■LERUP SSP

HLA-C\*17

**Product Insert** 

101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

Lot No.: 5R5

Lot-specific information

Olerup SSP® HLA-C\*17

Product number:	101.628-06 – including <i>Taq</i> polymerase
	101.628-06u – without Taq polymerase
Lot number:	5R5
Expiry date:	2026-12-01
Number of tests:	6
Number of wells per test:	15+1
Storage - pre-aliquoted primers:	dark, between -15°C and -25°C
- PCR Master Mix:	between -15°C and -25°C
- Adhesive PCR seals	RT

## This Product Description is only valid for Lot No. 5R5.

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

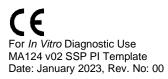
## CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® HLA-C\*17 Lot (6K3)

- The product documentation has been updated for new alleles of IMGT 3.49.0
- The kit resolution focuses on common and well documented (CWD) alleles<sup>1</sup>.

<sup>1</sup>As described in section Uniquely Identified Alleles.

The HLA-C\*17 specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup* SSP<sup>®</sup> HLA-C\*17 lot was made (Lot No. 6K3).

The HLA-C\*17 primer set is unchanged compared to the previous lot (Lot No. 6K3).



**Product Insert** 

101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

#### Lot No.: 5R5

Lot-specific information

Well **16** contains <u>Negative Control primer pairs</u>, that will amplify a majority of the *Olerup* SSP<sup>®</sup> 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	105	200	105	80	75	80	85
product							
5'-primer <sup>1</sup>	164	340	440	45	45	43	36
•	<sup>5'</sup> -CAC <sup>3'</sup>	<sup>5</sup> '-Agg <sup>3'</sup>	<sup>5'</sup> -TTA3'	<sup>5′</sup> -Tgg³′	⁵'-Tgg³'	<sup>5'</sup> -Tgg <sup>3'</sup>	<sup>5'</sup> -TAC <sup>3'</sup>
							36
							<sup>5'</sup> -TAT <sup>3'</sup>
3'-primer <sup>2</sup>	231	2 <sup>nd</sup> I	507	59	58	57	47
	<sup>5′</sup> -TgC³′	<sup>5'</sup> -AAA <sup>3'</sup>	<sup>5'</sup> -TTg <sup>3'</sup>	<sup>5'</sup> -CTC <sup>3'</sup>	<sup>5'</sup> -ggC <sup>3'</sup>	<sup>5′</sup> -CTC <sup>3′</sup>	<sup>5'</sup> -ACA <sup>3'</sup>
							48
							<sup>5'</sup> -gCA <sup>3'</sup>
							48
							<sup>5'</sup> -gCC <sup>3'</sup>
							52
							<sup>5′</sup> -TgT <sup>3′</sup>
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						÷	
DQA1							+

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

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

**Product Insert** 

101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

Lot No.: 5R5

Lot-specific information

## **PRODUCT DESCRIPTION**

## HLA-C\*17 SSP typing

## CONTENT

The primer set contains 5'- and 3'-primers for identifying the C\*17:01 to C\*17:64Q alleles.

## PLATE LAYOUT

Each HLA-C\*17 test consists of 16 PCR reactions in a 16 well cut PCR plate.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	NC

The 16 well PCR plate is marked with 'HLA-C17' in silver/gray ink.

Well No. 1 is marked with the Lot No. '5R5'.

Wells 1 to 15 – HLA-C\*17 high resolution primers.

Well 16 – 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 heat-sealed with a PCR-compatible foil.

**Please note:** When removing each 16 well PCR plate, make sure that the remaining plates stay sealed. 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-C alleles, non-HLA-C\*17 alleles will be amplified by some primer mixes. For further details see Specificity Table.

## UNIQUELY IDENTIFIED ALLELES

All the HLA-C\*17 alleles, i.e. C\*17:01 to C\*17:64Q, recognized by the HLA Nomenclature Committee in July  $2022^{1,2}$  will be amplified by the primers in the HLA-C\*17 SSP kit.

The HLA-C\*17 kit enables separation of the confirmed HLA-C\*17 alleles as listed in the IMGT/HLA database 3.24.0. 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-C\*17 alleles is listed below.

The HLA-C\*17 kit also enables identification of many null and alternatively expressed alleles.

Product Insert

#### 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

#### Lot No.: 5R5

## Lot-specific information

<sup>1</sup>HLA-C alleles listed on the IMGT/HLA web page 2022-July-12, release 3.49.0, <u>www.ebi.ac.uk/imgt/hla</u>.

<sup>2</sup>Alleles 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.

<sup>3</sup>The following alleles cannot be separated by this lot of the HLA-C\*17 kit. These alleles can be distinguished by the HLA-C low resolution kit.

#### Alleles

C\*17:01:01:02-17:01:18, 17:21, 17:30, 17:37-17:38:01:02, 17:42-17:44, 17:46-17:48, 17:50-17:55, 17:57, 17:61, 17:64Q, 04:423

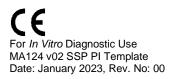
## **ALLELE CONFIRMATION STATUS**

Allele	e Status <sup>1</sup>		Status <sup>1</sup>	Allele	Status <sup>1</sup>
C*17:01:01:01	Confirmed	C*17:07	Confirmed	C*17:27N	Unconfirmed
C*17:01:01:02	Confirmed	C*17:08	Confirmed	C*17:28	Unconfirmed
C*17:01:01:03	Unconfirmed	C*17:09	Confirmed	C*17:29	Unconfirmed
C*17:01:01:04	Unconfirmed	C*17:10	Unconfirmed	C*17:30	Unconfirmed
C*17:01:01:05	Confirmed	C*17:11	Confirmed	C*17:31	Unconfirmed
C*17:01:02	Unconfirmed	C*17:12	Unconfirmed		
C*17:01:03	Confirmed	C*17:13	Unconfirmed		
C*17:01:04	Confirmed	C*17:14	Unconfirmed		
C*17:01:05	Unconfirmed	C*17:15	Confirmed		
C*17:01:06	Unconfirmed	C*17:16	Unconfirmed	_	
C*17:01:07	Unconfirmed	C*17:17	Confirmed		
C*17:01:08	Unconfirmed	C*17:18	Unconfirmed		
C*17:01:09	Confirmed	C*17:19	Unconfirmed		
C*17:01:10	Unconfirmed	C*17:20	Unconfirmed		
C*17:01:11	Unconfirmed	C*17:21	Unconfirmed		
C*17:02	Unconfirmed	C*17:22	Confirmed		
C*17:03	Confirmed	C*17:23	Unconfirmed		
C*17:04	Unconfirmed	C*17:24	Unconfirmed		
C*17:05	Unconfirmed	C*17:25	Unconfirmed		
C*17:06	Unconfirmed	C*17:26	Unconfirmed		

<sup>1</sup>Allele status "confirmed" or "unconfirmed" as listed on the IMGT/HLA web page 2016-April-15, release 3.24.0, <u>www.ebi.ac.uk/imgt/hla</u>.

## **RESOLUTION IN HOMO- AND HETEROZYGOTES**

Results file with resolution in HLA-C\*17 homo- and heterozygotes is available upon request.



**Product Insert** 

101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

Lot No.: 5R5

## Lot-specific information SPECIFICITY TABLE

## HLA-C\*17 SSP subtyping

# Specificities and sizes of the PCR products of the 15+1 primer mixes used for HLA-C\*17 SSP subtyping

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-C*17 alleles <sup>3</sup>	Other amplified HLA-C alleles
1	350 bp	800 bp	*17:01:01:02-17:01:18, 17:03:01:01-17:05, 17:06 <sup>?</sup> - 17:07 <sup>?</sup> , 17:08, 17:09 <sup>?</sup> - 17:16:01 <sup>?</sup> , 17:16:02-17:17, 17:18 <sup>?</sup> -17:20 <sup>?</sup> , 17:21, 17:22 <sup>?</sup> -17:29 <sup>?</sup> , 17:30, 17:31 <sup>?</sup> -17:35:01 <sup>?</sup> , 17:35:02, 17:36 <sup>?</sup> , 17:37- 17:44, 17:45 <sup>?</sup> , 17:46- 17:64Q	*04:423, 06:239, 07:665, 16:154
24	70 bp	1070 bp	*17:02, 17:06 <sup>?</sup> -17:07 <sup>?</sup> , 17:09 <sup>?</sup> -17:16:01 <sup>?</sup> , 17:18 <sup>?</sup> - 17:20 <sup>?</sup> , 17:22 <sup>?</sup> -17:29 <sup>?</sup> , 17:31 <sup>?</sup> -17:35:01 <sup>?</sup> , 17:36 <sup>?</sup> , 17:45 <sup>?</sup>	
3	300 bp	1070 bp	*17:03:01:01-17:03:03, 17:06 <sup>2</sup> -17:07 <sup>2</sup> , 17:09 <sup>2</sup> - 17:16:01 <sup>2</sup> , 17:16:02-17:17, 17:18 <sup>2</sup> -17:20 <sup>2</sup> , 17:22 <sup>2</sup> - 17:29 <sup>2</sup> , 17:31 <sup>2</sup> -17:35:01 <sup>2</sup> , 17:35:02, 17:36 <sup>2</sup> , 17:39- 17:41, 17:45 <sup>2</sup> , 17:49, 17:56, 17:58-17:60, 17:63	
44	90 bp	1070 bp	*17:01:01:02-17:01:18, 17:04-17:05, 17:06 <sup>?</sup> - 17:07 <sup>?</sup> , 17:08, 17:09 <sup>?</sup> - 17:16:01 <sup>?</sup> , 17:18 <sup>?</sup> -17:20 <sup>?</sup> , 17:21, 17:22 <sup>?</sup> -17:29 <sup>?</sup> , 17:30, 17:31 <sup>?</sup> -17:35:01 <sup>?</sup> , 17:36 <sup>?</sup> , 17:37-17:38:01:02, 17:42-17:44, 17:45 <sup>?</sup> , 17:46- 17:48, 17:50-17:55, 17:57, 17:61-17:62, 17:64Q	*04:423, <b>B*51:250</b>
5	155 bp 200 bp	1070 bp	*17:04 *17:15	*08:184, 15:135
64	65 bp	1070 bp	*17:05	*01:43, 03:280, 03:530, 05:01:12, 06:67, 07:101, 07:148, 07:161, 08:01:30, 08:02:11:01-08:02:11:02
74	125 bp 200 bp	800 bp	*17:06 *17:15	
84	100 bp	1070 bp	*17:07	*03:129, 03:234, <b>B*15:116</b> , B*15:352, B*15:412, B*15:507, B*35:331, B*40:63, B*40:92, 40:324, B*44:169, B*44:182, B*46:43, B*51:324, B*51:338, B*57:59
94	85 bp 135 bp 495 bp	1070 bp	*17:27N *17:08 *17:27N	

For *In Vitro* Diagnostic Use MA124 v02 SSP PI Template Date: January 2023, Rev. No: 00

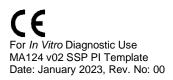
#### **Product Insert**

## 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

ot No.: 5	<u>R5</u>	L	ot-specific informatio	on
l 0 <sup>4</sup>	90 bp 495 bp	1070 bp	*17:09, 17:27N *17:27N	B*40:260
1	160 bp	1070 bp	*17:10	*03:319
2	450 bp	1070 bp	*17:11	*04:366, 04:368
I 3⁴	125 bp	1070 bp	*17:12	*15:98, <b>A*31:01:38, B*42:22</b>
44	80 bp 260 bp	1070 bp	*17:17 *17:13	*04:447, 04:480, 05:206, 08:185
154,5	260 bp 55 bp	1070 bp	*17:13 *17:22, 17:62 <sup>w</sup>	*01:17, 01:21, 01:23, 01:128, 01:152, 01:157, 02:12 <sup>w</sup> , 02:115, 03:27, 03:38:01-03:38:02, 03:69, 03:136, 03:246, 03:274, 03:431, 04:29, 04:172, 04:449 <sup>w</sup> , 04:473, 06:11, 06:122 <sup>w</sup> , 06:252, 07:01:01-07:01:02:14, 07:01:04 07:01:40, 07:01:42-07:01:69, 07:01:71-07:02:40, 07:02:42- 07:02:99, 07:02:101-07:02:130, 07:02:131 <sup>w</sup> , 07:02:132-07:04:13, 07:04:15-07:06:06, 07:08, 07:10- 07:33N, 07:35-07:38:02, 07:41- 07:48, 07:50-07:60, 07:62-07:75, 07:77-07:78:01, 07:79-07:114, 07:118-07:209, 07:211-07:222, 07:224, 07:226Q-07:237, 07:239- 07:246:02, 07:248-07:290, 07:212- 07:327, 07:329N-07:334, 07:336- 07:356, 07:358-07:360, 07:362- 07:376, 07:378-07:402, 07:404- 07:405:02, 07:407-07:414, 07:416- 07:477, 07:478 <sup>w</sup> , 07:479-07:517, 07:556-07:558:01:02, 07:559 <sup>w</sup> , 07:566-07:558:01:02, 07:559 <sup>w</sup> , 07:566-07:558:01:02, 07:559 <sup>w</sup> , 07:566-07:558:01:02, 07:656 <sup>w</sup> , 07:657-07:726N, 07:728-07:792, 07:996-07:1023, 08:05, 08:21, 08:25, 08:137, 12:02:01-12:02:22, 12:02:23 <sup>w</sup> , 12:03:71-12:03:81, 12:06-12:08, 12:10:01-12:02, 12:22-12:26, 12:28-12:32, 12:34- 12:40, 12:42Q-12:48, 12:50-12:53, 12:55-12:59, 12:61-12:62, 12:64- 12:71, 12:72 <sup>w</sup> , 12:73-12:97, 12:9901-12:107, 12:109-12:134, 12:135 <sup>w</sup> , 12:135 <sup>w</sup> , 12:155 <sup>w</sup> , 12:357, 12:355-12:359, 12:357, 12:355, 12:357, 1

<sup>1</sup>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-C\*17 SSP typings.



#### **Product Insert**

#### 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

#### Lot No.: 5R5

#### Lot-specific information

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 inherit 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.

<sup>2</sup>The 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.

<sup>3</sup>For several HLA Class I alleles 1<sup>st</sup> and/or 4<sup>th</sup> 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.

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

In order to have as little co-amplification as possible of non-HLA-C\*17 alleles by the primer pairs of the HLA-C\*17 subtyping kit, many of the specific PCR products are shorter than 100 base pairs.

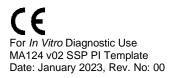
<sup>5</sup>Primer mix 15 may give rise to a lower yield of HLA-specific PCR product than the other HLA-C\*17 primer mixes in the C\*07:02 alleles.

<sup>6</sup>Primer mix 16 contains a negative control, which will amplify a 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: might be weakly amplified.

?: nucleotide sequence information not available for the primer matching sequence.



**Product Insert** 

#### 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

Lot No.: 5R5

## Lot-specific information PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	350	70	300	90	155	65	125	100	85	90	160	450
PCR product					200		200		135	495		
									495			
Length of int.	800	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070
pos. control <sup>1</sup>												
5'-primer(s) <sup>2</sup>	20	28	70	20	126	176	126	499	295	295	80	341
	5' -CCA 3'	<sup>5'</sup> -TCA <sup>3'</sup>	<sup>5'</sup> -ggA <sup>3'</sup>	5' -CCA 3'	<sup>5'</sup> -ggA <sup>3'</sup>	5' -gCA 3'	<sup>5'</sup> -ggA <sup>3'</sup>	5' -TCT 3'	5' -ACT 3'	5' -ACT 3'	5' -CCg 3'	<sup>5'</sup> -ggA <sup>3'</sup>
							412		406	445		
							<sup>5'</sup> -ATA <sup>3'</sup>		<sup>5'</sup> -gCA <sup>3'</sup>	<sup>5'</sup> -TCA <sup>3'</sup>		
3'-primer(s) <sup>3</sup>	201	59	201	70	239	201	287	559	341	341	201	499
	5' -CTC 3'	5' -CgA 3'	5' -CTC 3'	5' -ggC 3'	<sup>5'</sup> -gCg <sup>3'</sup>	5" -CTC 3"	5' -CCC 3'	5' -CAg <sup>3'</sup>	5' -Cgg <sup>3'</sup>	5' -Cgg 3'	5' -CTC 3'	<sup>5'</sup> -ggA <sup>3'</sup>
	201				287		495		499	499		
	5' -CTT 3'				5' -CCC 3'		<sup>5'</sup> -ATA <sup>3'</sup>		<sup>5'</sup> -ggA <sup>3'</sup>	<sup>5'</sup> -ggA <sup>3'</sup>		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15
Length of spec.	125	80	55
PCR product		260	
Length of int.	1070	1070	1070
pos. control <sup>1</sup>			
5'-primer(s) <sup>2</sup>	228	359	289
	<sup>5'</sup> -ATA <sup>3'</sup>	5' -CCg 3'	<sup>5'</sup> -Agg <sup>3'</sup>
		539	
		<sup>5'</sup> -gCg <sup>3'</sup>	
3'-primer(s) <sup>3</sup>	312	580	302
	<sup>5'</sup> -AgT <sup>3'</sup>	<sup>5'</sup> -TCC <sup>3'</sup>	<sup>5'</sup> -ggC <sup>3'</sup>
Well No.	13	14	15

<sup>1</sup>The 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.

<sup>2</sup>The nucleotide position matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the <u>www.ebi.ac.uk/imgt/hla</u> web site. The sequence of the 3 terminal nucleotides of the primer is given.

<sup>3</sup>The nucleotide position matching the specificity-determining 3'-end of the primer is given in the antisense direction. Nucleotide numbering as on the <u>www.ebi.ac.uk/imgt/hla</u> web site. The sequence of the 3 terminal nucleotides of the primer is given.

**Product Insert** 

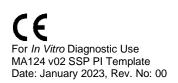
Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

## 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Lot No.: 5R5

Lot-specific information

			ELL	LINE	VA	۱L	DA	TI	0	1S	HE	EE.	Г						
			F	ILA-C*	17	SS	Ρp	rim	ner	set	2								
			_		 							Nel	1						
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					_			-		<i>(</i> 0	<u> </u>		-						
				 0	201891001	201891002	201891003	201891004	201891005	201891006	201891007	201891008	201891009	201891010	201891011	201891012	201891013	201891014	201891015
				Prod. No.	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391
				loo	3	3	3	3	3	3	3	3	018	3	3	3	3	018	3
	IHV	/C cell line <sup>1</sup>	-	<u> </u>	2	~		~	~		N	~	2		2		~	~	2
1	9001		*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
2		LK707	*07:01	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
3		E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
4		GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353		*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
7	9020		*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025		*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075		*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
18		32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
19		BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
20		SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21		AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
23	9124		*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
25		IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26		WT49	*07:18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
27		CH1007	*07:04	*15:29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
28		BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050		*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021		*17:01		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-
31		DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297		*17:03		+	-	+	-	-	-	-	-	-	-	-	-	-	-	-
33		MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104		*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
35		SSTO	*05:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36		KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37		HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
38	9099		*03:03	*07.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315		*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
40		WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42		TAB089	*01:02	*02.01			-	-	-	-		-			-	-	-	-	
43		T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057		*12:03	*17.01		-	-	-	-	-	-	-		-	-	-			+
45		SHJO	*06:02	*17:01	+	-	-	+	-	-	-	-	-	-	-	-	-	_	-
46 47		SCHU	*07:02	*15.00		-	-	-	-	-	-	-	-	-	-	-	-		+
				*15:02	-			-	-	-	-	-	-	-	-	-	-	-	+
48	<u>ჟა</u> 03	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



#### Product Insert

## 101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

#### Lot No.: 5R5

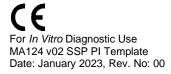
#### Lot-specific information

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

<sup>2</sup>The 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 2 and 5 to 14 were available.

The specificity of the primers in primer solutions 2, 6, 8, and 12 to 14 was tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 5 and 7 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 9 to 11 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solution 14 one 5'-primer was not possible to test. In addition, one 3'-primer in primer solution 1 was tested by separately adding one 5'-primer.



Product Insert

101.628-06 – including *Taq* polymerase 101.628-06u – without *Taq* polymerase

Lot No.: 5R5

Lot-specific information

Visit <u>www.caredx.com</u> for "Instructions for Use" (IFU)

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