

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

Visit <https://labproducts.caredx.com> for
 “Instructions for Use” (IFU)

Lot No.: **5N3**

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:	5N3
Expiry date:	2025-11-01
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. 5N3.

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 (7K0)**

- The product documentation has been updated for new alleles of IMGT 3.45.0.
- The kit resolution focuses on common and well documented (CWD) alleles¹.

The HLA-A*26 specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP®* HLA-A*26 lot was made (**Lot No. 7K0**).

The primers of the wells detailed below have been exchanged, added or modified compared to the previous lot (**Lot No. 7K0**).

Well	5'-primer	3'-primer	rationale
10	Moved, exchanged	Exchanged	5'-primer moved to well 12, exchanged primer pair for the *26:20:01-26:20:02 alleles.
12	Added	-	5'-primer added from well 10.

¹S. J. Mack, P. Cano, J. A. Hollenbach et al.
 Common and well-documented HLA alleles: 2012 update to the CWD catalogue. *Tissue Antigens*, 2013, 81, 194–203

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Well **48** contains Negative Control primer pairs, that will amplify the majority 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 200 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*26:215 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 ‘5N3’.

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 some primer mixes. For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*26 alleles, i.e. **A*26:01 to A*26:215**, recognized by the HLA Nomenclature Committee in July 2021 will be amplified by the primers in the HLA-A*26 subtyping kit^{1,2,3}.

The HLA-A*26 kit enables separation of the confirmed HLA-A*26 alleles as listed in the IMGT/HLA database 3.26.0. 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.

The HLA-A*26 kit also enables identification of many null and alternatively expressed alleles.



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Lot-specific information

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*26:11N, 26:60N	41	A*26:46, 26:53	33
A*26:17, 26:106	13	A*26:54-26:55	36
A*26:23, 26:27	20	A*26:59, 26:69	35
A*26:24, 26:41	21	A*26:62-26:63	39
A*26:25N, 26:38	22	A*26:68, 26:130	44
A*26:36, 26:116	28	A*26:103, 26:107N	43
A*26:43:01, 26:61	32		

¹HLA-A alleles listed on the IMGT/HLA web page 2021-July-12, release 3.45.0, 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>.

³The HLA-A*26 primer set cannot separate the following alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the respective high-resolution kits:

Alleles	Alleles
A*26:19, A*66:37	A*26:170, 26:184, A*25:60, A*31:24-31:25, A*32:26:01-32:26:02, A*33:61, 33:190, A*43:01, A*66:05, 66:15, A*74:37
A*26:156, 26:165, A*01:01:109, 01:51, A*29:105, A*33:48	



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ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*26:01:01:01	Confirmed	A*26:07:02	Confirmed	A*26:57	Unconfirmed	A*26:107N	Unconfirmed
A*26:01:01:02	Confirmed	A*26:08	Confirmed	A*26:58	Confirmed	A*26:108	Unconfirmed
A*26:01:01:03N	Unconfirmed	A*26:09	Unconfirmed	A*26:59	Confirmed	A*26:109	Unconfirmed
A*26:01:01:04	Unconfirmed	A*26:10	Unconfirmed	A*26:60N	Unconfirmed	A*26:110	Unconfirmed
A*26:01:02	Confirmed	A*26:11N	Unconfirmed	A*26:61	Unconfirmed	A*26:111	Unconfirmed
A*26:01:03	Unconfirmed	A*26:12	Confirmed	A*26:62	Confirmed	A*26:112	Confirmed
A*26:01:04	Confirmed	A*26:13	Unconfirmed	A*26:63	Confirmed	A*26:113	Unconfirmed
A*26:01:05	Unconfirmed	A*26:14	Confirmed	A*26:64	Unconfirmed	A*26:114	Unconfirmed
A*26:01:06	Confirmed	A*26:15	Confirmed	A*26:65	Confirmed	A*26:115	Confirmed
A*26:01:07	Unconfirmed	A*26:16	Unconfirmed	A*26:66	Unconfirmed	A*26:116	Confirmed
A*26:01:08	Unconfirmed	A*26:17	Confirmed	A*26:67	Unconfirmed	A*26:117	Unconfirmed
A*26:01:09	Unconfirmed	A*26:18	Confirmed	A*26:68	Confirmed	A*26:118	Unconfirmed
A*26:01:10	Unconfirmed	A*26:19	Unconfirmed	A*26:69	Confirmed	A*26:119	Unconfirmed
A*26:01:11	Confirmed	A*26:20	Confirmed	A*26:70	Unconfirmed	A*26:120	Unconfirmed
A*26:01:12	Unconfirmed	A*26:21	Unconfirmed	A*26:71N	Confirmed	A*26:121	Unconfirmed
A*26:01:13	Unconfirmed	A*26:22	Unconfirmed	A*26:72	Confirmed	A*26:122	Unconfirmed
A*26:01:14	Unconfirmed	A*26:23	Unconfirmed	A*26:73	Confirmed	A*26:123	Unconfirmed
A*26:01:15	Confirmed	A*26:24	Unconfirmed	A*26:74	Confirmed	A*26:124	Unconfirmed
A*26:01:16	Unconfirmed	A*26:25N	Unconfirmed	A*26:75	Confirmed	A*26:125	Unconfirmed
A*26:01:17	Confirmed	A*26:26	Unconfirmed	A*26:76	Unconfirmed	A*26:126	Unconfirmed
A*26:01:18	Confirmed	A*26:27	Confirmed	A*26:77	Unconfirmed	A*26:127N	Unconfirmed
A*26:01:19	Confirmed	A*26:28	Confirmed	A*26:78	Unconfirmed	A*26:128	Unconfirmed
A*26:01:20	Confirmed	A*26:29	Unconfirmed	A*26:79	Unconfirmed	A*26:129	Unconfirmed
A*26:01:21	Unconfirmed	A*26:30	Unconfirmed	A*26:80	Unconfirmed	A*26:130	Confirmed
A*26:01:22	Unconfirmed	A*26:31	Confirmed	A*26:81	Unconfirmed	A*26:131	Unconfirmed
A*26:01:23	Confirmed	A*26:32	Unconfirmed	A*26:82	Unconfirmed	A*26:132	Unconfirmed
A*26:01:24	Unconfirmed	A*26:33	Unconfirmed	A*26:83	Unconfirmed		
A*26:01:25	Unconfirmed	A*26:34	Unconfirmed	A*26:84	Unconfirmed		
A*26:01:26	Unconfirmed	A*26:35	Unconfirmed	A*26:85	Unconfirmed		
A*26:01:27	Unconfirmed	A*26:36	Confirmed	A*26:86	Unconfirmed		
A*26:01:28	Unconfirmed	A*26:37	Unconfirmed	A*26:87	Unconfirmed		
A*26:01:29	Unconfirmed	A*26:38	Confirmed	A*26:88	Unconfirmed		
A*26:01:30	Unconfirmed	A*26:39	Confirmed	A*26:89	Unconfirmed		
A*26:01:31	Unconfirmed	A*26:40	Unconfirmed	A*26:90	Unconfirmed		
A*26:01:32	Unconfirmed	A*26:41	Unconfirmed	A*26:91	Unconfirmed		
A*26:01:33	Unconfirmed	A*26:42	Confirmed	A*26:92	Unconfirmed		
A*26:01:34	Unconfirmed	A*26:43:01	Unconfirmed	A*26:93	Unconfirmed		
A*26:01:35	Unconfirmed	A*26:43:02	Confirmed	A*26:94	Unconfirmed		
A*26:01:36	Unconfirmed	A*26:45	Confirmed	A*26:95	Unconfirmed		
A*26:01:37	Unconfirmed	A*26:46	Unconfirmed	A*26:96	Unconfirmed		
A*26:01:38	Unconfirmed	A*26:47	Confirmed	A*26:97	Unconfirmed		
A*26:01:39	Unconfirmed	A*26:48	Unconfirmed	A*26:98	Unconfirmed		
A*26:01:41	Confirmed	A*26:49	Confirmed	A*26:99	Unconfirmed		
A*26:02:01	Confirmed	A*26:50	Unconfirmed	A*26:100	Unconfirmed		
A*26:02:02	Unconfirmed	A*26:51	Unconfirmed	A*26:101	Unconfirmed		
A*26:03:01	Confirmed	A*26:52	Confirmed	A*26:102	Unconfirmed		
A*26:04	Confirmed	A*26:53	Unconfirmed	A*26:103	Confirmed		
A*26:05	Confirmed	A*26:54	Unconfirmed	A*26:104	Confirmed		
A*26:06	Confirmed	A*26:55	Unconfirmed	A*26:105	Unconfirmed		
A*26:07:01	Unconfirmed	A*26:56	Unconfirmed	A*26:106	Confirmed		

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2016-October-14, release 3.26.0, 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
1 ⁵	180 bp	800 bp	*26:01:01:01-26:01:70, 26:03:01:01-26:03:01:02, 26:05, 26:07:01-26:08:03, 26:10-26:28, 26:30-26:39, 26:41-26:43:02, 26:45-26:48, 26:50-26:74, 26:76-26:77, 26:79-26:90, 26:92-26:117, 26:119-26:131, 26:133-26:137, 26:139-26:155, 26:157-26:164, 26:166Q-26:203, 26:206N-26:215	*02:135, 11:116, 11:140, 25:01:01:01-25:05, 25:07-25:35, 25:37-25:42N, 25:44-25:49N, 25:51, 25:53-25:58, 25:60-25:64, 25:66-25:76, 31:24-31:25, 32:26:01-32:26:02, 32:152, 33:61, 33:190, 43:01-43:02N, 66:01:01:01-66:01:05, 66:04-66:09, 66:11-66:15, 66:17-66:20, 66:22-66:24, 66:27N, 66:29-66:33, 66:35-66:38, 66:41-66:42, 74:37
2 ⁴	85 bp	800 bp	*26:01:01:01-26:02:02, 26:04, 26:08:01:01-26:18, 26:20:01-26:20:02, 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, 26:93-26:110, 26:112-26:113, 26:115-26:169, 26:171-26:176, 26:178-26:183, 26:185-26:192, 26:194-26:215	*01:01:109, 01:51, 02:644, 29:105, 33:13, 33:48, 68:84, 68:227
3	140 bp	1070 bp	*26:02:01-26:02:02, 26:118, 26:132, 26:138	
4 ⁶	260 bp	800 bp	*26:03:01:01-26:03:01:02, 26:06, 26:21, 26:30, 26:78, 26:92, 26:111, 26:177, 26:193	*01:134, 01:229, 02:591:01, 02:666, 03:09, 03:89:02, 03:108, 03:172, 03:198, 03:330N, 11:06, 11:18, 11:312, 29:19, 29:48, 30:13, 30:16, 30:44, 30:46, 33:24, 33:184, 68:05, 68:15, 68:20, 68:255, 74:06, 74:21, 74:39, C*06:247
5	180 bp	1070 bp	*26:04, 26:78	*25:50
6 ⁴	80 bp	1070 bp	*26:05	*68:109, 68:136
7 ⁷	150 bp	800 bp	*26:08:01:01-26:08:03, 26:28, 26:48, 26:52, 26:67, 26:73, 26:81, 26:86, 26:91, 26:124, 26:146, 26:150, 26:189	*25:04, 25:44
8 ⁶	135 bp	1070 bp	*26:14, 26:18, 26:28, 26:52, 26:73, 26:112, 26:146	*03:01:19, 03:103:02, 25:09, 31:03-31:04:02, 31:123, 34:03, 34:06, 34:17, 66:22, 66:43, 74:01:03



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Lot No.	Product	Product	Product	Product
9	145 bp	1070 bp	*26:12, 26:18, 26:172	*02:309, 02:454, 25:28, 25:30, 31:03-31:04:02, 31:123, 34:06, 66:06, 66:43, 74:01:03
	190 bp		*26:29, 26:49, 26:205	*01:01:56, 25:36, 25:65, 66:10
10	200 bp	1070 bp	*26:20:01-26:20:02	*01:51, 02:55, 02:644, 02:741, 02:815, 03:24, 25:03, 25:30, 32:15, 34:08, 68:71, 69:07
11	145 bp	800 bp	*26:06, 26:19, 26:45	*01:117 ^w , 30:125, 30:140, 31:03, 31:164, 66:37
12 ⁴	85 bp 240 bp	1070 bp	*26:07:01-26:07:02 *26:16	*01:83:01-01:83:02, 02:146, 02:749 *01:02:01-01:02:02, 01:20, 01:188, 01:190, 01:307, 24:04, 24:109, 24:129, 29:37, 29:56, 30:57, 30:90
13 ⁴	110 bp 255 bp	1070 bp	*26:45, 26:106 *26:17	*01:184
14	145 bp	1070 bp	*26:10	*01:88:02-01:88:03, 01:236, 02:38, 02:101:01, 02:154, 02:447, 02:543, 02:838, 02:848, 02:883, 02:1002, 11:119:01-11:119:02, 23:10, 23:110, 24:10:01:01-24:10:02, 24:46, 24:210, 24:300, 24:340, 24:494-24:495, 24:506, 24:528, 68:61, 68:134
15 ⁴	100 bp	800 bp	*26:13, 26:19, 26:33	*01:13, 01:17, 01:176, 01:302, 02:741, 03:63, 03:88, 03:382, 11:01:01:01-11:01:67, 11:01:69-11:01:72, 11:01:74-11:01:75, 11:01:77-11:11, 11:13-11:16, 11:20-11:27, 11:29-11:39, 11:41-11:52Q, 11:54:01-11:95, 11:97, 11:99N-11:105, 11:107-11:120, 11:122-11:158, 11:160-11:177, 11:179-11:249, 11:251N-11:290, 11:292-11:300, 11:302:01-11:307, 11:309-11:311, 11:313Q-11:324, 11:326-11:398, 11:400N-11:407N, 25:02, 25:75, 29:66, 30:125, 30:140, 34:01:01:01-34:06, 34:08, 34:10N-34:27, 66:01:01:01-66:01:05, 66:04, 66:06-66:11, 66:13-66:14, 66:17-66:20, 66:22-66:24, 66:27N, 66:29-66:33, 66:35-66:38, 66:40-66:42, 68:227, 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 , 02:580, 02:741, 02:907, 03:242, 03:312, 23:13, 24:07:01:01-24:07:04, 24:19, 24:24, 24:112, 24:131, 24:288, 24:290, 24:294Q, 24:339, 24:347:01-24:347:02, 24:387, 24:406, 24:453, 24:457, 24:477, 24:489, 24:510, 24:528, 24:541, 24:544, 29:155, 34:01:01:01-34:13, 34:15-34:27, 66:01:01:01-66:02, 66:04, 66:06-66:14, 66:16-66:27N, 66:29-66:38, 66:40-66:43, 68:01:01:01-68:02:20, 68:06-68:14, 68:16-68:19, 68:21:01-68:30,



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				68:32-68:56, 68:58:01-68:89, 68:91-68:108, 68:110-68:179, 68:181N-68:205N, 68:207-68:248, 68:250-68:254, 68:256-68:275, 69:01:01:01-69:08
17⁴	105 bp 175 bp	1070 bp	*26:74 *26:09, 26:91	*02:309, 02:454, 03:01:19, 03:103:02, 25:06, 31:03-31:04:02, 31:123, 34:01:01:01-34:09, 34:12-34:27, 74:01:03
18⁴	125 bp 205 bp	1070 bp	*26:31 *26:21, 26:115	*01:60, 34:24, C*06:71, C*07:581
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, 02:543, 02:838, 02:848 ^w , 02:883 ^w , 02:1002, 11:288, 66:09
20^{4,6}	60 bp 210 bp	1070 bp	*26:27 *26:23	*01:243 ^w *01:182 ^w , 11:185
21^{4,5}	115 bp	1070 bp	*26:24, 26:99	*02:140, 02:241, 02:684, 02:751, 02:821, 02:981, 29:116, 29:130, 31:48, 33:15, 33:31
	135 bp 205 bp		*26:82 *26:41	*02:956
22^{4,6}	100 bp 170 bp 220 bp	1070 bp	*26:25N *26:98 *26:38	*01:329, C*04:199, C*06:75
23	130 bp 165 bp	1070 bp	*26:56, 26:82 *26:26	*02:956
24	305 bp	1070 bp	*26:32, 26:70, 26:176	*01:03:01:01-01:03:02, 01:192, 01:287N, 01:307, 01:315, 01:350, 01:355N, 11:26, 11:118, 11:372, 29:66, 31:164, 32:62, 33:13, 33:184, 36:03, 68:227, 74:10, 74:30, B*57:102, C*06:72
25⁷	360 bp	1070 bp	*26:30, 26:65	*02:135, 02:309, 02:454, 03:01:19, 03:103:02, 25:13, 31:04:01:01-31:04:02, 31:123, 34:09, 66:02-66:03:01:03, 66:12, 66:16, 66:21, 66:25-66:26Q, 66:28N, 66:34, 66:39N, 66:43, 74:01:03
26⁶	175 bp	1070 bp	*26:01:21, 26:08:02, 26:34, 26:73	*66:01:02
27^{4,5}	125 bp 150 bp 275 bp	1070 bp	*26:76 *26:145N *26:35	*01:269N
28⁴	90 bp	1070 bp	*26:03:01:01-26:03:01:02, 26:06, 26:21, 26:36, 26:78, 26:92, 26:111, 26:146, 26:177, 26:193 *26:116	*01:104, 01:134, 01:229, 02:346, 02:427, 02:952, 11:06, 11:312, 25:11, 33:184, 80:01:01:01 ^w
29	265 bp 330 bp 475 bp	1070 bp	*26:37 *26:104	*24:74:02



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For *In Vitro* Diagnostic Use
 MA123 v01 SSP PI Template
 Date: November 2021, Rev. No: 00

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

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 “Instructions for Use” (IFU)

Lot No.: **5N3**

Lot-specific information

30⁴	120 bp	1070 bp	*26:15, 26:29, 26:56, 26:99	*02:140, 02:821, 11:91:01, 29:130, 31:48, 33:15, B*35:108:01, B*44:248, B*51:255, B*53:26, C*08:228, C*12:91, C*16:173
	235 bp		*26:33	
31	210 bp	800 bp	*26:39	*01:140:01 ^w , 11:54:02
32⁴	90 bp	1070 bp	*26:61	
	155 bp		*26:43:01	*02:309, 02:454, 03:01:19, 03:103:02, 25:19:01-25:19:02, 25:30, 31:03-31:04:02, 31:123, 34:02:01:01- 34:02:01:06, 34:02:03-34:04, 34:06- 34:09, 34:13, 34:15, 34:20-34:22, 34:24-34:26N, 66:06, 66:43, 74:01:03
	205 bp		*26:21, 26:115	
33^{4,6}	105 bp	1070 bp	*26:46	
	170 bp		*26:98	
	200 bp		*26:53	
34	140 bp	1070 bp	*26:47, 26:127N	*25:08, 66:18
	190 bp		*26:29, 26:49, 26:205	*01:01:56, 25:36, 25:65, 66:10
35⁴	115 bp	1070 bp	*26:48, 26:69, 26:114, 26:193	*02:741, 34:01:01:01-34:01:07, 34:05, 34:11-34:12, 34:14, 34:16- 34:18, 34:23, 34:27, C*04:49, C*07:262, C*07:417, C*07:475
	245 bp		*26:59	
36⁴	125 bp	1070 bp	*26:54	*02:454, 25:05
	150 bp		*26:127N	
	215 bp		*26:55	
37	245 bp	800 bp	*26:50	
	415 bp		*26:64, 26:66	*25:71, 68:89
38⁴	90 bp	1070 bp	*26:75	*01:205, 11:34
	150 bp		*26:145N	*01:269N
	190 bp		*26:51	*01:168, 11:262
39⁵	220 bp	800 bp	*26:63	*24:181
	410 bp		*26:62, 26:64, 26:72	*01:315, 02:609, 23:09, 24:129, 25:59, 25:71, 68:89
40⁴	90 bp	1070 bp	*26:57	*68:86, 68:265, B*39:104
	150 bp		*26:42	
	255 bp		*26:57	*02:886, 68:86, 68:265, B*39:104
41	140 bp	1070 bp	*26:60N	
	235 bp		*26:11N	
42	425 bp	1070 bp	*26:66	
	460 bp		*26:58	*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 02:571, 02:829, 02:933, 23:01:01:01-23:68, 23:70- 23:89, 23:91N-23:111, 23:113N- 23:117, 24:02:01:01-24:02:32, 24:02:34-24:02:115:02, 24:02:117- 24:03:04, 24:05:01-24:11N, 24:13:01- 24:15, 24:17:01:01-24:18, 24:20:01:01-24:25, 24:27, 24:29- 24:43, 24:45N-24:64, 24:66-24:88, 24:90:01N-24:99, 24:101-24:108, 24:110-24:128, 24:130-24:183N, 24:185N-24:210, 24:212-24:213,



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For *In Vitro* Diagnostic Use
 MA123 v01 SSP PI Template
 Date: November 2021, Rev. No: 00

101.424-12 – including *Taq* polymerase, IFU-01
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Lot No.: **5N3**

Lot-specific information

				24:215-24:239, 24:242-24:289, 24:291-24:293, 24:295-24:372, 24:374-24:405, 24:407-24:423, 24:425N-24:446, 24:448N-24:470, 24:472-24:551, 25:01:01:01- 25:01:20, 25:02-25:58, 25:61-25:76, 68:36, 68:249, B*27:163
43⁴	90 bp 175 bp	1070 bp	*26:107N *26:103	*25:18
44⁴	105 bp 235 bp	1070 bp	*26:68 *26:130	*25:76 *25:27:01, 66:14
45	155 bp 275 bp	1070 bp	*26:42, 26:71N *26:104	*11:208N, 68:94N, B*35:173:01N
46	240 bp	1070 bp	*26:18 ^w , 26:28, 26:43:02, 26:112	*34:06 [?] , 66:33, 66:43 ^w , 68:08:01:01- 68:08:01:02, 68:51 ^w , 68:168 ^w , 68:183
47	145 bp	1070 bp	*26:01:01:03N	
48⁸	-	-	Negative Control	

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

When the primers in a primer mix can give rise to 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.

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.

⁴HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

⁵Primer mixes 1, 27 and 39 may have tendencies of giving rise to primer oligomer formation.

⁶Primer mixes 4, 8, 20, 22, 26 and 33 may have tendencies of unspecific amplifications.

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

⁸Primer mix 48 contains a negative control, which will amplify the majority of HLA amplicons as well as 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 and the PCR product generated by the HGH positive control primer pair is 200 base pairs.

Abbreviations

w: may be weakly amplified.

?: nucleotide sequence of the primer matching sequence is not known.



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Lot No.: **5N3**

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	85	140	260	180	80	150	135	145	200	145	85
									190			240
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'	255 5'-gAT 3' 261 5'-AAC 3'	418 5'-AgA 3'	74 5'-C 3' 78 5'-TCC 3'	423 5'-gCT 3'	261 5'-AAC 3'	423 5'-gCT 3'	423 5'-gCT 3'	423 5'-gCT 3'	98 5'-CTT 3'	233 5'-gCg 3' 243 5'-CCT 3'	98 5'-CTC 3' 257 5'-Cgg 3' 416 5'-gCg 3'
3'-primer(s) ³	559 5'-CCT 3' 560 5'-ACC 3'	299 5'-TCg 3' 300 5'-TTT 3' 308 5'-TCT 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'	259 5'-gTT 3'	341 5'-CgT 3'	299 5'-TCg 3' 517 5'-CgT 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	115	100	130	305
	255				175	205	245	210	135	170	165	
									205	220		
Length of int. pos. control ¹	1070	1070	800	1070	1070	1070	800	1070	1070	1070	1070	1070
5'-primer(s) ²	228 5'-ATg 3' 346 5'-gTA 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'
						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



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101.424-12 – including *Taq* polymerase, IFU-01
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Lot No.: **5N3**

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec. PCR product	360	175	125	90	330	120	210	90	105	140	115	125
			150	265	475	235		155	170	190	245	150
			275					205	200			215
Length of int. pos. control ¹	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070
5'-primer(s) ²	341	423	106	116	28	98	391	423	401	423	136	423
	5'-ggC 3'	5'-gCT 3'	5'-CCA 3'	5'-gCg 3'	5'-TCg 3'	5'-CTA 3'	5'-ACC 3'	5'-gCT 3'	5'-CCA 3'	5'-gCT 3'	5'-gCC 3'	5'-gCT 3'
			232	292		652			495		256	
			5'-AgT 3'	5'-CTC 3'		5'-CTg 3'			5'-CAC 3'		5'-ACT 3'	
			255						704		270	
			5'-gAg 3'						5'-Tgg 3'		5'-AAA 3'	
3'-primer(s) ³	418	559	341	341	186	180	559	472	559	518	341	506
	5'-gTC 3'	5'-CCA 3'	5'-CgT 3'	5'-CgT 3'	5'-TCC 3'	5'-TCC 3'	5'-CCg 3'	5'-ggC 3'	5'-CCg 3'	5'-CCA 3'	5'-CgT 3'	5'-TgT 3'
		559			334	290		538	831	532		532
		5'-CCT 3'			5'-gCC 3'	5'-gAA 3'		5'-CAA 3'	5'-TCC 3'	5'-CTA 3'		5'-CTA 3'
						727		589		570		595
						5'-CCA 3'		5'-CTT 3'		5'-CCg 3'		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	425	90	105	155	240	145
	415	150	410	150	235	460	175	235	275		
		190		255							
Length of int. pos. control ¹	800	1070	800	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	28	191	28	98	2 nd I	28	423	423	98	2 nd I	4 th I
	5'-TCg 3'	5'-CgA 3'	5'-TCg 3'	5'-CTA 3'	5'-CCT 3'	5'-TCg 3'	5'-gCT 3'	5'-gCT 3'	5'-CTA 3'	5'-CCT 3'	5'-ggA 3'
	353	232		261							
	5'-CAg 3'	5'-AgT 3'		5'-AAC 3'							
		565									
		5'-gCA 3'									
3'-primer(s) ³	265	341	77	208	426	283	470	486	208	517	899
	5'-CCA 3'	5'-CgT 3'	5'-ggC 3'	5'-CCA 3'	5'-TCC 3'	5'-TgC 3'	5'-TCT 3'	5'-gCg 3'	5'-CCA 3'	5'-CgC 3'	5'-ACg 3'
	283	616	265	311	519	319	559	616	224	538	
	5'-TgC 3'	5'-CgT 3'	5'-CCA 3'	5'-ggA 3'	5'-ggA 3'	5'-gCg 3'	5'-CCC 3'	5'-CgC 3'	5'-TCT 3'	5'-CAg 3'	
	559		271						334		
	5'-CCg 3'		5'-CAT 3'						5'-gCC 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.



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

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Lot No.: **5N3**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*26 SSP subtyping kit ²																				
				Well																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	202014401	202014402	202014403	202014404	202014405	202014406	202014407	202014408	202014409	202135110	202014411	202135112	202135113	202014414	202014415	202014416
	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	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 OLG A		*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007		*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540		*03:01	*80:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367		*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16		*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA		*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL		*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
24	9035 JBUSH		*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9		*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007		*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
28	9320 BEL5GB		*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU		*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH		*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
31	9019 DUCAF		*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG		*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B		*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF		*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO		*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17		*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
37	9065 HHKB		*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL		*02:17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML		*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199		*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301		*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089		*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*66:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
45	9239 SHJO		*23:01	*24:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU		*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND		*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-



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

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Lot No.: **5N3**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*26 SSP subtyping kit ²																				
			Prod. No.:	Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
	IHWC cell line ¹	A*		202014417	202014418	202014419	202014420	202014421	202014422	202014423	202014424	202014425	202014426	202014427	202014428	202014429	202014430	202014431	202014432	
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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“Instructions for Use” (IFU)

Lot No.: **5N3**

Lot-specific information

CELL LINE VALIDATION SHEET																		
HLA-A*26 SSP subtyping kit ²																		
			Well															
			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
			Prod. No.:	202014433	202014434	202014435	202014436	202014437	202014438	202014439	202014440	202014441	202014442	202014443	202014444	202014445	202014446	202014447
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



0197

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

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 “Instructions for Use” (IFU)

Lot No.: **5N3**

Lot-specific information

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.

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 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, 22, 33, 34, 36, 37, 39, 44 and 46 were tested by separately adding one, two or three additional 5'-primers, respectively one or two additional 3'-primers. In primer solutions 23, 26, 29, 30, 40, 41, 43 and 45 it was only possible to test the 5'-primers, the 3'-primers were not possible to be tested. In primer solutions 13, 20, 27, 31, 38 and 47 it was only possible to test the 3'-primers, the 5'-primers were not possible to be tested. In primer solutions 1 to 3, 16, 18, 21, 32, 34, 36, 37, 39, 42 and 44 one, two or three of the 3'-primers were not possible to be tested. In primer solutions 2, 4, 10, 11, 18, 19, 21, 22, 28, 33, 35 and 37 one or two of the 5'-primers were not possible to be tested.

In addition, one or more primers in primer solutions 7, 12 and 17 were tested by separately adding one or more 5'-primers or 3'-primers.



0197

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

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **5N3**

Lot-specific information

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Fax: +46-8-717 88 18

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Web page: <https://labproducts.caredx.com/>

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Tel: 1-877-653-78171

Fax: 610-344-7989

E-mail: orders-us@caredx.com

Web page: <https://labproducts.caredx.com/>

For information on CareDx distributors worldwide, contact **CareDx AB**.



0197

For *In Vitro* Diagnostic Use

MA123 v01 SSP PI Template

Date: November 2021, Rev. No: 00