

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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

Lot No.: **01X**

Lot-specific information
Olerup SSP[®] HLA-A*26

Product number:	101.424-12 – including <i>Taq</i> polymerase 101.424-12u- without <i>Taq</i> polymerase
Lot number:	01X
Expiry date:	2017-January-01
Number of tests:	12
Number of wells per test:	47+1
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. 01X.

Complete product documentation consists of generic Instructions for Use (IFU), lot specific Product Insert, Worksheet and Certificate

**CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[®]
HLA-A*26 LOT (21S)**

The HLA-A*26 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

A well containing Negative Control primer pairs has been added.

The format of the Product Insert and Worksheet have been changed.

¹As described in section Uniquely Identified Alleles.

The HLA-A*26 primer set, specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP[®]* HLA-A*26 lot was made (**Lot No. 21S**). The kit design is based on IMGT/HLA database 3.16.0

As of lot series V, the Specificity Table is included in the lot-specific Product Insert, and the Interpretation Table is included in the Worksheet.

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

Well	5'-primer	3'-primer	rationale
3	Added	-	3'-primer added for the A*26:02:02 allele.
6	Removed	Removed	Primer pair removed for improved specificity of HLA-specific primer pair.
17	-	Added	3'-primer added for the A*26:74 allele.
20	Added	-	5'-primer added for the A*26:27 allele.
21	-	Added	3'-primer added for the A*26:99 allele.
22	Added	Added	Primer pair added for the A*26:98 allele.
26	-	Added	3'-primer added for the A*26:73 allele.
30	-	Added	3'-primer added for the A*26:99 allele.
33	Added	Added	Primer pair added for the A*26:98 allele.
38	Added	Added	Primer pair added for the A*26:75 allele.
39	-	-	Exchanged positive control primer pair.
45	Removed, added	Added	5'-primer removed, primer pair added for the A*26:42 allele.
48	-	-	Negative Control.

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Well **48** contains Negative Control primer pairs, that will amplify more than 95% of the *Olerup SSP*[®] HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene.

HLA-specific PCR product sizes range from 75 to 200 base pairs.

The PCR product generated by the positive control primer pair is 430 base pairs.

Length of PCR product	105	200	105	80	75	80	85
5'-primer¹	164	340	440	45	45	43	36
	5'-CAC ^{3'}	5'-Agg ^{3'}	5'-TTA ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-TAC ^{3'}
							36
							5'-TAT ^{3'}
3'-primer²	231	2nd I	507	59	58	57	47
	5'-TgC ^{3'}	5'-AAA ^{3'}	5'-TTg ^{3'}	5'-CTC ^{3'}	5'-ggC ^{3'}	5'-CTC ^{3'}	5'-ACA ^{3'}
							48
							5'-gCA ^{3'}
							48
							5'-gCC ^{3'}
							52
							5'-TgT ^{3'}
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

¹The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

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

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Lot-specific information

PRODUCT DESCRIPTION

HLA-A*26 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the A*26:01 to A*26:102 alleles.

PLATE LAYOUT

Each test consists of 48 PCR reactions in a 48 well cut 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	NC

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

Well No. 1 is marked with the Lot Number '01X'.

Wells 1 to 47 – HLA-A*26 high resolution primers.

Well 48 – Negative Control (NC).

A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays, and should be disregarded.

The PCR plates are covered with a PCR-compatible foil.

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

INTERPRETATION

Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*26 alleles will be amplified by primer mixes 1, 2, 4, 6 to 12, 14 to 21, 24, 25, 26, 28, 29, 30 to 32, 34 to 40, 42, 43, 45 and 46. In addition, a few HLA-B and HLA-C alleles will be amplified by primer mixes 15, 18, 22, 24, 30 and 45.

For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*26 alleles, i.e. **A*26:01 to A*26:102**, recognized by the HLA Nomenclature Committee in April 2014 will be amplified by the primers in the HLA-A*26 subtyping kit^{1,2}.

The HLA-A*26 kit enables separation of the confirmed HLA-A*26 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*26 alleles is listed below.

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The HLA-A*26 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 following HLA-A*26 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
A*26:17, 26:45	13	A*26:46, 26:53	33
A*26:23, 26:27	20	A*26:51, 26:75	38
A*26:24, 26:41	21	A*26:54, 26:55	36
A*26:25N, 26:38	22	A*26:59, 26:69	35
A*26:43:01, 26:61	32	A*26:62, 26:63	39

The HLA-A*26 subtyping kit cannot distinguish the following silent mutations: A*26:01:01-26:01:20 and 26:01:22-26:01:35 alleles, the A*26:02:01-26:02:02 alleles, the A*26:03:01-26:03:02 or the A*26:07:01-26:07:02 alleles.

¹HLA-A alleles listed on the IMGT/HLA web page 2014-April-14, release 3.16.0, www.ebi.ac.uk/imgt/hla.

²Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page <http://hla.alleles.org/alleles/deleted.html>.

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ALLELE CONFIRMATION STATUS

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

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2014-April-14, release 3.16.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in HLA-A*26 homo- and heterozygotes is available upon request.

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SPECIFICITY TABLE

HLA-A*26 SSP subtyping

Specificities and sizes of the PCR products of the 47+1 primer mixes used for HLA-A*26 SSP subtyping.

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*26 alleles ³	Other amplified HLA-A alleles ⁴
1⁶	180 bp	800 bp	*26:01:01-26:01:35, 26:03:01-26:03:02, 26:05, 26:07:01-26:08, 26:10-26:28, 26:29 ^w , 26:30-26:33, 26:35-26:39, 26:41-26:43:02, 26:45-26:48, 26:49 ^w , 26:50-26:77, 26:79-26:90, 26:92-26:102	*01:145 ^w , 02:135, 11:116, 11:140, 25:01:01-25:05, 25:07-25:17, 25:19-25:25, 31:24-31:25, 32:26, 33:61, 43:01, 66:01:01-66:01:02, 66:04-66:09, 66:10 ^w , 66:11-66:15, 66:17-66:19
2⁵	80 bp	800 bp	*26:01:01-26:02:02, 26:04, 26:08-26:18, 26:20, 26:22-26:29, 26:32-26:43:02, 26:45-26:56, 26:58-26:71N, 26:73-26:75, 26:77, 26:79-26:91, 26:93-26:102	*01:51, 33:13, 33:48, 68:84
3	140 bp	1070 bp	*26:02:01-26:02:02	
4⁷	260 bp	800 bp	*26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78, 26:92	*01:134, 03:09, 03:108, 03:172, 11:06, 11:18, 29:19, 29:48, 30:13, 30:16, 30:44, 30:46, 33:24, 68:05, 68:15, 68:20, 74:06, 74:21
5	180 bp	1070 bp	*26:04, 26:78	
6⁵	80 bp	1070 bp	*26:05	*68:109
7⁸	150 bp	800 bp	*26:08, 26:28, 26:48, 26:52, 26:67, 26:73, 26:81, 26:86, 26:91	*25:04
8	140 bp	1070 bp	*26:11N, 26:14, 26:18, 26:28, 26:52, 26:73	*03:01:19, 25:09, 31:03-31:04, 34:03, 34:06
9	145 bp	1070 bp	*26:12, 26:18	*02:309, 02:454, 31:03-31:04, 34:06, 66:06
	190 bp		*26:29, 26:49	*01:01:56, 66:10
10⁵	85 bp	1070 bp	*26:07:01-26:07:02	*01:83:01-01:83:02, 02:146
	260 bp		*26:20	*01:01:13, 02:146 ^w
11	140 bp	800 bp	*26:06, 26:19	*31:03
12	140 bp	1070 bp	*26:14, 26:18, 26:28, 26:52, 26:73	*03:01:19, 25:09, 31:03-31:04, 34:03, 34:06
	240 bp		*26:16	*01:02, 01:20, 24:04, 24:109, 24:129, 29:37, 29:56, 30:57
13⁵	110 bp	1070 bp	*26:45	
	255 bp		*26:17	

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Lot No.	Product	Size	Allele	Sequence
14	145 bp	1070 bp	*26:10	*02:38, 02:101:01, 02:154, 02:447, 11:119:01-11:119:02, 23:10, 24:10:01-24:10:02, 24:46, 24:210, 68:61
15 ⁵	100 bp	800 bp	*26:13, 26:19, 26:33	*01:13, 01:17, 03:63, 03:88, 11:01:01-11:11, 11:13-11:16, 11:20-11:27, 11:29-11:39, 11:41-11:52Q, 11:54-11:95, 11:97, 11:99N-11:105, 11:107-11:120, 11:122-11:158, 11:160-11:177, 11:179-11:192, 25:02, 29:66, 34:01:01-34:06, 34:08, 34:10N-34:11, 66:01:01-66:01:02, 66:04, 66:06-66:11, 66:13-66:14, 66:17-66:19, 69:02, C*07:335
16	430 bp	1070 bp	*26:13, 26:19, 26:33	*02:34 ^w , 02:35:01-02:35:03, 02:56:01 ^w -02:56:02 ^w , 02:62 ^w , 02:78, 02:103 ^w , 23:13, 24:07, 24:19, 24:24, 24:112, 24:131, 34:01:01-34:11, 66:01:01-66:02, 66:04, 66:06-66:14, 66:16-66:19, 68:01:01:01-68:02:07, 68:06-68:14, 68:16-68:19, 68:21:01-68:30, 68:32-68:56, 68:58-68:89, 68:91-68:108, 68:110-68:112, 69:01-69:03
17 ^{5,7}	105 bp 175 bp	1070 bp	*26:74 *26:09, 26:91	*02:309, 02:454, 03:01:19, 25:06, 31:03-31:04, 34:01:01-34:09
18 ^{5,6}	125 bp 205 bp	800 bp	*26:31 *26:21	*01:60, C*06:71
19	190 bp 245 bp	800 bp	*26:40 *26:22	*01:20 ^w , 01:66 ^w , 01:130 ^w , 02:38, 02:101:01, 02:447, 66:09
20 ^{5,7}	60 bp 210 bp	1070 bp	*26:27 *26:23	*11:185
21 ⁵	125 bp 205 bp	1070 bp	*26:24, 26:82, 26:99 *26:41	*02:140, 02:241, 31:48, 33:15, 33:31
22 ^{5,7}	100 bp 170 bp 220 bp	1070 bp	*26:25N *26:98 *26:38	C*06:75
23	130 bp 165 bp	1070 bp	*26:56, 26:82 *26:26	
24	305 bp	1070 bp	*26:32, 26:70	*01:03, 11:26, 11:118, 29:66, 32:62, 33:13, 36:03, 74:10, C*06:72
25 ⁸	360 bp	1070 bp	*26:30, 26:65	*02:135, 02:309, 02:454, 03:01:19, 25:13, 31:04, 34:09, 66:02-66:03, 66:12, 66:16
26 ⁷	150 bp 175 bp	1070 bp	*26:42 *26:01:21, 26:34, 26:73	*66:01:02
27 ⁵	125 bp 275 bp	1070 bp	*26:76 *26:35	
28 ⁵	90 bp	1070 bp	*26:03:01-26:03:02, 26:06, 26:21, 26:36, 26:78, 26:92	*01:104, 01:134, 02:346, 02:427, 11:06, 25:11, 80:01:01:01-80:01:01:02, 80:03
29	330 bp	1070 bp	*26:37	*24:74:02
30 ⁵	120 bp 235 bp	1070 bp	*26:15, 26:29, 26:56, 26:99 *26:33	*02:140, 11:91:01, 31:48, 33:15, B*35:108:01, B*53:26, C*12:91

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31	210 bp	800 bp	*26:39	*01:140 ^W
32⁵	90 bp 155 bp	1070 bp	*26:61 *26:43:01	*02:309, 02:454, 03:01:19, 25:19, 31:03-31:04, 34:02:01, 34:02:03-34:04, 34:06-34:09, 66:06
33^{5,7}	105 bp 170 bp 200 bp	1070 bp	*26:46 *26:98 *26:53	
34	135 bp 190 bp	1070 bp	*26:47 *26:29, 26:49	*25:08, 66:18 *01:01:56, 66:10
35⁵	110 bp 245 bp	1070 bp	*26:48, 26:69 *26:59	*34:01:01-34:01:02, 34:05, 34:11
36⁵	125 bp 215 bp	1070 bp	*26:54 *26:55	*02:454, 25:05
37	245 bp 410 bp	800 bp	*26:50 *26:64	*68:89
38⁵	90 bp 190 bp	1070 bp	*26:75 *26:51	*11:34
39⁶	220 bp 410 bp	800 bp	*26:63 *26:62, 26:64, 26:72	*24:181 *23:09, 24:129, 68:89
40⁵	90 bp	1070 bp	*26:57	*68:86
41	140 bp	1070 bp	*26:60N	
42	460 bp	1070 bp	*26:58	*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 23:01:01-23:63, 24:02:01:01- 24:02:32, 24:02:34-24:03:02, 24:05- 24:11N, 24:13:01-24:15, 24:17-24:18, 24:20-24:25, 24:27, 24:29-24:43, 24:45N-24:64, 24:66-24:88, 24:90N- 24:99, 24:101-24:108, 24:110-24:128, 24:130-24:183N, 24:185N-24:210, 24:212-24:213, 24:215-24:239, 24:242- 24:281, 25:01:01-25:25, 68:36
43	135 bp	1070 bp	*26:14, 26:18, 26:28, 26:73	*03:01:19, 25:09, 31:03-31:04, 34:03, 34:06
44⁵	105 bp	1070 bp	*26:68	
45	160 bp	1070 bp	*26:42, 26:71N	*68:94N, B*35:173N
46	155 bp	1070 bp	*26:43:02	*34:02:02
47	425 bp	1070 bp	*26:66	
48⁹			Negative Control	

¹ Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of HLA-A*01 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 alleles listed are specified according to amplicon length.

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.

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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 internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for 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. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*26 alleles will be amplified by primer mixes 1, 2, 4, 6 to 12, 14 to 21, 24, 25, 26, 28, 29, 30 to 32, 34 to 40, 42, 43, 45 and 46. In addition, a few HLA-B and HLA-C alleles will be amplified by primer mixes 15, 18, 22, 24, 30 and 45.

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

⁶Primer mixes 1, 18 and 39 have a tendency to giving rise to primer oligomer formation.

⁷Primer mixes 4, 17, 20, 22, 26 and 33 may have tendencies of unspecific amplifications.

⁸Primer mixes 7 and 25 may give rise to a lower yield of HLA-specific PCR product than the other A*26 primer mixes.

⁹Primer mix 48 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by control primer pairs. PCR product sizes range from 75 to 200 base pairs. The PCR product generated by the control primer pair is 430 base pairs.

'w', may be weakly amplified.

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information
PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec. PCR product	180	80	140	260	180	80	150	140	145	85	140	140
Length of int. pos. control ¹	800	800	1070	800	1070	1070	800	1070	1070	1070	800	1070
5'-primer(s) ²	418 5'-Agg 3'	261 5'-AAC 3'	418 5'-AgA 3'	74 5'-C 3'	423 5'-gCT 3'	261 5'-AAC 3'	423 5'-gCT 3'	423 5'-gCT 3'	423 5'-gCT 3'	78 5'-TCT 3'	243 5'-CCT 3'	98 5'-CTC 3'
				78 5'-TCC 3'						257 5'-Cgg 3'	416 5'-gCg 3'	423 5'-gCT 3'
3'-primer(s) ³	559 5'-CCg 3'	299 5'-TCg 3'	517 5'-CgT 3'	292 5'-gTg 3'	560 5'-ACA 3'	299 5'-TCT 3'	524 5'-CAC 3'	517 5'-CgC 3'	527 5'-CCA 3'	299 5'-TCg 3'	341 5'-CgT 3'	299 5'-TCg 3'
	559 5'-CCT 3'		517 5'-CgT 3'				538 5'-CTg 3'	519 5'-ggA 3'	570 5'-CCg 3'		517 5'-CgT 3'	517 5'-CgC 3'
								524 5'-CAC 3'				524 5'-CAC 3'
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec. PCR product	110	145	100	430	105	125	190	60	125	100	130	305
Length of int. pos. control ¹	1070	1070	800	1070	1070	800	800	1070	1070	1070	1070	1070
5'-primer(s) ²	228 5'-ATg 3'	453 5'-AAA 3'	282 5'-CAg 3'	28 5'-TCg 3'	423 5'-gCT 3'	257 5'-CCC 3'	355 5'-CCg 3'	392 5'-CgA 3'	395 5'-gCA 3'	160 5'-ACT 3'	652 5'-CTg 3'	341 5'-ggA 3'
	346 5'-gTA 3'					423 5'-gCT 3'	410 5'-gTT 3'	542 5'-gAA 3'	652 5'-CTg 3'	280 5'-CCC 3'		
										704 5'-Tgg 3'		
3'-primer(s) ³	299 5'-TCg 3'	559 5'-CCg 3'	341 5'-CgT 3'	282 5'-gAC 3'	485 5'-CCg 3'	341 5'-CgT 3'	559 5'-CCg 3'	559 5'-CCg 3'	559 5'-CCg 3'	341 5'-CgT 3'	743 5'-TCC 3'	362 5'-TCA 3'
	559 5'-CCg 3'	559 5'-CCg 3'		290 5'-gAA 3'	559 5'-CgT 3'	589 5'-CTT 3'			727 5'-CCA 3'	831 5'-TCC 3'	746 5'-ggT 3'	
									728 5'-CCT 3'		776 5'-CAA 3'	
									746 5'-ggT 3'			
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec. PCR product	360	150	125	90	330	120	210	90	105	135	110	125
		175	275			235		155	170	190	245	215
								200				
Length of int. pos. control ¹	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070
5'-primer(s) ²	341 5'-ggC 3'	98 5'-CTA 3'	106 5'-CCA 3'	292 5'-CTC 3'	28 5'-TCg 3'	98 5'-CTA 3'	391 5'-ACC 3'	423 5'-gCT 3'	401 5'-CCA 3'	423 5'-gCT 3'	136 5'-gCC 3'	423 5'-gCT 3'
		423 5'-gCT 3'	255 5'-gAg 3'			652 5'-CTg 3'			495 5'-CAC 3'		270 5'-AAA 3'	
									704 5'-Tgg 3'			
3'-primer(s) ³	418 5'-gTC 3'	208 5'-CCA 3'	341 5'-CgT 3'	341 5'-CgT 3'	186 5'-TCC 3'	180 5'-TCC 3'	559 5'-CCg 3'	472 5'-ggC 3'	559 5'-CCg 3'	518 5'-CCA 3'	341 5'-CgT 3'	506 5'-TgT 3'
		559 5'-CCA 3'				290 5'-gAA 3'		538 5'-CAA 3'	831 5'-TCC 3'	570 5'-CCg 3'		595 5'-CCA 3'
		559 5'-CCT 3'				727 5'-CCA 3'						
						743 5'-TCC 3'						
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47
Length of spec. PCR product	245	90	220	90	140	460	135	105	160	155	425
	410	190	410								
Length of int. pos. control ¹	800	1070	800	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	28 5'-TCg 3'	191 5'-CgA 3'	28 5'-TCg 3'	261 5'-AAC 3'	2 nd 5'-CCT 3'	28 5'-TCg 3'	423 5'-gCT 3'	423 5'-gCT 3'	98 5'-CTA 3'	423 5'-gCT 3'	28 5'-TCg 3'
	353 5'-CAg 3'	565 5'-gCA 3'									
3'-primer(s) ³	265 5'-CCA 3'	341 5'-CgT 3'	77 5'-ggC 3'	311 5'-ggA 3'	426 5'-TCC 3'	319 5'-gCg 3'	517 5'-CgC 3'	486 5'-gCg 3'	208 5'-CCA 3'	538 5'-CAg 3'	283 5'-TgC 3'
	559 5'-CCg 3'	616 5'-CgT 3'	265 5'-CCA 3'						224 5'-TCT 3'		
			271 5'-CAT 3'								
Well No.	37	38	39	40	41	42	43	44	45	46	47

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

²The nucleotide position 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 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.

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*26 SSP subtyping kit²																				
				Well																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	201437801	201437802	201437803	201437804	201437805	201437806	201437807	201437808	201437809	201437810	201437811	201437812	201437813	201437814	201437815	201437816
IHWC cell line¹				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	HFKB	*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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*26 SSP subtyping kit²																				
				Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
				Prod. No.:	201437817	201437818	201437819	201437820	201437821	201437822	201437823	201437824	201437825	201437826	201437827	201437828	201437829	201437830	201437831	201437832
	IHWC cell line ¹	A*																		
1	9001 SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
7	9020 QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9007 DEM	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*03:01	*80:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
18	9257 32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*02:01	*34:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO	*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information

CELL LINE VALIDATION SHEET																			
HLA-A*26 SSP subtyping kit²																			
				Well															
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
				Prod. No.:	201437833	201437834	201437835	201437836	201437837	201437838	201437839	201437840	201437841	201437842	201437843	201437844	201437845	201437846	201437847
IHWC cell line¹				A*															
1	9001	SA	*24:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	
2	9280	LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	9011	E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	9275	GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	9009	KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	9353	SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	9020	QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	9007	DEM	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	9026	YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	9107	LKT3	*24:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	
11	9051	PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	9052	DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
13	9004	JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	9071	OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	9075	DKB	*24:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	
16	9037	SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	
17	9282	CTM3953540	*03:01	*80:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	9257	32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	9059	SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	9064	AMALA	*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	9056	KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	9124	IHL	*02:01	*34:01	-	-	+	-	-	-	-	-	-	-	-	-	-	-	
24	9035	JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	9049	IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	9285	WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	9191	CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
28	9320	BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	9050	MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	9021	RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
31	9019	DJCAF	*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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

¹The provided cell line HLA specificities are retrieved from the <http://www.ihwg.org/hla> web site. The specificity of an individual cell line may thus be subject to change.

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: 01X

Lot-specific information

²The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 8 to 11, 13, 18, 19, 21 to 23, 26, 27, 29 to 31, 33, 34, 36 to 41 and 43 to 47 were available. The specificities of the primers in primer solutions 8 to 11, 18, 19, 21, 33, 34, 36, 37, 39, 43, 44 and 46 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 23, 26, 29, 30, 40, 41, 45 and 47 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 13, 20, 22, 27, 31 and 38 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 1, 3, 8, 16, 21, 32, 34, 36, 37 and 39 one or two of the 3'-primers were not possible to test. In primer solutions 4, 10, 11, 18, 19, 21, 22, 35 and 37 one of the 5'-primers was not possible to test. Additional primers in primer solutions 6, 7, 12 and 17 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer.

101.424-12 – including *Taq* polymerase, IFU-01
101.424-12u – without *Taq* polymerase, IFU-02

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101.424-12u – without *Taq* polymerase, IFU-02

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Lot No.: **01X**

Lot-specific information

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