

101.843-12 – including *Taq* polymerase, IFU-01
101.843-12u – without *Taq* polymerase, IFU-02

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

Lot No.: **55N**

Lot-specific information

Olerup SSP[®] HLA-A*23 Add-on

Product number:	101.843-12 – including <i>Taq</i> polymerase 101.843-12u – without <i>Taq</i> polymerase
Lot number:	55N
Expiry date:	2014-August-01
Number of tests:	12
Number of wells per test:	3
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. 55N.

The Lot-specific information for HLA-A*23 Add-on including and without *Taq* polymerase is described in one common Product Insert.

Change in revision R01 compared to R00:

1. Primer mix 2 does not amplify the A*23:05 allele. Furthermore, for many A*23 alleles it is not known whether they are amplified by this primer mix due to lack of nucleotide sequence information. This has been changed in the specificity and amplification tables.

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PRODUCT DESCRIPTION

HLA-A*23 Add-on SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for separating the HLA-A*23:17 from the A*23:01 alleles.

PLATE LAYOUT

Each test consists of 3 PCR reactions in an 8 well cut PCR plate. Wells 4 to 8 are empty.

1	2	3	empty	empty	empty	empty	empty
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The 8 well cut PCR plate is marked with the Lot No. '55N' in silver/gray ink.

Well No. 1 is marked with the Lot No. '55N'.

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*23 Add-on SSP subtypings will be influenced by all A*23 alleles. In addition, ten A*02, six A*24, the A*29:07, the A*31:29, the A*32:28, the A*33:32 and the A*68:51 alleles and the B*18:27 allele will be amplified by the primers in the A*23 Add-on kit.

UNIQUELY IDENTIFIED ALLELES

The HLA-A*23:01 and 23:17 alleles give different amplification patterns in the HLA-A*23 Add-on kit².

¹The HLA-A*23 add-on kit cannot distinguish the silent mutations in the A*23:01:01-23:01:07 alleles.

²Based on HLA-A 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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SPECIFICITY TABLE

HLA-A*23 Add-on SSP subtyping

Specificities and sizes of the PCR products of the 3 primer mixes used for HLA-A*23 Add-on SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*23 alleles	Other amplified HLA-A alleles ^{3,4}
1	210 bp	800 bp	*23:01:01-23:01:07, 23:03:01-23:50	*02:17:01-02:17:02, 02:108, 02:110, 02:268, 02:300, 02:303, 24:13:01-24:13:02, 24:18, 24:24, 24:94, 24:188, 29:07, 31:29, B*18:27
2⁵	90 bp	1070 bp	*23:01:01-23:01:07, 23:02 [?] -23:04 [?] , 23:06-23:07N, 23:08N [?] , 23:09, 23:10 [?] -23:16 [?] , 23:18 [?] -23:25 [?] , 23:26, 23:27 [?] -23:37:02 [?] , 23:38N, 23:39 [?] -23:50 [?]	
3⁵	110 bp	1070 bp	*23:01:01-23:01:07, 23:02 ^w , 23:04-23:13, 23:14 ^w , 23:15-23:23, 23:25-23:33, 23:35-23:50	*02:40, 02:51, 02:130, 24:24, 32:28, 33:32, 68:51 ^w

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*23 Add-on 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 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 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*23 Add-on subtyping.

³For several HLA-A alleles 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-A alleles some non-HLA-A*23 alleles will be amplified by primer mixes 1 and 3. In addition, primer mix 1 will amplify the B*18:27 allele.

⁵Short specific PCR fragments are less intense and not as sharp as longer specific bands.

‘w’, might be weakly amplified.

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

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INTERPRETATION TABLE			
HLA-A*23 Add-on SSP typing			
	Well		
	1	2	3
Length of spec.	210	90	110
PCR product			
Length of int.	800	1070	1070
pos. control ¹			
5'-primer ²	368	920	453
	5' -gTT 3'	5' -CCA 3'	5' -AAA 3'
3'-primer ³	539	971	524
	5' -TCA 3'	5' -CAg 3'	5' -CAC 3'
Well No.	1	2	3
HLA-A allele			
*23:01:01-23:01:07, 23:06-23:07N, 23:09, 23:26, 23:38N	1	2	3
*23:02		?	w
*23:03:01-23:03:02, 23:24, 23:34	1	?	
*23:04, 23:08N, 23:10-23:13, 23:14:02-23:16, 23:18-23:23, 23:25, 23:27-23:33, 23:35-23:37:02, 23:39-23:50	1	?	3
*23:05, 23:17, 24:24	1		3
*23:14	1	?	w
*02:17:01-02:17:02, 02:108, 02:110, 02:268, 02:300, 02:303, 24:13:01-24:13:02, 24:18, 24:94, 24:188, 29:07, 31:29, B*18:27	1		
*02:40, 02:51, 02:130, 32:28, 33:32			3
*68:51			w
HLA-A allele			
Well No.	1	2	3

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-A*23 Add-on subtyping.

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

'w', might be weakly amplified.

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

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CELL LINE VALIDATION SHEET							
HLA-A*23 Add-on SSP kit							
					Well		
					1	2	3
				Lot No.:	201296001	201296002	201299203
	IHWC cell line	A*	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 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		-	-	-

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CERTIFICATE OF ANALYSIS

Olerup SSP[®] HLA-A*23 Add-on SSP

Product number: 101.843-12 – including *Taq* polymerase
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Lot number: 55N

Expiry date: 2014-August-01

Number of tests: 12

Number of wells per test: 3

Well specifications:

Well No.	Production No.
1	2012-960-01
2	2012-960-02
3	2012-992-03

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

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

Date of approval: 2012-March-09

Approved by:

Production Quality Control

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Lot-specific information

Declaration of Conformity

Product name: *Olerup* SSP® HLA-A*23 Add-on
Product number: 101.843-12/12u
Lot number: 55N

Intended use: HLA-A*23 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, 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-May-10

Ann-Cathrin Jareman
Head of QA and Regulatory Affairs

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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**.