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

Lot No.: 28R Lot-specific information www.olerup-ssp.com

Olerup SSP® HLA-A\*24:09N

Product number: 101.841-12 – including *Taq* polymerase

**101.841-12u** – without *Taq* polymerase

Lot number: 28R

Expiry date: 2015-February-01

Number of tests: 12 Number of wells per test: 2

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. 28R.

# CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® HLA-A\*24:09N Lot (90M)

The Lot-specific information for HLA-A\*24:09N including and without *Taq* polymerase is now described in one common Product Insert.

The HLA-A\*24:09N specificity and interpretation tables have been updated compared the previous *Olerup* SSP® HLA-A\*24:09N lot **(Lot No. 90M)**.

The HLA-A\*24:09N primer set is unchanged compared to the previous lot.

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

Lot No.: 28R Lot-specific information

www.olerup-ssp.com

## PRODUCT DESCRIPTION

# **HLA-A\*24:09N SSP subtyping**

#### CONTENT

The primer set contains 5'- and 3'-primers for identifying the HLA-A\*24:09N allele.

#### PLATE LAYOUT

Each test consists of 2 PCR reactions in an 8 well cut PCR plate. Wells 3 to 8 are empty.

1 2 empty empty empty empty empty empty

The 8 well cut PCR plate is marked with the Lot No. '28R' in silver/gray ink.

Well No. 1 is marked with the Lot No. '28R'.

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 8 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

The interpretation of HLA-A\*24:09N SSP subtypings will be influenced by the  $A*02:17:01^{-}02:17:02^{w}$ , A\*23:14:01-23:14:02, most A\*24, the A\*26:16, A\*33:19 and the A\*68:45 alleles.

## **UNIQUELY IDENTIFIED ALLELES**

The HLA-A\*24:09N allele will give rise to a unique amplification pattern by the primers in the HLA-A\*24:09N kit<sup>1</sup>.

<sup>1</sup>HLA-A alleles listed on the IMGT/HLA web page 2012-July-12, release 3.9.0, www.ebi.ac.uk/imgt/hla.

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

Lot No.: 28R Lot-specific information

www.olerup-ssp.com

## SPECIFICITY TABLE

# **HLA-A\*24:09N SSP subtyping**

Specificities and sizes of the PCR products of the 2 primer mixes used for HLA-A\*24:09N SSP subtyping

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-A alleles <sup>3</sup>
1 <sup>4</sup>	105 bp	800 bp	*24:09N
2	175, 205 bp	1070 bp	*02:17:01**-02:17:02**, 23:14:01-23:14:02, 24:02:01:01-24:11N, 24:13:01-24:13:02, 24:17-24:50, 24:54-24:56, 24:58-24:63, 24:66-24:91, 24:93, 24:95-24:113, 24:115-24:137, 24:139-24:187, 24:189-24:209, 26:16, 33:19, 68:45

<sup>&</sup>lt;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-A\*24:09N SSP typings. 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 preheated.

<sup>2</sup>The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A\*24:09N subtyping.

<sup>3</sup>For several HLA-A alleles 4<sup>th</sup> exon nucleotide sequences are not available. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. We assume that unknown sequences in these regions are conserved within allelic groups.

<sup>4</sup>Specific PCR fragments shorter than 150 base pairs have a lower intensity than longer PCR bands.

'w', may be weakly amplified.

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

Lot No.: 28R Lot-specific information www.olerup-ssp.com

INTERPRETATION TABLE			
HLA-A*24:09N SSP typing			
	W	Well	
	1	2	
Length of spec.	105	175	
PCR product		205	
Length of int.	800	1070	
pos. control <sup>1</sup>			
5'-primer(s) <sup>2</sup>	678	98	
	<sup>5'</sup> -AgA <sup>3'</sup>	<sup>5'</sup> -CTC <sup>3'</sup>	
		368	
		<sup>5'</sup> -gTT <sup>3'</sup>	
3'-primer(s) <sup>3</sup>	742	259	
- F (-)	5' -CTA 3'	<sup>5'</sup> -gTT <sup>3'</sup>	
		502	
		5' -CTT 3'	
		539	
		5' -TCT 3'	
Well No.	1	2	
HLA-A allele			
*24:09N	1	2	
*02:17:01-02:17:02		w	
*23:14:01-23:14:02, 24:02:01:01-24:08, 24:10-24:11N,			
3:01-24:13:02, 24:17-24:50, 24:54-24:56, 24:58-24:63,		2	
24:66-24:91, 24:93, 24:95-24:113, 24:115-24:137, 24:139-		2	
24:187, 24:189-24:209, 26:16, 33:19, 68:45			
HLA-A allele			
Well No.	1	2	

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

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-A\*24:09N subtyping. .  $^{2}$ The nucleotide position, in the  $2^{nd}$ ,  $3^{rd}$  or  $4^{th}$  exon, matching the specificity-determining 3'-end of

'w', may be weakly amplified.

<sup>&</sup>lt;sup>2</sup>The nucleotide position, in the 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> exon, 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>&</sup>lt;sup>3</sup>The nucleotide position, in the 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. 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.

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

Lot No.: 28R Lot-specific information

www.olerup-ssp.com

CELL LINE VALIDATION SHEET HLA-A24:09N SSP kit								
	•				Well			
					1	2		
					Ľ			
					901	201192902		
				ot No.:	192	192		
				io io	20119290	5		
	ILIV	VC cell line	A*	A*	- (1	(1		
1	9001		*24:02		-	+		
2		LK707	*02:01		-			
3		E4181324	*01:01		-	-		
4		GU373	*30:01		-	-		
5		KAS011	*01:01		-	-		
6	9353		*02:01	*26:03	-	-		
7	9020		*26:01		-	-		
8	9025		*31:01		-	-		
9		YAR	*26:01		-	-		
10		LKT3	*24:02		-	+		
11		PITOUT	*29:02		-	-		
12	9052		*02:01		-	-		
13		JESTHOM	*02:01		-	-		
14		OLGA	*31:01		-	-		
15	9075		*24:02		-	+		
16	9037	SWEIG007	*29:02		-	-		
17		CTM3953540	*03:01	*80:01	-	-		
18	9257		*33:03	*74:01	-	-		
19		BM16	*02:01		-	-		
20		SLE005	*02:01		-	-		
21		AMALA	*02:17		-	w		
22		KOSE	*02:01		-	-		
23	9124		*02:01	*34:01	-	-		
24		JBUSH	*32:01	0	-	-		
25		IBW9	*33:01		-	-		
26		WT49	*02:05		-	-		
27		CH1007	*24:10	*29:01	-	+		
28		BEL5GB	*02:01	*29:02	-	-		
29		MOU	*29:02	===	-	-		
30	9021	RSH	*30:01	*68:02	-	-		
31		DUCAF	*30:02	33.02	-	-		
32		HAG	*02:01		-	-		
33		MT14B	*31:01		-	-		
34		DHIF	*31:01		-	-		
35		SSTO	*32:01		-	-		
36		KT17	*02:06	*11:01	-	-		
37		HHKB	*03:01		-	-		
38	9099		*02:17		-	w		
39	9315		*01:01	*03:01	-	-		
40		WHONP199	*02:07	*30:01	-	-		
41		H0301	*03:01	30.01	-	-		
42		TAB089	*02:07		-	-		
43	9076	T7526	*02:06	*02:07	-	-		
44	9057		*66:01	02.01	-	-		
45		SHJO	*23:01	*24:02	-	+		
46		SCHU	*03:01	27.02	-	-		
47		TUBO	*02:16	*03:01				
48		TER-ND	*02:01	*11:01				
40	<b>33U3</b>	I LIK-IND	02.01	11.01		-		

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

Lot No.: 28R Lot-specific information www.olerup-ssp.com

## CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-A\*24:09N SSP

Product number: 101.841-12 – including *Taq* polymerase

101.841-12u - without *Tag* polymerase

Lot number: 28R

Expiry date: 2015-February-01

Number of tests: 12 Number of wells per test: 2

## Well specifications:

Well No.	Production No.		
1	2011-929-01		
2	2011-929-02		

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solution 1 were available. In primer solution 1 it was only possible to test the 5'-primer by separately adding one additional 3'-primer, the 3'-primer was not possible to test. Additional primers in primer mix 2 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer.

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

Date of approval: 2012-August-24

Approved by:

**Production Quality Control** 

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

Lot No.: 28R Lot-specific information www.olerup-ssp.com

**Declaration of Conformity** 

**Product name:** Olerup SSP® HLA-A\*24:09N

**Product number:** 101.841-12/12u

Lot number: 28R

Intended use: HLA-A\*24:09N histocompatibility testing

Manufacturer: Olerup SSP AB

Franzengatan 5

SE-112 51 Stockholm, Sweden

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

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Stockholm, Sweden 2012-August-24

Ann-Cathrin Jareman Head of QA and Regulatory Affairs

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

Lot No.: 28R Lot-specific information www.olerup-ssp.com

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:** <a href="mailto:support-at@olerup.com">support-at@olerup.com</a></a> **Web page:** <a href="mailto:http://www.olerup.com">http://www.olerup.com</a>

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.