:43, 11:45- 11:49, 11:51-11:52Q, 11:54-11:93, 11:95-11:100, 11:102-11:117, 11:119- 11:132, 24:51, 24:92
5	185 bp	800 bp	*03:03N	
6	275 bp	1070 bp	*03:04:01-03:04:03	*01:86, 30:34
7	225 bp	1070 bp	*03:06, 03:69N	
8	240 bp	1070 bp	*03:01:01:01-03:01:07, 03:01:09-03:11N, 03:13- 03:40, 03:42-03:56, 03:58- 03:87, 03:89-03:106, 03:108, 03:110-03:151, 03:153-03:161N	*01:13, 01:28, 02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:48, 02:01:50-02:01:81, 02:01:83-02:04, 02:07:01-02:07:02, 02:09, 02:11:01- 02:13, 02:15N-02:20:02, 02:22:01- 02:22:02, 02:24:01-02:27, 02:29- 02:40:02, 02:42-02:43N, 02:45-02:50, 02:52-02:53N, 02:55-02:56:02, 02:58- 02:60:02, 02:62-02:71, 02:73-02:77, 02:80, 02:82N-02:83N, 02:85-02:86, 02:88N-02:90, 02:92-02:97:02, 02:101:01-02:105, 02:107, 02:109- 02:111, 02:113N-02:121, 02:123, 02:125N, 02:128, 02:130-02:135, 02:138-02:141, 02:145, 02:147- 02:153, 02:155-02:168, 02:171:01- 02:171:02, 02:173-02:177, 02:181- 02:183, 02:185-02:228, 02:230- 02:231, 02:233-02:243, 02:245- 02:246, 02:249-02:258, 02:260- 02:270, 02:272-02:277, 02:279- 02:285, 02:287-02:289, 02:291- 02:294, 02:296-02:299, 02:301N- 02:309, 02:311-02:323, 02:325- 02:327, 02:329, 02:332, 02:334- 02:336, 02:338-02:343, 02:345- 02:354, 02:356N-02:357, 02:360- 02:372, 02:374-02:375, 02:377- 02:381, 02:383-02:386, 02:388- 02:392, 11:43, 11:88, 24:19, 24:28, 24:44, 24:89, 29:19, 29:39, 30:01:01- 30:01:07, 30:11:01-30:11:02, 30:13- 30:20, 30:23-30:24, 30:26, 30:30- 30:31, 30:35-30:44, 30:46, 30:48- 30:49, 30:52-30:56, 30:58-30:60, 30:62-30:63, 30:65, 31:01:02- 31:01:05, 31:01:07-31:06, 31:09, 31:11-31:32, 31:34-31:70,

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Lot No.: 88R			Lot-specific Information	www.olerup-ssp.com
				33:01:01-33:01:07, 33:03:01-33:03:05, 33:03:07-33:12, 33:14-33:16, 33:18:01-33:37, 33:39-33:47, 33:49- 33:50, 33:52-33:64, 34:08, 68:29, 68:45, 68:71, 74:01-74:09, 74:11- 74:17, 80:02
9⁹	230 bp	1070 bp	*03:05:01-03:05:02, 03:10, 03:42, 03:72	*02:156, 02:338, 11:04, 11:35, 11:88, 24:19, 30:01:01-30:04:02, 30:06- 30:20, 30:22-30:27N, 30:29-30:44, 30:46, 30:48-30:70N, 31:03-31:04, 33:49, 34:02:01-34:04, 34:07-34:10N, 36:01, 36:05, 68:45
10^{5,10}	65 bp, 205 bp	800 bp	*03:02:01-03:02:03, 03:07, 03:10, 03:31-03:32, 03:42, 03:60, 03:73, 03:76, 03:82, 03:90, 03:106, 03:113, 03:133, 03:160	*01:12, 01:19, 01:21, 02:156, 02:338, 11:31, 11:35, 11:60, 24:92, 30:04:01- 30:04:02, 30:06, 30:09, 30:17, 30:29, 30:46, 31:03-31:04, 33:49
11	225 bp	800 bp	*03:08, 03:32, 03:41, 03:107	*01:01:01:01-01:01:31, 01:01:33- 01:01:46, 01:01:48-01:01:51, 01:03- 01:04N, 01:06, 01:08-01:12, 01:14- 01:16N, 01:18N-01:19, 01:21-01:33, 01:35-01:42, 01:44-01:94, 01:96- 01:103, 01:105-01:107, 01:109- 01:122, 02:48, 02:81, 02:90, 02:124, 02:146, 25:03, 26:20, 32:01:01-32:02, 32:03 ^w , 32:04-32:06, 32:08 ^w , 32:09- 32:16, 32:18-32:26, 32:28-32:41, 32:43-32:55, 36:01-36:05, 74:01- 74:04, 74:08-74:12N, 74:14N-74:17, 80:01:01:01 ^w -80:01:01:02 ^w , 80:02
12	190 bp	1070 bp	*03:09, 03:108	*02:01:09, 02:05:05, 02:06:07, 02:50, 02:76:02, 02:122, 11:06, 11:18, 24:28, 24:89, 26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78, 29:19, 33:24, 68:05, 68:15, 68:20, 74:06
13	145 bp	800 bp	*03:01:01:02N	
14^{5,11}	105 bp, 235 bp	1070 bp	*03:11N, 03:59	
15	225 bp	1070 bp	*03:12, 03:88	*02:78, 11:01:01-11:02:01, 11:02:02 ^w , 11:02:03-11:05, 11:06 ^w , 11:07-11:16, 11:20-11:27, 11:29-11:39, 11:41- 11:42, 11:44, 11:46, 11:48-11:52Q, 11:54-11:77, 11:79-11:87, 11:89- 11:91, 11:93-11:97, 11:99N-11:105, 11:107-11:110, 11:112-11:120, 11:122-11:132, 30:08, 34:01:01-34:07,

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				34:09-34:10N, 66:01-66:02, 66:04, 66:06-66:10, 66:12-66:14, 66:16-66:19, 68:01:01:01-68:02:05, 68:06-68:14, 68:16-68:19, 68:21:01-68:28, 68:30, 68:32-68:35, 68:37-68:44, 68:47-68:56, 68:58-68:70, 68:72-68:83, 68:85-68:89, 68:91-68:96, 69:01
16	275 bp	1070 bp	*03:14	
17^{6,7}	215 bp	800 bp	*03:01:01:01-03:01:38, 03:03N-03:09, 03:11N-03:17:02, 03:19-03:30, 03:33-03:49, 03:51-03:64, 03:67-03:68N, 03:70-03:72, 03:74, 03:77-03:81, 03:83-03:89, 03:91N-03:94, 03:96-03:105, 03:107-03:112, 03:114-03:134, 03:136-03:152, 03:154-03:159, 03:161N	*01:06, 02:156, 02:338, 11:24:01-11:25, 11:31, 11:35, 30:01:01-30:03, 30:07-30:16, 30:18-30:20, 30:22-30:27N, 30:30-30:45, 30:48-30:51, 30:53-30:62, 30:64-30:70N, 31:03-31:04, 32:04, 33:49, 34:02:01-34:04, 34:07-34:10N, 80:01:01:01-80:02
18¹²	135 bp, 210 bp	1070 bp	*03:13, 03:50, 03:64, 03:66	*01:98, 11:08, 11:44, 30:04:01-30:04:02, 30:06, 30:17, 30:29, 30:46, 36:02
19⁷	230 bp	1070 bp	*03:15, 03:19	
20^{5,13}	60 bp, 175 bp	1070 bp	*03:16, 03:61	
21¹⁴	130 bp, 155 bp, 195 bp	1070 bp	*03:17:01-03:17:02, 03:74, 03:102	*01:88, 02:156, 02:338, 11:119, 24:51, 24:92, 30:61
22	250 bp	1070 bp	*03:18, 03:97, 03:122, 03:135	*01:01:01:01-01:01:02, 01:04N, 01:06-01:19, 01:21-01:33, 01:35-01:62, 01:64-01:65, 01:67-01:71, 01:74-01:101, 01:103-01:122, 11:27, 11:38-11:39, 11:94, 24:51, 24:92, 80:01:01:01-80:02
23^{5,15}	95 bp, 185 bp, 210 bp, 240 bp	1070 bp	*03:19, 03:22:01-03:22:02, 03:56, 03:75, 03:88, 03:99, 03:103	*02:237, 11:130, 24:18, 24:204, 24:213, 32:52, 36:02
24	470 bp	1070 bp	*03:21N	*01:04N, 11:21N, 23:07N, 24:11N
25	155 bp	1070 bp	*03:23:01-03:23:02	*01:83:01-01:83:02, 02:01:09, 02:05:05, 02:06:07, 02:11:02, 02:35:03, 02:50, 02:76:02, 02:122, 11:121, 24:08, 24:42, 24:89, 26:07:01-26:07:02, 33:08, 74:04

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26	190 bp	1070 bp	*03:24, 03:93	*01:51, 25:03, 32:15, 32:37, 34:08, 68:71
27^{5,16}	95 bp, 145 bp, 240 bp	1070 bp	*03:25, 03:71, 03:149	
28⁸	495 bp	1070 bp	*03:41, 03:63, 03:88	*11:130, 36:02
29⁵	100 bp	1070 bp	*03:01:01:01-03:07, 03:09-03:28, 03:30-03:31, 03:33, 03:35, 03:37-03:40, 03:42-03:61, 03:64-03:87, 03:90-03:106, 03:109-03:151, 03:153-03:161N	*02:34-02:35:03, 02:56:01-02:56:02, 02:62, 02:78, 02:103, 11:12, 23:13, 24:07, 24:24, 24:108, 24:112, 24:131, 29:01:01:01-29:18, 29:21-29:29, 29:31-29:33, 29:35-29:45, 30:01:01-30:01:07, 30:08, 30:11:01-30:11:02, 30:14L-30:20, 30:23-30:26, 30:30, 30:35-30:43, 30:48-30:49, 30:52-30:56, 30:58-30:60, 30:62-30:63, 30:65, 32:17, 34:09, 66:02, 66:12, 66:16, 68:01:01:01-68:02:05, 68:06-68:14, 68:16-68:19, 68:21:01-68:30, 68:32-68:39, 68:41-68:71, 68:73-68:84, 68:86-68:89, 68:91-68:92, 68:94N-68:96, 69:01, 74:13
30¹⁷	130 bp, 155 bp, 210 bp	1070 bp	*03:27, 03:49, 03:102	
31^{7,18}	200 bp, 230 bp	800 bp	*03:28, 03:56, 03:88, 03:99, 03:143	*11:130, 32:52, 36:02
32¹⁹	150 bp, 220 bp, 270 bp	1070 bp	*03:29, 03:67, 03:91N	
33²⁰	180 bp, 210 bp, 285 bp	1070 bp	*03:30, 03:62, 03:93, 03:152	*24:104, 32:05, 32:37, 80:01:01:01 ^w -80:02 ^w
34^{5,21}	125 bp, 160 bp	1070 bp	*03:31, 03:58	
35^{7,22}	235 bp, 275 bp	1070 bp	*03:32, 03:55	*31:21, 74:07
36^{5,23}	120 bp, 160 bp, 210 bp	1070 bp	*03:33, 03:70, 03:81	
37^{5,24}	95 bp, 120 bp, 225 bp	1070 bp	*03:34, 03:48, 03:81	
38²⁵	165 bp, 195 bp, 250 bp	800 bp	*03:35, 03:73, 03:79	
39²⁶	200 bp,	1070 bp	*03:36N, 03:45	

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	235 bp			
40	240 bp	1070 bp	*03:37	
41 ²⁷	185 bp, 275 bp	1070 bp	*03:38, 03:68N	
42 ^{7,28}	190 bp, 220 bp	800 bp	*03:39, 03:143	
43 ²⁹	150 bp, 260 bp	1070 bp	*03:20, 03:47, 03:76	
44 ³⁰	165 bp, 195 bp, 240 bp	1070 bp	*03:40, 03:51, 03:79	
45 ³¹	150 bp, 270 bp	1070 bp	*03:43, 03:91N	
46 ^{5,8,32}	110 bp, 190 bp	1070 bp	*03:44, 03:52-03:53	*02:164, 02:380, 30:30, 31:19, 31:69, C*07:35, C*08:48
47	240 bp	1070 bp	*03:41, 03:57, 03:107	*01:01:01:01-01:01:03, 01:01:05- 01:01:12, 01:01:14-01:01:28, 01:01:30-01:01:31, 01:01:33-01:01:34, 01:01:36-01:01:49, 01:01:51, 01:03- 01:04N, 01:06, 01:08-01:12, 01:14- 01:19, 01:21-01:23, 01:25-01:27N, 01:29-01:33, 01:35-01:42, 01:44- 01:94, 01:96-01:112, 01:114-01:122, 36:01-36:05, 74:10, 80:01:01:01- 80:01:01:02
48 ^{5,33}	70 bp, 110 bp, 145 bp	1070 bp	*03:46, 03:52, 03:54	*02:380, 31:19, C*07:86
49 ³⁴	195 bp, 545 bp	1070 bp	*03:78, 03:161N	*01:45, 11:108, 66:17
50	130 bp	1070 bp	*03:86	
51 ^{7,35}	215 bp, 285 bp	1070 bp	*03:50, 03:87	*01:101, 11:30, 30:04:01-30:04:02, 30:06, 30:17, 30:29, 30:46
52 ⁵	85 bp	1070 bp	*03:96	
53 ³⁶	225 bp, 260 bp	800 bp	*03:104, 03:150, 03:153	*33:49
54	240 bp	1070 bp	*03:111	
55	175 bp	800 bp	*03:112	
56	215 bp	1070 bp	*03:113	
57 ^{8,37}	180 bp, 275 bp	1070 bp	*03:118, 03:134	
58 ⁶	215 bp	1070 bp	*03:127, 03:150, 03:153	*01:06, 11:24:02
59	240 bp	1070 bp	*03:128	
60 ⁷	390 bp	1070 bp	*03:129N	

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61	170 bp	1070 bp	*03:130	
62	190 bp	1070 bp	*03:132	
63³⁸	175 bp, 200 bp	800 bp	*03:42, 03:123, 03:133	*02:156, 02:338, 11:16, 11:35, 11:57, 11:73, 30:09, 31:03-31:04, 33:49
64	225 bp	1070 bp	*03:18, 03:97, 03:122, 03:135	*02:19, 02:36-02:37, 02:54, 02:255, 23:01:01-23:03:02, 23:05-23:15, 23:17-23:30, 23:32-23:41, 23:44, 23:46-23:54, 24:02:01:01-24:02:04, 24:02:06-24:02:28, 24:02:30-24:02:63, 24:04-24:09N, 24:11N, 24:13:01- 24:14, 24:17, 24:19-24:21:02, 24:24- 24:32, 24:34-24:40N, 24:42-24:50, 24:52-24:64, 24:66-24:74, 24:76- 24:91, 24:93, 24:95-24:117, 24:119- 24:124, 24:126-24:131, 24:133- 24:137, 24:139-24:166, 24:168- 24:203, 24:205-24:206, 24:208- 24:209, 24:212-24:214, 24:216- 24:218, 24:220-24:222N, 29:03, 31:05, 33:10, 33:19, 68:26, 68:65, 80:01:01:01-80:02

¹Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of HLA-A*03 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.

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-A*03 subtyping.

In addition, wells number 4, 5, 10, 11, 13, 17, 31, 38, 42, 53, 55 and 63 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.

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⁴Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*03 alleles will be amplified by primer mixes 1 to 4, 6, 8 to 12, 15, 17, 18, 21 to 26, 28, 29, 31, 33, 35, 46 to 49, 51, 53, 58, 63 and 64. In addition, the C*07:35 and C*08:48 alleles are amplified by primer mix 46 and the C*07:86 allele is amplified by primer mix 48.

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

⁶Primer mix 2, 3, 17 and 58 may give rise to a lower yield of HLA-specific PCR product than the other A*03 primer mixes.

⁷Primer mixes 17, 19, 31, 35, 42, 51 and 60 may have tendencies of unspecific amplifications.

⁸Primer mixes 28, 46 and 57 have a tendency to giving rise to primer oligomer formation.

⁹Primer mix 9 may give rise to a long unspecific amplification product of approximately 750 bp. This should be disregarded when interpreting the A*03 typings.

¹⁰Primer mix 10: Specific PCR fragment of 65 bp in A*03:60 allele. Specific PCR fragment of 205 bp in the A*03:02:01-03:02:03, 03:07, 03:10, 03:31-03:32, 03:42, 03:73, 03:76, 03:82, 03:90, 03:106, 03:113, 03:133, 03:160, 01:12, 01:19, 01:21, 02:156, 02:338, 11:31, 11:35, 11:60, 24:92, 30:04:01-30:04:02, 30:06, 30:09, 30:17, 30:29, 30:46, 31:03-31:04 and 33:49 alleles.

¹¹Primer mix 14: Specific PCR fragment of 105 bp in the A*03:11N allele. Specific PCR fragment of 235 bp in the A*03:59 allele.

¹²Primer mix 18: Specific PCR fragment of 135 bp in the A*03:13 allele. Specific PCR fragment of 210 bp in the A*03:50, 03:64, 03:66, 01:98, 11:08, 11:44, 30:04:01-30:04:02, 30:06, 30:17, 30:29, 30:46 and 36:02 alleles.

¹³Primer mix 20: Specific PCR fragment of 60 bp in the A*03:61 allele. Specific PCR fragment of 175 bp in the A*03:16 allele.

¹⁴Primer mix 21: Specific PCR fragment of 130 bp in the A*03:17:01-03:17:02 and the A*01:88, 02:156, 02:338, 11:119, 24:51, 24:92 and 30:61 alleles. Specific PCR fragment of 155 bp in the A*03:102 allele. Specific PCR fragment of 195 bp in the A*03:74 allele.

¹⁵Primer mix 23: Specific PCR fragment of 95 bp in the A*03:22:01-03:22:02 alleles. Specific PCR fragment of 185 bp in the A*03:19 and 03:103 and the A*02:237 alleles. Specific PCR fragment of 210 bp in the A*03:56, 03:88 and 03:99 and the A*1:130 and 36:02 alleles. Specific PCR fragment of 240 bp in the A*03:75 allele. Specific PCR fragment of 95, 185 and 210 bp in the A*32:52 allele. Specific PCR fragments of 185 and 240 bp in the A*24:18, 24:204, 24:213, allele.

¹⁶Primer mix 27: Specific PCR fragment of 95 bp in the A*03:71 allele. Specific PCR fragment of 145 bp in the A*03:25 allele. Specific PCR fragment of 240 bp in the A*03:149 allele.

¹⁷Primer mix 30: Specific PCR fragment of 130 bp in the A*03:27 allele. Specific PCR fragment of 155 bp in the A*03:102 allele. Specific PCR fragment of 210 bp in the A*03:49 allele.

¹⁸Primer mix 31: Specific PCR fragment of 200 bp in the A*03:56, 03:88, 03:99 and 03:143 and the A*11:130, 32:52 and 36:02 alleles. Specific PCR fragment of 230 bp in the A*03:28 allele.

¹⁹Primer mix 32: Specific PCR fragment of 150 bp in the A*03:67 allele. Specific PCR fragment of 220 bp in the A*03:29 allele. Specific PCR fragment of 270 bp in the A*03:91N allele.

²⁰Primer mix 33: Specific PCR fragment of 180 bp in the A*03:93 and the A*32:37 and 80:01^w-80:02^w alleles. Specific PCR fragment of 210 bp in the A*03:30 and 03:152 and the A*24:104 and 32:05 alleles. Specific PCR fragment of 285 bp in the A*03:62 allele.

²¹Primer mix 34: Specific PCR fragment of 125 bp in the A*03:58 allele. Specific PCR fragment of 160 bp in the A*03:31 allele.

²²Primer mix 35: Specific PCR fragment of 235 bp in the A*03:32 and the A*31:21 and 74:07 alleles. Specific PCR fragment of 275 bp in the A*03:55 allele.

²³Primer mix 36: Specific PCR fragment of 120 bp in the A*03:81 allele. Specific PCR fragment of 160 bp in the A*03:33 allele. Specific PCR fragment of 210 bp in the A*03:70 allele.

²⁴Primer mix 37: Specific PCR fragment of 95 bp in the A*03:48 allele. Specific PCR fragment of 120 bp in the A*03:81 allele. Specific PCR fragment of 225 bp in the A*03:34 allele.

²⁵Primer mix 38: Specific PCR fragment of 165 bp in the A*03:35 allele. Specific PCR fragment of 195 bp in the A*03:79 allele. Specific PCR fragment of 250 bp in the A*03:73 allele.

²⁶Primer mix 39: Specific PCR fragment of 200 bp in the A*03:36N allele. Specific PCR fragment of 235 bp in the A*03:45 allele.

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²⁷Primer mix 41: Specific PCR fragment of 185 bp in the A*03:38 allele. Specific PCR fragment of 275 bp in the A*03:68N allele.

²⁸Primer mix 42: Specific PCR fragment of 190 bp in the A*03:143 allele. Specific PCR fragment of 220 bp in the A*03:39 allele.

²⁹Primer mix 43: Specific PCR fragment of 150 bp in the A*03:20 allele. Specific PCR fragment of 260 bp in the A*03:47 and 03:76 alleles.

³⁰Primer mix 44: Specific PCR fragment of 165 bp in the A*03:51 allele. Specific PCR fragment of 195 bp in the A*03:79 allele. Specific PCR fragment of 240 bp in the A*03:40 allele.

³¹Primer mix 45: Specific PCR fragment of 150 bp in the A*03:43 allele. Specific PCR fragment of 270 bp in the A*03:91N allele.

³²Primer mix 46: Specific PCR fragment of 110 bp in A*03:44 and 03:52 and the A*02:164, 02:380 and 31:19 alleles. Specific PCR fragment of 190 bp in A*03:53 and in the A*30:30 and 31:69 and the C*07:35 and C*08:48 alleles.

³³Primer mix 48: Specific PCR fragment of 70 bp in the A*03:54 allele. Specific PCR fragment of 110 bp in the A*03:52 and the A*02:380 and 31:19 alleles. Specific PCR fragment of 145 bp in the A*03:46 and in the C*07:86 alleles.

³⁴Primer mix 49: Specific PCR fragment of 195 bp in the A*03:161N allele. Specific PCR fragment of 545 bp in the A*03:78 and 01:45 and the A*11:108 and 66:17 alleles.

³⁵Primer mix 51: Specific PCR fragment of 215 bp in the A*03:50 and the A*30:04:01-30:04:02, 30:06, 30:17, 30:29 and 30:46 alleles. Specific PCR fragment of 285 bp in the A*03:87 and the A*01:101 and 11:30 alleles.

³⁶Primer mix 53: Specific PCR fragment of 225 bp in the A*03:150 and 03:153 alleles. Specific PCR fragment of 260 bp in the A*03:104 and the A*33:49 alleles.

³⁷Primer mix 57: Specific PCR fragment of 180 bp in the A*03:134 allele. Specific PCR fragment of 275 bp in the A*03:118 allele.

³⁸Primer mix 63: Specific PCR fragment of 175 bp in the A*03:123 and the A*02:156, 02:338, 11:16, 11:35, 11:57 and 11:73 alleles. Specific PCR fragment of 200 bp in the A*03:42 and 03:133 and the A*30:09, 31:03-31:04 and 33:49 alleles.

‘w’, may be weakly amplified.

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INTERPRETATION TABLE																																			
HLA-A*03 SSP subtyping																																			
Amplification patterns of the A*03:01 to A*03:161N alleles																																			
	Well ¹⁸																																		
	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			
Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	175	60	155	130	250	95	470	155	190	95	495	100	130	200	150	
PCR product(s)										205				235				210			175	195	155		240	210	185			210	155	230	200	220	150
Length of int. pos. control ¹	800	1070	1070	800	800	1070	1070	1070	1070	800	800	1070	800	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	800	1070	1070	1070
5'-primer(s) ²	5'-ATA ³ 363	5'-CTT ³ 98	5'-ATA ³ 363	5'-ATA ³ 363	5'-Tgg ³ 382	5'-ATA ³ 363	5'-ATA ³ 363	5'-ACA ³ 102	5'-CTC ³ 98	5'-ATA ³ 363	5'-CTT ³ 98	5'-gCC ³ 144	5'-gga ³ 4 th 1	5'-TCC ³ 28	5'-CTA ³ 98	5'-CTT ³ 98	5'-ATA ³ 363	5'-ATA ³ 363	5'-gTT ³ 368	5'-ATA ³ 363	5'-ATA ³ 363	5'-ATA ³ 363	5'-ATA ³ 363	5'-ATA ³ 363	5'-ATA ³ 363	5'-CTT ³ 98	5'-CTg ³ 83	5'-CTg ³ 83	5'-gga ³ 341	5'-CAG ³ 282	5'-ATA ³ 363	5'-AAC ³ 365	5'-CTT ³ 98		
3'-primer(s) ³	5'-CCA ³ 555	5'-gAC ³ 282	5'-CCT ³ 527	5'-TCT ³ 539	5'-CCT ³ 527	5'-CCg ³ 595	5'-CTA ³ 538	5'-CCA ³ 299	5'-gAC ³ 282	5'-gAT ³ 388	5'-gAg ³ 282	5'-gTg ³ 292	5'-ACA ³ 899	5'-AAC ³ 92	5'-gAC ³ 282	5'-CTg ³ 333	5'-TCA ³ 539	5'-CCA ³ 455	5'-CCA ³ 555	5'-CCT ³ 382	5'-TCT ³ 453	5'-CCg ³ 570	5'-CCA ³ 555	5'-ggg ³ 621	5'-CCC ³ 256	5'-gCT ³ 239	5'-gAC ³ 282	5'-CCA ³ 555	5'-Cg ³ 341	5'-CTg ³ 454	5'-CCA ³ 555	5'-CCg ³ 206			
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	29	30	31	32			
HLA-A allele ⁴																																			

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150																	
PCR product(s)										205				235				210		175	195	155	240	210	185			240	145	95	495	210	155	230	220	150													
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	29	30	31	32																	
HLA-A allele ⁴																																																	
*03:01:01:01, 03:01:01:03, 03:01:03-03:01:05 , 03:01:07, 03:01:09- 03:01:11 , 03:01:13, 03:01:15- 03:01:22, 03:01:24- 03:01:29, 03:01:31- 03:01:38, 03:26, 03:77, 03:80, 03:83-03:85, 03:92, 03:94, 03:100-03:101, 03:110, 03:114-03:117, 03:119-03:121, 03:124- 03:126, 03:131, 03:136- 03:139, 03:141, 03:144- 03:148, 03:151, 03:154- 03:159 ¹⁹	1	2	3					8									17																				29												
*03:01:01:02N	1	2	3					8					13				17																					29											
*03:01:02, 03:01:06 , 03:01:14, 03:140	1	2						8									17																						29										
*03:01:08, 03:109	1	2	3														17																							29									
* 03:01:12 , 03:01:23	1	w	3					8									17																							29									
*03:01:30, 03:98, 03:105		2	3					8									17																								29								
* 03:02:01 -03:02:03, 03:82, 03:90, 03:106, 03:160	1	2		4				8		10																																29							
*03:03N	1	2	3		5			8									17																									29							
*03:04:01-03:04:03	1	2	3			6		8									17																										29						
* 03:05:01		2	3					8	9								17																										29						
*03:05:02, 30:55 ⁵		2						8	9								17																											29					
*03:06	1	2	3				7	8									17																											29					
* 03:07	1	2						8		10							17																												29				
* 03:08	1		3					8			11						17																												29				
* 03:09	1	2	3					8				12					17																													29			
*03:10		2		4				8	9	10																																				29			
*03:11N	1	2	3					8						14			17																													29			
*03:12	1		3												15		17																													29			
*03:13	1	2	3					8									17	18																												29			
*03:14	1	2	3					8								16	17																													29			
*03:15	1	2	3					8									17		19																											29			
* 03:16 , 03:61 ⁷	1	2	3					8									17			20																										29			
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	29	30	31	32																	

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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

Lot No.: **88R**

Lot-specific Information

www.olerup-ssp.com

																												Length of spec.				
																												PCR product(s)				
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	Well No.
																												HLA-A allele⁴				
																												* 03:01:01:01 , 03:01:01:03, 03:01:03-03:01:05 , 03:01:07, 03:01:09- 03:01:11 , 03:01:13, 03:01:15- 03:01:22, 03:01:24- 03:01:29, 03:01:31- 03:01:38, 03:26, 03:77, 03:80, 03:83-03:85, 03:92, 03:94, 03:100-03:101, 03:110, 03:114-03:117, 03:119-03:121, 03:124- 03:126, 03:131, 03:136- 03:139, 03:141, 03:144- 03:148, 03:151, 03:154- 03:159 ¹⁹				
																												* 03:01:01:02N				
																												*03:01:02, 03:01:06 , 03:01:14, 03:140				
																												*03:01:08, 03:109				
																												* 03:01:12 , 03:01:23				
																												*03:01:30, 03:98, 03:105				
																												* 03:02:01 -03:02:03, 03:82, 03:90, 03:106, 03:160				
																												*03:03N				
																												*03:04:01-03:04:03				
																												* 03:05:01				
																												*03:05:02, 30:55 ⁵				
																												*03:06				
																												* 03:07				
																												* 03:08				
																												* 03:09				
																												*03:10				
																												*03:11N				
																												*03:12				
																												*03:13				
																												*03:14				
																												*03:15				
																												* 03:16 , 03:61 ⁷				
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	Well No.



101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150				
PCR product(s)										205				235				210		175		195	155		240	210	185		240	145		210	155	230	220	270
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	29	30	31	32				
*03:17:01-03:17:02, 03:74⁸	1	2	3					8									17				21								29							
*03:18, 03:135		2						8														22								29						
*03:19	1	2	3					8									17		19				23							29						
*03:20, 03:47⁹	1	2	3					8									17													29						
*03:21N	1	2	3					8									17						24							29						
*03:22:01-03:22:02, 03:103 ¹⁰	1	2	3					8									17						23							29						
*03:23:01-03:23:02	1	2	3					8									17								25				29							
*03:24	1	2	3					8									17									26			29							
*03:25, 03:71 ¹¹	1	2	3					8									17										27		29							
*03:27, 03:49¹²	1	2	3					8									17												29	30						
*03:28	1	2	3					8									17												29		31					
*03:29	1	2	3					8									17															32				
*03:30	1	2	3					8									17												29							
*03:31	1	2		4				8		10																			29							
*03:32	1			4				8		10	11																									
*03:33, 03:70 ¹³	1	2	3					8									17												29							
*03:34	1	2	3					8									17																			
*03:35	1	2	3					8									17												29							
*03:36N	1		3					8									17																			
*03:37	1	2	3					8									17												29							
*03:38, 03:68N¹⁴	1	2	3					8									17												29							
*03:39	1	2	3					8									17												29							
*03:40		2	3					8									17												29							
*03:41	1		3								11						17										28									
*03:42		2						8	9	10							17												29							
*03:43	1	2	3					8									17												29							
*03:44, 03:53¹⁵	1	2	3					8									17												29							
*03:45	1	2	3					8									17												29							
*03:46	1	2	3					8									17												29							
*03:48	1	2	3					8									17												29							
*03:50	1	2						8										18											29							
*03:51	1	2	3					8									17												29							
*03:52	1	2	3					8									17												29							
*03:54	1	2						8									17												29							
*03:55	1	2	3					8									17												29							
*03:56, 03:99	1	2	3					8									17						23					29		31						
*03:57	1		3														17												29							
*03:58	1	2	3					8									17												29							
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	29	30	31	32				

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150		
PCR product(s)										205				235				210		175		195	155	240	210			240	145		210	155	230	270
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	29	30	31	32		
*03:59	1		3					8						14			17													29				
*03:60	1	2	3					8		10							17													29				
*03:62	1	2	3					8									17																	
*03:63	1	2	3					8									17											28						
*03:64	1	2						8									17	18												29				
*03:65	1	2		4				8																						29				
*03:66	1	2						8										18												29				
*03:67	1	2	3					8									17													29			32	
*03:69N	1	2	3	4			7	8																					29					
*03:72	1		3					8		9							17													29				
*03:73	1	2		4				8		10																				29				
*03:75		2						8															23							29				
*03:76	1	2		4				8		10																				29				
*03:78, 03:161N ¹⁶	1	2	3					8									17													29				
*03:79	1	2	3					8									17													29				
*03:81	1	2	3					8									17													29				
*03:86	1	2	3					8									17													29				
*03:87	1	2	3					8									17													29				
*03:88	1		3											15			17						23					28			31			
*03:89	1		3					8									17																	
*03:91N	1	2	3					8									17												29			32		
*03:93	1	2	3					8									17										26			29				
*03:95, 74:13 ⁶		2						8																						29				
*03:96	1	2	3					8									17													29				
*03:97	1	2	3					8									17						22							29				
*03:102	1	2	3					8									17					21							29	30				
*03:104	1	2	3					8									17													29				
*03:107	1		3								11						17																	
*03:108	1		3					8				12					17																	
*03:111	1		3					8									17													29				
*03:112	1	2	3					8									17													29				
*03:113	1	2		4				8		10																				29				
*03:118, 03:134 ¹⁷	1	2	3					8									17													29				
*03:122		2	3					8									17						22							29				
*03:123	1	2	3					8									17													29				
*03:127	1	2						8									17													29				
*03:128	1	2	3					8									17													29				
*03:129N	1	2	3					8									17													29				
*03:130	1	2	3					8									17													29				
*03:132	1	2	3					8									17													29				
*03:133	1	2						8		10							17													29				
*03:142	1		3					8									17													29				
*03:143	1	2	3					8									17													29			31	
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	29	30	31	32		

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

www.olerup-ssp.com

Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150				
PCR product(s)									205					235				210		175	195	155	240	210	185			240	145		210	155	230	220	270	
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	29	30	31	32				
*03:149	1		3					8									17										27		29							
*03:150	1	2	3					8									17												29							
*03:152	1		3														17																			
*03:153	1	2						8																						29						
*01:01:01:01:01:01:03, 01:01:05-01:01:12, 01:01:14-01:01:28, 01:01:30-01:01:31, 01:01:33-01:01:34, 01:01:36-01:01:46, 01:01:48-01:01:49, 01:01:51, 01:08- 01:11N, 01:14-01:16N, 01:18N, 01:22N-01:23, 01:26-01:27N, 01:29- 01:33, 01:35-01:42, 01:44, 01:46-01:50, 01:52N-01:62, 01:64- 01:65, 01:67-01:71, 01:74-01:82, 01:84- 01:85, 01:87N, 01:89- 01:94, 01:96-01:97, 01:99-01:100, 01:103, 01:105-01:107, 01:109- 01:112, 01:114-01:122											11											22														
*01:01:04, 01:01:13, 01:01:29, 01:01:35, 01:01:50, 01:24, 01:113											11											22														
*01:01:32, 01:02, 01:07, 01:43, 01:95																						22														
*01:01:47, 01:17, 01:104, 01:108																						22														
*01:03, 01:63, 01:66, 01:72-01:73, 01:102, 36:03-36:04, 74:10											11																									
*01:04N											11											22	24													
*01:06											11						17					22														
*01:12, 01:19				4						10	11											22														
*01:13		2						8														22														
*01:21											10	11										22														
*01:25				4							11											22														
*01:28								8			11											22														
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	29	30	31	32				

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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																												Length of spec.						
																												PCR product(s)						
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	Well No.		
																																		*03:149
																					53					58							*03:150	
33																																	*03:152	
																																	*03:153	
															47																		*01:01:01-01:01:03, 01:01:05-01:01:12, 01:01:14-01:01:28, 01:01:30-01:01:31, 01:01:33-01:01:34, 01:01:36-01:01:46, 01:01:48-01:01:49, 01:01:51, 01:08- 01:11N, 01:14-01:16N, 01:18N, 01:22N-01:23, 01:26-01:27N, 01:29- 01:33, 01:35-01:42, 01:44, 01:46-01:50, 01:52N-01:62, 01:64- 01:65, 01:67-01:71, 01:74-01:82, 01:84- 01:85, 01:87N, 01:89- 01:94, 01:96-01:97, 01:99-01:100, 01:103, 01:105-01:107, 01:109- 01:112, 01:114-01:122	
																																	*01:01:04, 01:01:13, 01:01:29, 01:01:35, 01:01:50, 01:24, 01:113	
																																	*01:01:32, 01:02, 01:07, 01:43, 01:95	
														47																			*01:01:47, 01:17, 01:104, 01:108	
														47																			*01:03, 01:63, 01:66, 01:72-01:73, 01:102, 36:03-36:04, 74:10	
														47																			*01:04N	
														47												58							*01:06	
														47																			*01:12, 01:19	
														47																			*01:13	
														47																			*01:21	
														47																			*01:25	
																																	*01:28	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	Well No.		

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150	
PCR product(s)										205				235				210		175		195	155	240	210	185			240	145		270	220
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	29	30	31	32	
*01:45											11											22											
*01:51											11											22				26							
*01:83:01-01:83:02											11											22				25							
*01:86						6					11											22											
*01:88											11											21	22										
*01:98											11						18					22											
*01:101											11											22											
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	29	30	31	32	

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	155	250	95	470	155	190	95	495	100	130	200	150		
PCR product(s)										205				235				210		175		195	155		240	210	185		240	145		210	155	230	220
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	29	30	31	32			
*02:01:01:01-02:01:08, 02:01:10-02:01:15, 02:01:17- 02:01:19, 02:01:21- 02:01:48, 02:01:50- 02:01:81, 02:01:83-02:04, 02:07:01-02:07:02, 02:09, 02:11:01, 02:11:03-02:13, 02:15N-02:18, 02:20:01- 02:20:02, 02:22:01- 02:22:02, 02:24:01-02:27, 02:29-02:33, 02:38- 02:40:02, 02:42-02:43N, 02:45-02:47, 02:49, 02:52- 02:53N, 02:55, 02:58- 02:60:02, 02:63-02:71, 02:73-02:76:01, 02:77, 02:80, 02:82N-02:83N, 02:85-02:86, 02:88N-02:89, 02:92-02:97:02, 02:101:01- 02:102, 02:104-02:105, 02:107, 02:109-02:111, 02:113N-02:121, 02:123, 02:125N, 02:128, 02:130- 02:135, 02:138-02:141, 02:145, 02:147-02:153, 02:155, 02:157-02:163, 02:165-02:168, 02:171:01- 02:171:02, 02:173-02:177, 02:181-02:183, 02:185- 02:228, 02:230-02:231, 02:233-02:236, 02:238- 02:243, 02:245-02:246, 02:249-02:254, 02:256- 02:258, 02:260-02:270, 02:272-02:277, 02:279- 02:285, 02:287-02:289, 02:291-02:294, 02:296- 02:299, 02:301N-02:309, 02:311-02:323, 02:325- 02:327, 02:329, 02:332, 02:334-02:336, 02:339- 02:343, 02:345-02:354, 02:356N-02:357, 02:360- 02:372, 02:374-02:375, 02:377-02:379, 02:381, 02:383-02:386, 02:388- 02:392, 31:01:02-31:01:05, 31:01:07-31:02, 31:06, 31:09, 31:11-31:18, 31:20, 31:22-31:32, 31:34-31:68, 31:70, 33:01:01-33:01:07, 33:03:01-33:03:05, 33:03:07- 33:07, 33:09, 33:11-33:12, 33:14-33:16, 33:18:01- 33:18:02, 33:20-33:23, 33:25-33:37, 33:39-33:47, 33:50, 33:52-33:64, 74:05								8																											
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	29	30	31	32			



101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot-specific Information

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Length of spec.		PCR product(s)		Well No.					
180	185	190	195	200	205				
160	165	170	175	180	185				
235	240	245	250	255	260				
120	125	130	135	140	145				
95	100	105	110	115	120				
165	170	175	180	185	190				
200	205	210	215	220	225				
240	245	250	255	260	265				
185	190	195	200	205	210				
190	195	200	205	210	215				
150	155	160	165	170	175				
150	155	160	165	170	175				
110	115	120	125	130	135				
240	245	250	255	260	265				
70	75	80	85	90	95				
195	200	205	210	215	220				
130	135	140	145	150	155				
215	220	225	230	235	240				
85	90	95	100	105	110				
225	230	235	240	245	250				
240	245	250	255	260	265				
175	180	185	190	195	200				
215	220	225	230	235	240				
180	185	190	195	200	205				
215	220	225	230	235	240				
390	395	400	405	410	415				
170	175	180	185	190	195				
190	195	200	205	210	215				
175	180	185	190	195	200				
225	230	235	240	245	250				
33	34	35	36	37	38				
39	40	41	42	43	44				
45	46	47	48	49	50				
51	52	53	54	55	56				
57	58	59	60	61	62				
63	64	*02:01:01:01-02:01:08, 02:01:10-02:01:15, 02:01:17- 02:01:19, 02:01:21- 02:01:48, 02:01:50- 02:01:81, 02:01:83-02:04, 02:07:01-02:07:02, 02:09, 02:11:01, 02:11:03-02:13, 02:15N-02:18, 02:20:01- 02:20:02, 02:22:01- 02:22:02, 02:24:01-02:27, 02:29-02:33, 02:38- 02:40:02, 02:42-02:43N, 02:45-02:47, 02:49, 02:52- 02:53N, 02:55, 02:58- 02:60:02, 02:63-02:71, 02:73-02:76:01, 02:77, 02:80, 02:82N-02:83N, 02:85-02:86, 02:88N-02:89, 02:92-02:97:02, 02:101:01- 02:102, 02:104-02:105, 02:107, 02:109-02:111, 02:113N-02:121, 02:123, 02:125N, 02:128, 02:130- 02:135, 02:138-02:141, 02:145, 02:147-02:153, 02:155, 02:157-02:163, 02:165-02:168, 02:171:01- 02:171:02, 02:173-02:177, 02:181-02:183, 02:185- 02:228, 02:230-02:231, 02:233-02:236, 02:238- 02:243, 02:245-02:246, 02:249-02:254, 02:256- 02:258, 02:260-02:270, 02:272-02:277, 02:279- 02:285, 02:287-02:289, 02:291-02:294, 02:296- 02:299, 02:301N-02:309, 02:311-02:323, 02:325- 02:327, 02:329, 02:332, 02:334-02:336, 02:339- 02:343, 02:345-02:354, 02:356N-02:357, 02:360- 02:372, 02:374-02:375, 02:377-02:379, 02:381, 02:383-02:386, 02:388- 02:392, 31:01:02-31:01:05, 31:01:07-31:02, 31:06, 31:09, 31:11-31:18, 31:20, 31:22-31:32, 31:34-31:68, 31:70, 33:01:01-33:01:07, 33:03:01-33:03:05, 33:03:07- 33:07, 33:09, 33:11-33:12, 33:14-33:16, 33:18:01- 33:18:02, 33:20-33:23, 33:25-33:37, 33:39-33:47, 33:50, 33:52-33:64, 74:05							
33	34					35	36	37	38
39	40					41	42	43	44
45	46					47	48	49	50
51	52					53	54	55	56
57	58					59	60	61	62
63	64					Well No.			



101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150						
PCR product(s)										205				235				210		175	195	155		240	210	185		240	145		210	155	230	270	220	150		
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	29	30	31	32						
*02:01:09, 02:50, 02:76:02								8				12													25													
*02:05:05, 02:06:07, 02:122												12														25												
*02:11:02, 33:08								8																		25												
*02:19, 02:36-02:37, 02:255, 24:44, 31:05, 33:10, 33:19								8																														
*02:34-02:35:02, 02:56:01-02:56:02, 02:62, 02:103		w						8																					29									
*02:35:03		w						8																		25			29									
*02:48, 02:90, 74:01-74:03, 74:08-74:09, 74:11-74:12N, 74:14N-74:17								8			11																											
*02:54, 23:01:01-23:03:02, 23:05-23:06, 23:08N-23:12, 23:14:01-23:15, 23:17-23:30, 23:32-23:41, 23:44, 23:46-23:54, 24:02:01:01-24:02:04, 24:02:06-24:02:28, 24:02:30-24:02:63, 24:04-24:06, 24:09N, 24:13:01-24:14, 24:17, 24:20-24:21:02, 24:25-24:27, 24:29-24:32, 24:34-24:40N, 24:43, 24:45N-24:50, 24:52-24:64, 24:66-24:74, 24:76-24:88, 24:90N-24:91, 24:93, 24:95-24:103, 24:105-24:107, 24:109-24:111, 24:113-24:117, 24:119-24:124, 24:126-24:130, 24:133-24:137, 24:139-24:166, 24:168-24:203, 24:205-24:206, 24:208-24:209, 24:212, 24:214, 24:216-24:218, 24:220-24:222N																																						
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	29	30	31	32						

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150				
PCR product(s)										205				235				210		175	195	155		240	210	185			240	145	95	495	100	130	200	150
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	29	30	31	32				
*02:78, 66:02, 66:12, 66:16, 68:01:01:01-68:02:05, 68:06-68:14, 68:16-68:19, 68:21:01-68:25, 68:27-68:28, 68:30, 68:32-68:35, 68:37-68:39, 68:41-68:44, 68:47-68:56, 68:58-68:64, 68:66-68:70, 68:73-68:83, 68:86-68:89, 68:91-68:92, 68:94N-68:96, 69:01															15													29								
*02:81, 02:124, 02:146, 26:20, 32:01:01-32:02, 32:06, 32:09-32:14, 32:16, 32:18-32:26, 32:28-32:36, 32:38-32:41, 32:43-32:51, 32:53-32:55											11																									
*02:156, 02:338								8	9	10						17					21															
*02:164, 31:69								8																												
*02:237								8															23													
*02:380, 31:19								8																												
*11:01:01-11:02:01, 11:02:03-11:03, 11:05, 11:07, 11:09-11:11, 11:13-11:15:02, 11:20, 11:22, 11:29, 11:32-11:34, 11:36-11:37, 11:41-11:42, 11:46, 11:48-11:49, 11:51-11:52Q, 11:54-11:56, 11:58-11:59, 11:61-11:72, 11:74-11:77, 11:79-11:87, 11:89-11:91, 11:93, 11:95-11:97, 11:99N-11:100, 11:102-11:105, 11:107, 11:109N-11:110, 11:112-11:117, 11:120, 11:122-11:129, 11:131-11:132				4											15																					
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	29	30	31	32				

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Lot-specific Information																												Length of spec.				
www.olerup-ssp.com																												PCR product(s)				
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	Well No.
																																*02:78, 66:02, 66:12, 66:16, 68:01:01:01-68:02:05, 68:06-68:14, 68:16-68:19, 68:21:01-68:25, 68:27-68:28, 68:30, 68:32-68:35, 68:37-68:39, 68:41-68:44, 68:47-68:56, 68:58-68:64, 68:66-68:70, 68:73-68:83, 68:86-68:89, 68:91-68:92, 68:94N-68:96, 69:01
																																*02:81, 02:124, 02:146, 26:20, 32:01:01-32:02, 32:06, 32:09-32:14, 32:16, 32:18-32:26, 32:28-32:36, 32:38-32:41, 32:43-32:51, 32:53-32:55
																																63 *02:156, 02:338
													46																			*02:164, 31:69
																																*02:237
													46		48																	*02:380, 31:19
																																*11:01:01-11:02:01, 11:02:03-11:03, 11:05, 11:07, 11:09-11:11, 11:13-11:15:02, 11:20, 11:22, 11:29, 11:32-11:34, 11:36-11:37, 11:41-11:42, 11:46, 11:48-11:49, 11:51-11:52Q, 11:54-11:56, 11:58-11:59, 11:61-11:72, 11:74-11:77, 11:79-11:87, 11:89-11:91, 11:93, 11:95-11:97, 11:99N-11:100, 11:102-11:105, 11:107, 11:109N-11:110, 11:112-11:117, 11:120, 11:122-11:129, 11:131-11:132
																																Well No.

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	155	250	95	470	155	190	95	495	100	130	200	150					
PCR product(s)										205				235				210		175		195	155		240	210	185		240	145		210	155	230	270	220	150	
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	29	30	31	32						
*11:02:02				4											w																							
*11:04				4					9						15																							
*11:06				4								12			w																							
*11:08, 11:44															15		18																					
*11:12				4											15															29								
*11:16, 11:57, 11:73				4											15																							
*11:17, 11:19, 11:40, 11:45, 11:47, 11:78N, 11:92, 11:98, 11:106, 11:111				4																																		
*11:18				4								12																										
*11:21N				4											15									24														
*11:23, 11:26, 11:50Q, 11:101, 11:118, 34:01:01-34:01:02, 34:05-34:06, 66:01, 66:04, 66:06-66:10, 66:13-66:14, 66:18- 66:19, 68:40, 68:72, 68:85, 68:93															15																							
*11:24:01															15	17																						
*11:24:02															15	17																						
*11:25			3												15	17																						
*11:27, 11:38-11:39				4											15								22															
*11:30				4											15																							
*11:31										10					15	17																						
*11:35									9	10					15	17																						
*11:43				4			8																															
*11:60				4						10					15																							
*11:88				4			8	9																														
*11:94															15								22															
*11:108				4											15																							
*11:119				4											15							21																
*11:121				4																																		
*11:130	1			4											15									23					28						31			
*23:07N, 24:11N																								24														
*23:13, 24:07, 24:24, 24:108, 24:112, 24:131, 29:03																																					29	
*24:08, 24:42																																						
*24:18, 24:204																																						
*24:19								8	9																													
*24:28								8				12																										
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	29	30	31	32						

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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285 210 180		160 125		275 235		210 160 120		225 120 95		250 195 165		235 200		240		275 185		220 190		260 150		240 195 165		270 150		190 110		240		145 110 70		545 195		130		285 215		85		260 225		240		175		215		275 180		215		240		390		170		190		175		225		Length of spec.		PCR product(s)	
Well No.																																																																			
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																																	*11:04																																		
																																	*11:06																																		
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																																	*11:17, 11:19, 11:40, 11:45, 11:47, 11:78N, 11:92, 11:98, 11:106, 11:111																																		
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																																	64 *24:19																																		
																																	64 *24:28																																		
Well No.																																																																			

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150				
PCR product(s)										205				235				210	135	230	60	195	155	250	95	470	155	190	95	495	100	130	200	150		
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	29	30	31	32				
*24:51				4																		21	22													
*24:89								8				12														25										
*24:92				4						10													21	22												
*24:104																																				
*24:213																																				
*25:03, 32:15												11												23												
*26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78, 68:05, 68:15, 68:20												12																								
*26:07:01-26:07:02																										25										
*29:01:01:01-29:02:13, 29:04-29:18, 29:21- 29:29, 29:31-29:33, 29:35-29:38, 29:40- 29:45, 32:17, 68:36, 68:46, 68:57, 68:84																																			29	
*29:19, 33:24, 74:06								8				12																								
*29:39, 68:29								8																											29	
*30:01:01-30:01:07, 30:11:01-30:11:02, 30:14L-30:16, 30:18- 30:20, 30:23-30:24, 30:26, 30:35-30:43, 30:48-30:49, 30:53- 30:54, 30:56, 30:58- 30:60, 30:62, 30:65								8	9								17																		29	
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*30:04:01-30:04:02, 30:06, 30:29									9	10								18																		
*30:08									9						15		17																		29	
*30:09									9	10							17																			
*30:13, 30:31, 30:44								8	9								17																			
*30:17								8	9	10							18																		29	
*30:25									9								17																		29	
*30:30								8	9								17																		29	
*30:34						6			9								17																			
*30:45																	17																			
*30:46								8	9	10							18																			
*30:52, 30:63, 68:45								8	9																										29	
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	29	30	31	32				

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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285		210		180		210		160		125		275		235		240		275		185		220		190		260		150		240		190		110		240		145		110		70		545		195		130		285		215		85		260		225		240		175		215		275		180		215		240		390		170		190		175		225		Length of spec.		PCR product(s)	
Well No.																																																																																							
																																	*24:51																																																						
																																	64 *24:89																																																						
																																	*24:92																																																						
33																																	64 *24:104																																																						
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																																	*26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78, 68:05, 68:15, 68:20																																																						
																																	*26:07:01-26:07:02																																																						
																																	*29:01:01:01-29:02:13, 29:04-29:18, 29:21-29:29, 29:31-29:33, 29:35-29:38, 29:40-29:45, 32:17, 68:36, 68:46, 68:57, 68:84																																																						
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																																	*30:01:01-30:01:07, 30:11:01-30:11:02, 30:14L-30:16, 30:18-30:20, 30:23-30:24, 30:26, 30:35-30:43, 30:48-30:49, 30:53-30:54, 30:56, 30:58-30:60, 30:62, 30:65																																																						
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Well No.																																																																																							

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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“Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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Length of spec.	235	225	205	215	185	275	225	240	230	65	225	190	145	105	225	275	215	135	230	60	130	250	95	470	155	190	95	495	100	130	200	150						
PCR product(s)										205				235				210		175		195	155	240	210	185		240	145		210	155	230	220	270			
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	29	30	31	32						
*30:61									9								17				21																	
*31:03-31:04								8	9	10							17																					
*31:21, 74:07								8																														
*32:03, 32:08											w																											
*32:04	1		3								11						17																					
*32:05											11																											
*32:37											11																26											
*32:52											11												23											31				
*33:49								8	9	10							17																					
*34:02:01, 34:02:03-34:04, 34:07, 34:10N			3						9						15	17																						
*34:02:02									9						15	17																						
*34:08		2	3					8	9								17										26											
*34:09			3						9						15	17																		29				
*36:01, 36:05									9	11																												
*36:02	1									11							18					23					28							31				
*66:17															15																							
*68:26, 68:65															15																				29			
*68:71		2						8																			26						29					
*74:04								8		11																25												
*80:01:01:01-80:01:01:02											w						17						22															
*80:02								8		11							17						22															
<i>C*07:35, C*08:48</i>																																						
<i>C*07:86</i>																																						
HLA-A allele⁴																																						
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	29	30	31	32						

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

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A*03 subtyping.

In addition, wells number 4, 5, 10, 11, 13, 17, 31, 38, 42, 53, 55 and 63 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 3rd or 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, 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.

⁴HLA-A*03 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.

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: 88R

Lot-specific Information

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www.olerup-ssp.com																								Length of spec.															
																								PCR product(s)															
285	210	180	160	125	275	235	210	160	120	95	165	200	240	185	190	150	165	150	150	110	240	70	195	130	215	85	225	240	175	215	180	215	240	390	170	190	175	225	Well No.
																																							*30:61
					35																															63	*31:03-31:04 *31:21, 74:07 *32:03, 32:08		
33																																						*32:04 *32:05 *32:37 *32:52	
33																																					63	*33:49 *34:02:01, 34:02:03-34:04, 34:07, 34:10N *34:02:02 *34:08 *34:09 *36:01, 36:05 *36:02 *66:17	
																																						64	*68:26, 68:65 *68:71 *74:04 *80:01:01:01-80:01:01:02 *80:02 C*07:35, C*08:48 C*07:86
w																																						64	HLA-A allele ⁴
w																																						64	Well No.

⁵The HLA-A*03 primer set cannot separate the A*03:05:02 and A*30:55 alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the HLA-A*30 high resolution kit.

⁶The HLA-A*03 primer set cannot separate the A*03:95 and 74:13 alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the HLA-A*74 high resolution kit.

⁷The A*03:16 and A*03:61 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 20.

⁸The A*03:17:01-03:17:02 and A*03:74 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 21.

⁹The A*03:20 and A*03:47 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 43.

¹⁰The A*03:22:01-03:22:02 and A*03:103 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 23.

¹¹The A*03:25 and A*03:71 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 27.

¹²The A*03:27 and A*03:49 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 30.

¹³The A*03:33 and A*03:70 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: 88R**Lot-specific Information****www.olerup-ssp.com**

¹⁴The A*03:38 and A*03:68N alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 41.

¹⁵The A*03:44 and A*03:53 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 46.

¹⁶The A*03:78 and A*03:161N alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 49.

¹⁷The A*03:118 and A*03:134 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 57.

¹⁸Primer mix 10: Specific PCR fragment of 65 bp in A*03:60 allele. Specific PCR fragment of 205 bp in the A*03:02:01-03:02:03, 03:07, 03:10, 03:31-03:32, 03:42, 03:73, 03:76, 03:82, 03:90, 03:106, 03:113, 03:133, 03:160, 01:12, 01:19, 01:21, 02:156, 02:338, 11:31, 11:35, 11:60, 24:92, 30:04:01-30:04:02, 30:06, 30:09, 30:17, 30:29, 30:46, 31:03-31:04 and 33:49 alleles.

Primer mix 14: Specific PCR fragment of 105 bp in the A*03:11N allele. Specific PCR fragment of 235 bp in the A*03:59 allele.

Primer mix 18: Specific PCR fragment of 135 bp in the A*03:13 allele. Specific PCR fragment of 210 bp in the A*03:50, 03:64, 03:66, 01:98, 11:08, 11:44, 30:04:01-30:04:02, 30:06, 30:17, 30:29, 30:46 and 36:02 alleles.

Primer mix 20: Specific PCR fragment of 60 bp in the A*03:61 allele. Specific PCR fragment of 175 bp in the A*03:16 allele.

Primer mix 21: Specific PCR fragment of 130 bp in the A*03:17:01-03:17:02 and the A*01:88, 02:156, 02:338, 11:119, 24:51, 24:92 and 30:61 alleles. Specific PCR fragment of 155 bp in the A*03:102 allele. Specific PCR fragment of 195 bp in the A*03:74 allele.

Primer mix 23: Specific PCR fragment of 95 bp in the A*03:22:01-03:22:02 alleles. Specific PCR fragment of 185 bp in the A*03:19 and 03:103 and the A*02:237 alleles. Specific PCR fragment of 210 bp in the A*03:56, 03:88 and 03:99 and the A*1:130 and 36:02 alleles. Specific PCR fragment of 240 bp in the A*03:75 allele. Specific PCR fragment of 95, 185 and 210 bp in the A*32:52 allele. Specific PCR fragments of 185 and 240 bp in the A*24:18, 24:204, 24:213, allele.

Primer mix 27: Specific PCR fragment of 95 bp in the A*03:71 allele. Specific PCR fragment of 145 bp in the A*03:25 allele. Specific PCR fragment of 240 bp in the A*03:149 allele.

Primer mix 30: Specific PCR fragment of 130 bp in the A*03:27 allele. Specific PCR fragment of 155 bp in the A*03:102 allele. Specific PCR fragment of 210 bp in the A*03:49 allele.

Primer mix 31: Specific PCR fragment of 200 bp in the A*03:56, 03:88, 03:99 and 03:143 and the A*11:130, 32:52 and 36:02 alleles. Specific PCR fragment of 230 bp in the A*03:28 allele.

Primer mix 32: Specific PCR fragment of 150 bp in the A*03:67 allele. Specific PCR fragment of 220 bp in the A*03:29 allele. Specific PCR fragment of 270 bp in the A*03:91N allele.

Primer mix 33: Specific PCR fragment of 180 bp in the A*03:93 and the A*32:37 and 80:01^W-80:02^W alleles. Specific PCR fragment of 210 bp in the A*03:30 and 03:152 and the A*24:104 and 32:05 alleles. Specific PCR fragment of 285 bp in the A*03:62 allele.

Primer mix 34: Specific PCR fragment of 125 bp in the A*03:58 allele. Specific PCR fragment of 160 bp in the A*03:31 allele.

Primer mix 35: Specific PCR fragment of 235 bp in the A*03:32 and the A*31:21 and 74:07 alleles. Specific PCR fragment of 275 bp in the A*03:55 allele.

Primer mix 36: Specific PCR fragment of 120 bp in the A*03:81 allele. Specific PCR fragment of 160 bp in the A*03:33 allele. Specific PCR fragment of 210 bp in the A*03:70 allele.

Primer mix 37: Specific PCR fragment of 95 bp in the A*03:48 allele. Specific PCR fragment of 120 bp in the A*03:81 allele. Specific PCR fragment of 225 bp in the A*03:34 allele.

Primer mix 38: Specific PCR fragment of 165 bp in the A*03:35 allele. Specific PCR fragment of 195 bp in the A*03:79 allele. Specific PCR fragment of 250 bp in the A*03:73 allele.

Primer mix 39: Specific PCR fragment of 200 bp in the A*03:36N allele. Specific PCR fragment of 235 bp in the A*03:45 allele.

Primer mix 41: Specific PCR fragment of 185 bp in the A*03:38 allele. Specific PCR fragment of 275 bp in the A*03:68N allele.

Primer mix 42: Specific PCR fragment of 190 bp in the A*03:143 allele. Specific PCR fragment of 220 bp in the A*03:39 allele.

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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Primer mix 43: Specific PCR fragment of 150 bp in the A*03:20 allele. Specific PCR fragment of 260 bp in the A*03:47 and 03:76 alleles.

Primer mix 44: Specific PCR fragment of 165 bp in the A*03:51 allele. Specific PCR fragment of 195 bp in the A*03:79 allele. Specific PCR fragment of 240 bp in the A*03:40 allele.

Primer mix 45: Specific PCR fragment of 150 bp in the A*03:43 allele. Specific PCR fragment of 270 bp in the A*03:91N allele.

Primer mix 46: Specific PCR fragment of 110 bp in A*03:44 and 03:52 and the A*02:164, 02:380 and 31:19 alleles. Specific PCR fragment of 190 bp in A*03:53 and in the A*30:30 and 31:69 and the C*07:35 and C*08:48 alleles.

Primer mix 48: Specific PCR fragment of 70 bp in the A*03:54 allele. Specific PCR fragment of 110 bp in the A*03:52 and the A*02:380 and 31:19 alleles. Specific PCR fragment of 145 bp in the A*03:46 and in the C*07:86 alleles.

Primer mix 49: Specific PCR fragment of 195 bp in the A*03:161N allele. Specific PCR fragment of 545 bp in the A*03:78 and 01:45 and the A*11:108 and 66:17 alleles.

Primer mix 51: Specific PCR fragment of 215 bp in the A*03:50 and the A*30:04:01-30:04:02, 30:06, 30:17, 30:29 and 30:46 alleles. Specific PCR fragment of 285 bp in the A*03:87 and the A*01:101 and 11:30 alleles.

Primer mix 53: Specific PCR fragment of 225 bp in the A*03:150 and 03:153 alleles. Specific PCR fragment of 260 bp in the A*03:104 and the A*33:49 alleles.

Primer mix 57: Specific PCR fragment of 180 bp in the A*03:134 allele. Specific PCR fragment of 275 bp in the A*03:118 allele.

Primer mix 63: Specific PCR fragment of 175 bp in the A*03:123 and the A*02:156, 02:338, 11:16, 11:35, 11:57 and 11:73 alleles. Specific PCR fragment of 200 bp in the A*03:42 and 03:133 and the A*30:09, 31:03-31:04 and 33:49 alleles.

¹⁹This lot of the HLA-A*03 subtyping kit cannot distinguish the A*03:26 and the A*03:01:01:01, 03:01:01:03, 03:01:03-03:01:05, 03:01:07, 03:01:09-03:01:11, 03:01:13, 03:01:15-03:01:22, 03:01:24-03:01:29 and 03:01:31-03:01:38 alleles.

‘w’, may be weakly amplified.

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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CELL LINE VALIDATION SHEET																			
HLA-A*03 SSP subtyping kit																			
			Prod. No.:	Well															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				201313701	201072002	201187903	201072004	201072005	201203706	201072007	201072008	201072009	201313710	201072011	201072012	201072013	201072014	201072015	201072016
	IHWC cell line	A*																	
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	+	+	+	-	-	-	-	+	-	-	W	-	-	-	-	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	-	-	-	-	-	-	-	+	+	-	-	-	-	-	+	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-
37	9065 HHKB	*03:01		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	+	+	+	-	-	-	-	+	-	-	+	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
41	9055 H0301	*03:01		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	+	-	-	-	+	-	-	-	-	-	-	+	-

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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CELL LINE VALIDATION SHEET																			
HLA-A*03 SSP subtyping kit																			
			Prod. No.:	Well															
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
				201203717	201072018	201072019	201072020	201313721	201072022	201313723	201313724	201072025	201313726	201313727	201072028	201072029	201203730	201313731	201203732
IHWC cell line	A*																		
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	9011 E4181324	*01:01		-	-	-	-	-	+	-	-	-	-	-	-	-	-		
4	9275 GU373	*30:01		+	-	-	-	-	-	-	-	-	-	+	-	-	-		
5	9009 KAS011	*01:01		-	-	-	-	-	+	-	-	-	-	-	-	-	-		
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-		
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-		
17	9282 CTM3953540	*03:01	*80:01	+	-	-	-	-	+	-	-	-	-	+	-	-	-		
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
23	9124 IHL	*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	+	-	-	-		
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	+	-	-	-		
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-		
30	9021 RSH	*30:01	*68:02	+	-	-	-	-	-	-	-	-	-	+	-	-	-		
31	9019 DUCAF	*30:02		+	-	-	-	-	-	-	-	-	-	-	-	-	-		
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
37	9065 HHKB	*03:01		+	-	-	-	-	-	-	-	-	-	+	-	-	-		
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
39	9315 CML	*01:01	*03:01	+	-	-	-	-	+	-	-	-	-	+	-	-	-		
40	9134 WHONP199	*02:07	*30:01	+	-	-	-	-	-	-	-	-	-	+	-	-	-		
41	9055 H0301	*03:01		+	-	-	-	-	-	-	-	-	-	+	-	-	-		
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
44	9057 TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
46	9013 SCHU	*03:01		+	-	-	-	-	-	-	-	-	-	+	-	-	-		
47	9045 TUBO	*02:16	*03:01	+	-	-	-	-	-	-	-	-	-	+	-	-	-		
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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CELL LINE VALIDATION SHEET																			
HLA-A*03 SSP subtyping kit																			
			Prod. No.:	Well															
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	IHWC cell line	A*		201203733	201072034	201072035	201203736	201203737	201203738	201072039	201072040	201072041	201313742	201072043	201203744	201203745	201072046	201072047	201072048
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	W	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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CELL LINE VALIDATION SHEET																			
HLA-A*03 SSP subtyping kit																			
			Prod. No.:	Well															
				49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
	IHWC cell line	A*		201313749	201313750	201313751	201203752	201313753	201203754	201203755	201203756	201203757	201313758	201203759	201313760	201313761	201203762	201203763	201203764
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
46	9013 SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.413-24/04 – including *Taq* polymerase, IFU-01
 101.413-24u/04u – without *Taq* polymerase, IFU-02

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

Lot No.: **88R**

Lot-specific Information

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CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-A*03 SSP

Product number: 101.413-24/04 – including *Taq* pol.
 101.413-24u/04u – without *Taq* pol.
Lot number: 88R
Expiry date: 2015-August-01
Number of tests: 24 tests – Product No. 101.413-24/24u
 4 tests – Product No. 101.413-04/04u
Number of wells per test: 64

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2013-137-01	25	2010-720-25	49	2013-137-49
2	2010-720-02	26	2013-137-26	50	2013-137-50
3	2011-879-03	27	2013-137-27	51	2013-137-51
4	2010-720-04	28	2010-720-28	52	2012-037-52
5	2010-720-05	29	2010-720-29	53	2013-137-53
6	2012-037-06	30	2012-037-30	54	2012-037-54
7	2010-720-07	31	2013-137-31	55	2012-037-55
8	2010-720-08	32	2012-037-32	56	2012-037-56
9	2010-720-09	33	2012-037-33	57	2012-037-57
10	2013-137-10	34	2010-720-34	58	2013-137-58
11	2010-720-11	35	2010-720-35	59	2012-037-59
12	2010-720-12	36	2012-037-36	60	2013-137-60
13	2010-720-13	37	2012-037-37	61	2013-137-61
14	2010-720-14	38	2012-037-38	62	2012-037-62
15	2010-720-15	39	2010-720-39	63	2012-037-63
16	2010-720-16	40	2010-720-40	64	2012-037-64
17	2012-037-17	41	2010-720-41		
18	2010-720-18	42	2013-137-42		
19	2010-720-19	43	2010-720-43		
20	2010-720-20	44	2012-037-44		
21	2013-137-21	45	2012-037-45		
22	2010-720-22	46	2010-720-46		
23	2013-137-23	47	2010-720-47		
24	2013-137-24	48	2010-720-48		

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 5 to 7, 13, 16, 19 to 21, 23, 25 to 28, 30 to 32, 34 to 46, 48 to 50, 52 to 57 and 59 to 63 were available. The specificities of the primers in primer solutions 21, 23, 25, 26, 28, 31, 32, 34, 35, 43 to 45, 49, 53 and 63 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer.

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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“Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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In primer solutions 6, 7, 16, 20, 30, 36 to 39, 41, 52, 54, 56, 59 and 61 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 5, 13, 19, 27, 40, 42, 46, 48, 50, 55, 57, 60 and 62 it was only possible to test the 3'-primers, the 5'-primers were not possible to test.

In primer mixes 28, 31, 34, 43 and 49 one or two 5'-primers were not possible to test, and in primer mixes 1, 10, 14, 18, 21, 26, 32, 34, 35, 43 to 45, 49, 51, 53 and 58 one to three 3'-primers were not possible to test.

Additional primers in primer mixes 14 and 33 were tested by separately adding one 3'-primer and/or 5'-primer.

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

Date of approval: 2013-March-12

Approved by:

Production Quality Control

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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“Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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Declaration of Conformity

Product name: *Olerup* SSP® HLA-A*03
Product number: 101.413-24/24u, -04/04u
Lot number: 88R

Intended use: HLA-A*03 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
2014-October-10

Daniel Malica
Head of QA and Regulatory Affairs

101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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“Instructions for Use” (IFU)

Lot No.: **88R**

Lot-specific Information

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101.413-24/04 – including *Taq* polymerase, IFU-01
101.413-24u/04u – without *Taq* polymerase, IFU-02

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Lot No.: **88R**

Lot-specific Information

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