©LERUPSSP®
DRB1\*16 Product Insert Page 1 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="https://www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

# Olerup SSP® DRB1\*16

Product number: 101.126-12 – including *Taq* polymerase

101.126-12u – without *Taq* polymerase

Lot number: 51Y

Expiry date: 2017-December-01

Number of tests: 12 Number of wells per test: 15+1

Storage - pre-aliquoted primers: dark at -20°C

PCR Master Mix: -20°C
 Adhesive PCR seals
 Product Insert
 RT

## This Product Description is only valid for Lot No. 51Y.

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

# CHANGES COMPARED TO THE PREVIOUS *OLERUP* SSP® DRB1\*16 LOT (60X)

The DRB1\*16 kit is updated for new alleles to enable separation of:

- Confirmed<sup>1</sup> 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.

The DRB1\*16 primer set, specificity and interpretation tables have been updated for the DRB1 alleles described since the previous *Olerup* SSP® DRB1\*16 lot was made (Lot No. 60X). The kit design is based on IMGT/HLA database 3.20.0.

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

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

Product Insert Page 2 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

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.

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

Well	5'-primer	3'-primer	rationale
1	-	Added	3'-primer added for the DRB1*16:01:07 allele.
8	-	Added	3'-primer added for the DRB1*16:26 allele.
16	-	-	Updated negative control.

Change in revision R01 compared to R00:

1. The DRB1\*16:12 allele is amplified by primer mixes 1 and 2, and is weakly amplified by primer mix 12. The DRB1\*15:28 allele is amplified by primer mix 9. This has been corrected in the Specificity and Interpretation Tables.





Visit <u>www.olerup-ssp.com</u> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

Well **16** 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	105	200	105	80	75	80	85
product							
5'-primer <sup>1</sup>	164	340	440	45	45	43	36
	5'-CAC3'	<sup>5'</sup> -Agg <sup>3'</sup>	<sup>5'</sup> -TTA3'	<sup>5</sup> '-Tgg <sup>3</sup> '	<sup>5</sup> '-Tgg <sup>3</sup> '	<sup>5'</sup> -Tgg <sup>3'</sup>	5'-TAC3'
							36
							<sup>5'</sup> -TAT <sup>3'</sup>
3'-primer <sup>2</sup>	231	2 <sup>nd</sup> I	507	59	58	57	47
•	5'-TgC3'	<sup>5</sup> '-AAA <sup>3</sup> '	<sup>5'</sup> -TTg <sup>3'</sup>	5'-CTC <sup>3'</sup>	<sup>5'</sup> -ggC <sup>3'</sup>	5'-CTC3'	5'-ACA3'
							48
							<sup>5'</sup> -gCA <sup>3'</sup>
							48
							<sup>5'</sup> -gCC <sup>3'</sup>
							52
							<sup>5'</sup> -TgT <sup>3'</sup>
<b>A</b> *	+	+	+				
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 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 <a href="https://www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a> web site. The sequence of the 3 terminal nucleotides of the primer is given.

<sup>&</sup>lt;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 <a href="www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a> web site. The sequence of the 3 terminal nucleotides of the primer is given.

Product Insert

Page 4 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <u>www.olerup-ssp.com</u> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

### PRODUCT DESCRIPTION

## DRB1\*16 SSP subtyping

#### **CONTENT**

The primer set contains 5'- and 3'-primers for identifying the DRB1\*16:01 to DRB1\*16:34 alleles.

#### PLATE LAYOUT

Each 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 cut PCR plate is marked with 'DRB1\*16' in silver/gray ink.

Well No. 1 is marked with the Lot No. '51Y'.

Wells 1 to 15 – DRB1\*16 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 covered with a PCR-compatible foil.

**Please note:** When removing each 16 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 DRB1 alleles, primer mixes 1, 5, 6, 9, 10, 14 and 15 will amplify other DRB1 alleles. In addition, DRB5 alleles will be amplified by primer mix 14.

For further details see Specificity Table.

#### **UNIQUELY IDENTIFIED ALLELES**

All the DRB1\*16 alleles, i.e. **DRB1\*16:01 to DRB1\*16:34**, recognized by the HLA Nomenclature Committee in April 2015<sup>1,2</sup> will be amplified by the primers in the DRB1\*16 subtyping kit.

The DRB1\*16 kit enables separation of the confirmed DRB1\*16 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 DRB1\*16 alleles is listed below.

The DRB1\*16 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles. Product Insert

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Page 5 of 12

Lot No.: 51Y Lot-specific information

The DRB1\*16 subtyping kit cannot distinguish the following silent mutations: the DRB1\*16:01:01-16:01:08, DRB1\*16:02:01-16:02:04, the DRB1\*16:05:01-16:05:02 or the DRB1\*16:09:01-16:09:02 alleles.

<sup>1</sup>DRB1 alleles listed on the IMGT/HLA web page 2015-April-17, release 3.20.0, www.ebi.ac.uk/imgt/hla.

#### **ALLELE CONFIRMATION STATUS**

Allele	Status <sup>1</sup>	Allele	Status <sup>1</sup>	Allele	Status <sup>1</sup>
DRB1*16:01:01	Confirmed	DRB1*16:10	Confirmed	DRB1*16:30	Unconfirmed
DRB1*16:01:02	Unconfirmed	DRB1*16:11	Unconfirmed	DRB1*16:31	Unconfirmed
DRB1*16:01:03	Unconfirmed	DRB1*16:12	Confirmed	DRB1*16:32	Unconfirmed
DRB1*16:01:04	Unconfirmed	DRB1*16:13N	Unconfirmed	DRB1*16:33	Unconfirmed
DRB1*16:01:05	Confirmed	DRB1*16:14	Confirmed	DRB1*16:34	Unconfirmed
DRB1*16:01:06	Unconfirmed	DRB1*16:15	Confirmed		
DRB1*16:01:07	Unconfirmed	DRB1*16:16	Unconfirmed		
DRB1*16:01:08	Unconfirmed	DRB1*16:17	Unconfirmed		
DRB1*16:02:01	Confirmed	DRB1*16:18	Unconfirmed		
DRB1*16:02:02	Unconfirmed	DRB1*16:19	Unconfirmed		
DRB1*16:02:03	Unconfirmed	DRB1*16:20	Unconfirmed		
DRB1*16:02:04	Unconfirmed	DRB1*16:21N	Unconfirmed		
DRB1*16:03	Unconfirmed	DRB1*16:22	Unconfirmed		
DRB1*16:04	Confirmed	DRB1*16:23	Unconfirmed		
DRB1*16:05:01	Confirmed	DRB1*16:24	Unconfirmed		
DRB1*16:05:02	Confirmed	DRB1*16:25	Unconfirmed		
DRB1*16:07	Confirmed	DRB1*16:26	Unconfirmed		
DRB1*16:08	Confirmed	DRB1*16:27	Unconfirmed		
DRB1*16:09:01	Confirmed	DRB1*16:28	Unconfirmed		
DRB1*16:09:02	Unconfirmed	DRB1*16:29	Unconfirmed		

<sup>&</sup>lt;sup>1</sup>Allele status "confirmed" or "unconfirmed" as listed on the IMGT/HLA web page 2015-April-17, release 3.20.0, <a href="https://www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a>.

#### RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in DRB1\*16 homo- and heterozygotes is available upon request.

<sup>&</sup>lt;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.

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: **51Y** 

Lot-specific information

## **SPECIFICITY TABLE**

## DRB1\*16 SSP subtyping

Specificities and sizes of the PCR products of the 15+1 primer mixes used for DRB1\*16 SSP subtyping

Mix F	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified DRB1*16 alleles <sup>3</sup>	Other amplified DRB1 alleles <sup>4</sup>
1 2	260 bp	515 bp	*16:01:01-16:05:02, 16:07-16:14, 16:16- 16:22, 16:24-16:32	*15:02:01-15:02:12, 15:08, 15:11, 15:14-15:15, 15:19, 15:26-15:27, 15:29-15:31, 15:34, 15:38-15:39, 15:44, 15:47, 15:58, 15:60, 15:63, 15:68, 15:78, 15:80N, 15:99, 15:101, 15:103-15:105, 15:115N, 15:118-15:119
2 2	200 bp	515 bp	*16:02:01-16:02:04, 16:10-16:12, 16:14, 16:16-16:23, 16:29, 16:31	
36 2	200 bp	430 bp	*16:01:01-16:01:08, 16:03-16:04, 16:08- 16:09:02, 16:13N, 16:15, 16:24-16:25, 16:27-16:28, 16:30, 16:32-16:34	
4 2	215 bp	430 bp	*16:03	
5 2	220 bp	430 bp	*16:04, 16:18	*15:21
	200 bp	430 bp	*16:05:01-16:05:02, 16:07	*15:10, 15:21
	160 bp	515 bp	*16:07	
1	110 bp 175 bp 205 bp	430 bp	*16:08 *16:14 *16:26	
9 1	140 bp	430 bp	*16:09:01-16:10, 16:33	*15:01:01:01-15:01:21, 15:01:23- 15:02:09, 15:02:11-15:06:03, 15:08, 15:10, 15:12-15:33, 15:35-15:47,
				15:49-15:58, 15:60-15:68, 15:70- 15:87, 15:89-15:95, 15:97-15:114, 15:116-15:120
	115 bp	430 bp	*16:09:01-16:10, 16:33	*11:01:03, 11:01:10-11:01:11, 11:04:07, 11:08:03, 11:19:02, 12:01:01, 12:01:03-12:02:03, 12:02:05-12:10, 12:12-12:15, 12:16:02-12:20, 12:23-12:37, 12:39-12:42, 12:44-12:48, 12:51-12:52, 12:54-12:56, 13:02:02, 13:77, 13:163, 13:181, 15:50N, 15:80N
	170 bp 215 bp	430 bp	*16:21N *16:11	
	215 bp	515 bp	*16:12 <sup>w</sup> , 16:17	

Visit <u>www.olerup-ssp.com</u> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

13 <sup>5</sup>	120 bp 165 bp	430 bp	*16:19 *16:13N, 16:14	
14 <sup>5</sup>	85 bp	430 bp	*16:16, 16:27 *16:21N	*11:01:03, 11:01:10-11:01:11, 11:04:07, 11:08:03, 11:19:02, 12:04, <b>DRB5*01:13</b>
15 <sup>5</sup>	80 bp	430 bp	*16:15, 16:23, 16:33-16:34	*01:23, 04:53, 04:99, 11:04:07, 12:01:01, 12:01:03-12:02:03, 12:02:05-12:06, 12:08-12:15, 12:17-12:21, 12:23-12:38, 12:41-12:48, 12:50-12:56, 13:77, 13:163, 13:181
16 <sup>7</sup>			Negative Control	

<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 DRB\*16 SSP subtypings.

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 430 or 515 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the longer, 515 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 DRB1 alleles 1<sup>st</sup> and/or 3<sup>rd</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>Due to the sharing of sequence motifs between DRB1 alleles, primer mixes 1, 5, 6, 9, 10, 14 and 15 will amplify other DRB1 alleles. In addition, DRB5 alleles will be amplified by primer mix 14.

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

<sup>6</sup>Primer mix 3 has a tendency to giving rise to primer oligomer formation.

<sup>7</sup>Primer mix 16 contains a negative control, which will amplify more than 95% 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 430 base pairs.

Visit <u>www.olerup-ssp.com</u> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

#### PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	260	200	200	215	220	200	160	110	140	115	170	215
PCR product								175			215	
								205				
Length of int.	515	515	430	430	430	430	515	430	430	430	430	515
pos. control <sup>1</sup>												
5'-primer(s) <sup>2</sup>	13(126)	13(126)	13(126)	13(126)	13(126)	13(126)	27(167)	13(126)	13(126)	47(227)	13(127)	13(126)
	<sup>5'</sup> -Agg <sup>3'</sup>	5' -CCC 3'	<sup>5'</sup> -Agg <sup>3'</sup>	<sup>5'</sup> -Agg <sup>3'</sup>	<sup>5'</sup> -gTT <sup>3'</sup>	<sup>5'</sup> -ggA <sup>3'</sup>	<sup>5'</sup> -AAg <sup>3'</sup>					
											29(173)	15(133)
											<sup>5'</sup> Ag <sup>3'</sup>	<sup>5'</sup> -gTA <sup>3'</sup>
3'-primer(s) <sup>3</sup>	86(344)	66(286)	66(286)	71(301)	73(307)	66(286)	66(286)	37(197)	47(227)	72(303)	72(303)	72(303)
- 1 (-)							<sup>5'</sup> -gAT <sup>3'</sup>					
	86(344)		66(286)				66(286)					
	5' -CCC 3'		<sup>5'</sup> -gAA <sup>3'</sup>				5' -gAT 3'					
								67(289)				
								5' -CAC 3'				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15
Length of spec.	120	85	80
PCR product	165	170	
-			
Length of int.	430	430	430
pos. control <sup>1</sup>			
5'-primer(s) <sup>2</sup>	13(126)	29(173)	72(303)
	<sup>5'</sup> -Agg <sup>3'</sup>	<sup>5'</sup> Ag <sup>3'</sup>	<sup>5'</sup> -CgC <sup>3'</sup>
		58(261)	
		<sup>5'</sup> -gAg <sup>3'</sup>	
3'-primer(s) <sup>3</sup>	39(203)	72(303)	86(344)
	<sup>5'</sup> -AgT <sup>3'</sup>	<sup>5'</sup> -gCg <sup>3'</sup>	5' -CCA 3'
	51(241)		
	5' -CTA 3'		
	57(258)		
	5' -gCT 3'		
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 430 or 515 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the longer, 515 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 <a href="https://www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a> 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 anti-sense direction. Nucleotide numbering as on the <a href="www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a> web site. The sequence of the 3 terminal nucleotides of the primer is given.



Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

		CE	LL LIN	VE VA	LI	D/	۱T	10	N	Sŀ	ΙE	Ε٦	Γ						
			DRB1	1*16 SS	P	su	bty	/pi	ng	kit	t <sup>2</sup>								
											\	Ve	_						
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Prod. No.:	201553301	201553302	201553303	201553304	201553305	201553306	201553307	201553308	201553309	201553310	201553311	201553312	201553313	201553314	201553315
	IHV	/C cell line <sup>1</sup>	D	RB1															
1	9001	SA	*01:01		•	-	-	-	-	-	-	-	-	-	-	-	-	-	
2		LK707	*15:02	*04:05	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-
3		E4181324	*15:02		+	-	-	-	-	-	-	-	+	-	-	-	-	-	-
4		GU373	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		KAS011	*16:01		+	-	+	-	-	-	-	-	-	-	-	-	-	-	-
6	9353		*04:07	*08:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020		*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025		*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026		*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10		LKT3	*04:05		-	-	-	-	-	-	-	-	<u> </u>	-	_	-	-	-	-
11		PITOUT	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 13	9052	JESTHOM	*07:01 *01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		OLGA	*08:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075		*09:01		-	-	-	-	-	-	-	-	-	-	-	Ë	-	-	-
16		SWEIG007	*11:01		-	-		-	-	-		-	-	-	-	H	H	Ė	-
17		CTM3953540	*03:01	*13:01		-	-	-	-	-	-	-	E	-	-	Ë	-	-	-
18		32367	*09:01	*11:01	E	-	_	-	-	-	_	-	H	-	-	-	-	-	-
19		BM16	*12:01	11.01	-	-	_	-	-	-	-	-	-	+	-	-	-	-	+
20		SLE005	*13:02			-	_	-	-	-		-	-		-	Ë	Ë	-	-
21		AMALA	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		KOSE	*13:02	*14:01	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
23	9124		*08:03	*14:14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		JBUSH	*11:01	14.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		IBW9	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26		WT49	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		CH1007	*04:05	*10:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		BEL5GB	*04:16	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050		*07:01	07.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021		*03:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31		DUCAF	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32		HAG	*13:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33		MT14B	*04:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104		*11:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35		SSTO	*04:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36		KT17	*04:03	*04:06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37		HHKB	*13:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*03:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*07:01	*09:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*13:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*08:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*09:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*14:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46		SCHU	*15:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
47	9045	TUBO	*11:04	*12:01	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+
48	9303	TER-ND	*01:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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





Product Insert Page 10 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

<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 4, 6 to 8, 11 to 14 were available. The specificities of the primers in primer solutions 6, 8 and 14 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 4 and 13 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solution 7, 11 and 12 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, and in primer solutions 1, 3 and 8 one or two 3'-primer was not possible to test.



**Product Insert** 

Page 11 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information



©LERUPSSP® DRB1\*16

RB1\*16 Product Insert Page 12 of 12

**101.126-12 – including** *Taq* **polymerase**, IFU-01 **101.126-12u – without** *Taq* **polymerase**, IFU-02

Visit <a href="www.olerup-ssp.com">www.olerup-ssp.com</a> for "Instructions for Use" (IFU)

Lot No.: 51Y Lot-specific information

ADDRESSES:

Manufacturer:

Olerup SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

**Tel:** +46-8-717 88 27 **Fax:** +46-8-717 88 18

*E-mail:* info-ssp@olerup.com

Web page: http://www.olerup-ssp.com

Distributed by:

Olerup GmbH, Löwengasse 47 / 6, AT-1030 Vienna, Austria.

**Tel:** +43-1-710 15 00 **Fax:** +43-1-710 15 00 10

**E-mail:** support-at@olerup.com **Web page:** http://www.olerup.com

Olerup Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

**Tel:** 1-877-OLERUP1 **Fax:** 610-344-7989

E-mail: info.us@olerup.com
Web page: http://www.olerup.com

For information on Olerup SSP distributors worldwide, contact Olerup GmbH.