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

Lot No.: 23N Lot-specific information

Olerup SSP® HLA-B*07 Add-on

Product number: 101.852-12 – including *Taq* polymerase

101.852-12 u- without Taq polymerase

Lot number: 23N

Expiry date: 2014-August-01

Number of tests: 12 Number of wells per test: 5

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. 23N.

The Lot-specific information for HLA- B*07 Add-on including and without *Taq* polymerase is described in one common Product Insert.

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PRODUCT DESCRIPTION

HLA-B*07 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers to separate the HLA-B*07:61 from the B*07:02 alleles and the HLA-B*07:05 from the B*07:06 alleles.

PLATE LAYOUT

Each test consists of 5 PCR reactions in an 8 well cut PCR plate. Wells 6 to 8 are empty.

- 1 - 7							
1	2	3	4	5	empty	empty	empty

The 8 well cut PCR plate is marked with 'HLA-B*07' in silver/gray ink.

Well No. 1 is marked with the Lot Number '32N'.

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 8 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

The interpretation of HLA-B*07 Add-on SSP subtypings will be influenced by the B*07, the B*08:79, the B*27:36, two B*35, the B*37:07, most B*40, most B*42, the B*44:31, the B*46:06, the B*48, two B*54, seven B*55, six B*56 and the B*81 alleles. In addition, the C*04:77 allele will be amplified by primer mix 1.

UNIQUELY IDENTIFIED ALLELES

The HLA-B*07:02, 07:05, 07:06 and 07:61 alleles give different patterns in the B*07 Add-on subtyping kit¹.

The HLA-B*07 Add-on kit cannot distinguish these silent mutations: the B*07:02:01-07:02:29 and the B*07:05:01-07:05:06 alleles.

¹Based on HLA-B alleles listed on the IMGT/HLA web page 2012-January-12, release 3.7.0, www.ebi.ac.uk/imgt/hla.

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Lot No.: 23N Lot-specific information

SPECIFICITY TABLE

HLA-B*07 Add-on SSP subtyping

Specificities and sizes of the PCR products of the 5 primer mixes used for HLA-B*07 Add-on SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*07 alleles ³	Other amplified HLA Class I alleles ⁴
1 ⁵	105 bp	800 bp	*07:02:01-07:02:25, 07:02:27-07:03, 07:05:01-07:18:02, 07:20-07:24, 07:27- 07:32, 07:35-07:39, 07:41-07:42, 07:44- 07:47, 07:49N-07:52, 07:54, 07:56-07:59, 07:61-07:65, 07:67N- 07:79, 07:81-07:99, 07:101-07:121, 07:123- 07:130, 07:132-07:138, 07:140-07:144	*08:79, 35:66, 37:07, 40:15-40:16, 40:23, 40:32, 40:98, 40:128, 48:05, 48:08, C*04:77
2 ⁶	355 bp	1070 bp	*07:05:01-07:05:06	*35:46, 37:07
3	355 bp	1070 bp	*07:02:01-07:02:05, 07:02:07-07:04, 07:06- 07:99, 07:101-07:144	*08:79, 27:36, 40:01:01- 40:01:23, 40:07, 40:09², 40:10:01-40:10:02, 40:11:01²- 40:13², 40:14:01-40:14:03, 40:15²-40:16², 40:18², 40:20²- 40:21², 40:22N, 40:23²-40:28², 40:30²-40:38², 40:42²-40:48², 40:49, 40:51-40:52, 40:54- 40:55, 40:59²-40:60², 40:61, 40:62², 40:63, 40:64²-40:65², 40:72:01-40:73, 40:74²-40:76², 40:77, 40:78², 40:79, 40:80², 40:81, 40:83²-40:84², 40:86²- 40:87:01², 40:87:02-40:88, 40:90², 40:92²-40:93², 40:95²- 40:96², 40:98, 40:99²-40:121², 40:123², 40:124:01, 40:124:02²-40:127², 40:128, 40:129²-40:137², 40:138- 40:141, 40:145², 40:146- 40:147, 40:148²-40:149²,

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Lot No.: 23N	Lot-specific information
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			Lot specific information	
				40:150-40:155N, 40:156?- 40:157?, 40:158, 40:160?, 40:162?-40:163?, 40:165?- 40:166?, 40:168?-40:173?, 40:175, 40:177?-40:178?, 40:179, 40:180?, 44:31, 46:06, 48:01:01-48:01:03, 48:03:01- 48:12, 48:14-48:27, 81:01- 81:02, 81:04N-81:05
4	425 bp	1070 bp	*07:05:01-07:06, 07:34, 07:40, 07:53, 07:80, 07:90, 07:97, 07:105, 07:112, 07:137-07:138, 07:140	*40:166, 42:01:01-42:02, 42:04-42:05:02, 42:07-42:08, 42:10, 42:12-42:15, 54:04, 54:11, 55:04, 55:08, 55:17, 55:20, 55:28, 55:49, 55:51, 56:05:01-56:06, 56:12, 56:15, 56:21, 81:01-81:04N
5	350 bp	1070 bp	*07:61	

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-B*07 Add-on SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective lengths of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

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.

²The 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-B*07 Add-on subtyping.

In the presence of a specific amplification the intensity of the control band often decreases.

³For several HLA-B alleles 4th and 5th 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 exons are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B*07 alleles will be amplified by primer mixes 1 to 4. In addition, the C*04:77 allele will be amplified by primer mix 1.

⁵Specific PCR fragments shorter than 125 base pairs are less intense and not as sharp as longer specific bands.

⁶Primer solution 2 may yield less specific PCR product than the other HLA-B*07 Add-on primer mixes.

'w', might be weakly amplified.

'?', nucleotide sequence information not available for the primer matching sequence.



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INTERPRETATION TABLE						
HLA-B*07 Add-on SSP typ	ing					
	Well					
	1	2	3	4	5	
Length of spec.	105	355	355	425	350	
PCR product						
Length of int.	800	1070	1070	1070	1070	
pos. control ¹						
5'-primer(s) ²	540	693	693	272	756	
• , ,	^{5'} -Cgg ^{3'}	^{5'} -ggT ^{3'}	^{5'} -ggT ^{3'}	^{5'} -CTA ^{3'}	^{5'} -ACT ^{3'}	
3'-primer(s) ³	605	916	916	412	973	
	^{5'} -gCT ^{3'}	^{5'} -gAT ^{3'}	^{5'} -gAC ^{3'}	^{5'} -gTT ^{3'}	^{5'} -TCT ^{3'}	
Well No.	1	2	3	4	5	
HLA-B allele ⁴						
*07:02:01-07:02:05, 07:02:07-07:02:25, 07:02:27-07:03,						
07:07-07:18:02, 07:20-07:24, 07:27-07:32, 07:35-07:39,						
07:41-07:42, 07:44-07:47, 07:49N-07:52, 07:54, 07:56-						
07:59, 07:62-07:65, 07:67N-07:79, 07:81-07:89, 07:91-	1		3			
07:96:02, 07:98-07:99, 07:101-07:104, 07:106-07:111N,						
07:113-07:121, 07:123-07:130, 07:132-07:136, 07:141-						
07:144, 08:79, 40:98, 40:128, 48:05, 48:08						
*07:02:06, 35:66, C * <i>04:7</i> 7	1					
*07:02:26, 07:04, 07:19, 07:25-07:26, 07:33, 07:43, 07:48,						
07:55, 07:60, 07:66, 07:122, 07:131, 07:139, 27:36,						
40:01:01-40:01:23, 40:07, 40:10:01-40:10:02, 40:14:01-						
40:14:03, 40:22N, 40:49, 40:51-40:52, 40:54-40:55, 40:61,						
40:63, 40:66-40:67, 40:72:01-40:73, 40:77, 40:79, 40:81,			3			
40:87:02-40:88, 40:124:01, 40:138-40:141, 40:146-40:147,						
40:150-40:155N, 40:158, 40:175, 40:179, 44:31, 46:06,						
48:01:01-48:01:03, 48:03:01-48:04, 48:06-48:07, 48:09-						
48:12, 48:14-48:27, 81:05						
*07:05:01-07:05:06	1	2		4		
*07:06, 07:90, 07:97, 07:105, 07:112, 07:137-07:138,			_			
07:140	1		3	4		
*07:34, 07:40, 07:53, 07:80, 81:01-81:02, 81:04N			3	4		
*07:61	1		3		5	
*35:46		2				
*37:07	1	2				
Well No.	1	2	3	4	5	

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Lot No.: 23N **Lot-specific information**

Length of spec.	105	355	355	425	350
PCR product					
Well No.	1	2	3	4	5
*40:09, 40:11:01-40:13, 40:18, 40:20-40:21, 40:24-40:28,					
40:30-40:31, 40:33-40:38, 40:42-40:48, 40:59-40:60,					
40:62, 40:64-40:65, 40:69-40:71, 40:74-40:76, 40:78,					
40:80, 40:83-40:84, 40:86-40:87:01, 40:90, 40:92-40:93,			2		
40:95-40:96, 40:99-40:121, 40:123, 40:124:02-40:127,			f		
40:129-40:137, 40:145, 40:148-40:149, 40:156-40:157,					
40:160, 40:162-40:163, 40:165, 40:168-40:173, 40:177-					
40:178, 40:180					
*40:15-40:16, 40:23, 40:32	1		?		
*40:166			?	4	
*42:01:01-42:02, 42:04-42:05:02, 42:07-42:08, 42:10,					
42:12-42:15, 54:04, 54:11, 55:04, 55:08, 55:17, 55:20,				4	
55:28, 55:49, 55:51, 56:05:01-56:06, 56:12, 56:15, 56:21,				4	
81:03					
HLA-B allele					
Well No.	1	2	3	4	5

¹The 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-B*07 Add-on subtyping.

In the presence of a specific amplification the intensity of the control band often decreases.

²The nucleotide position, in the 2nd, 3rd or 4th exon, 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, in 2nd or 5th exon, 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.

⁴The sequence of B*0701 has been shown to be in error.

^{&#}x27;w', might be weakly amplified.

^{&#}x27;?', nucleotide sequence information not available for the primer matching sequence.

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	CELL LINE VALIDATION SHEET									
HLA-B*07 add-on SSP subtyping kit										
					Well					
					1	2	3	4	5	
						۵.				
ı					201196101	201196102	201196103	201196104	201196105	
ı				Prod. No.:	96	96	96	96	96	
ı				00	7	7	7	7	7	
				4	20	20	8	2	2	
		C cell line	E	3*						
1	9001	SA	*07:02		+	-	+	-	-	
2	9280	LK707	*52:01	*73:01	-	-	-	-	-	
3		E4181324	*52:01		-	-	-	-	-	
4	9275	GU373	*15:10	*53:01	-	-	-	-	-	
5	9009	KAS011	*37:01		-	-	-	-	-	
6	9353		*39:01	*51:01	-	-	-	-	-	
7	9020		*18:01		-	-	-	-	-	
8	9025	DEU	*35:01		-	-	-	-	-	
9	9026	YAR	*38:01		-	-	-	-	-	
10	9107	LKT3	*54:01		-	-	-	-	-	
11		PITOUT	*44:03		-	-	-	-	-	
12	9052		*57:01		-	-	-	-	-	
13	9025	JESTHOM	*27:05		-	-	-	-	-	
14	9071	OLGA	*15:01	*15:20	-	-	-	-	-	
15	9075	DKB	*40:01		-	-	+	-	-	
16	9037	SWEIG007	*40:02		-	-	-	-	-	
17	9282	CTM3953540	*08:01	*55:01	-	-	-	-	-	
18	9257	32367	*14:01	*56:01	-	-	-	-	-	
19	9038	BM16	*18:01		-	-	-	-	-	
20	9059	SLE005	*40:01		-	-	+	-	-	
21	9064	AMALA	*15:01		-	-	-	-	-	
22	9056	KOSE	*35:03		-	-	-	-	-	
23	9124	IHL	*40:02	*56:02	-	-	-	-	-	
24	9035	JBUSH	*38:01		-	-	-	-	-	
25	9049	IBW9	*14:02		-	-	-	-	-	
26	9285	WT49	*58:01		-	-	-	-	-	
27	9191	CH1007	*07:05	*51:01	+	+	-	+	-	
28	9320	BEL5GB	*44:02	*44:03	-	-	-	-	-	
29	9050	MOU	*44:03		-	-	-	-	-	
30	9021	RSH	*42:01		-	-	-	+	-	
31	9019	DUCAF	*18:01		-	-	-	-	-	
32	9297		*41:02		-	-	-	-	-	
33		MT14B	*40:01		-	-	+	-	-	
34	9104		*38:01		-	-	-	-	-	
35		SSTO	*44:02		-	-	-	-	-	
36		KT17	*15:01	*35:01	-	-	-	-	-	
37		HHKB	*07:02		+	-	+	-	-	
38	9099		*15:01		-	-	-	-	-	
39	9315		*08:01	*27:05	-	-	-	-	-	
40		WHONP199	*13:02	*46:01	-	-	-	-	-	
41		H0301	*14:02		-	-	-	-	-	
42		TAB089	*46:01		-	-	-	-	-	
43		T7526	*46:01		-	-	-	-	-	
44	9057		*38:01		-	-	-	-	-	
45		SHJO	*42:01	*50:01	-	-	-	+	-	
46		SCHU	*07:02	55.61	+	-	+	-	-	
47		TUBO	*51:01		-	-	-	-	-	
48		TER-ND	*35:01	*44:03	-	-			-	

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Lot No.: 23N Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-B*07 Add-on SSP

Product number: 101.852-12 – including *Taq* polymerase

101.852-12 u- without Taq polymerase

Lot number: 23N

Expiry date: 2014-August-01

Number of tests: 12 Number of wells per test: 5

Well specifications:

Well No.	Production No.
1	2011-961-01
2	2011-961-02
3	2011-961-03
4	2011-961-04
5	2011-961-05

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

No DNAs carrying the alleles to be amplified by primer solution 5 were available.

In primer solution 5 the 5'-primer was tested by adding one additional 3'-primer, the 3'-primer was not possible to test.

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

Date of approval: 2012-March-09

Approved by:

Production Quality Control

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

Lot No.: 23N Lot-specific information

Declaration of Conformity

Product name: Olerup SSP® HLA-B*07 add-on

Product number: 101.512-12/12u

Lot number: 23N

Intended use: HLA-B*07 high resolution 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-July-04

Ann-Cathrin Jareman
Head of QA and Regulatory Affairs

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Lot No.: 23N Lot-specific information

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