HLA-B\*73 Product Insert Page 1 of 8

101.555-06u – without *Taq* polymerase General "Instructions for Use"

IFU-02 Rev. No. 02 can be downloaded from

Lot No.: 52K Lot-specific information www.olerup-ssp.com

# Olerup SSP® HLA-B\*73

Product number: 101.555-06u – without *Taq* polymerase

Lot number: 52K

Expiry date: 2013-April-01

Number of tests: 6 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. 52K.

101.555-06u - without Tag polymerase

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Lot No.: 52K Lot-specific information www.olerup-ssp.com

# PRODUCT DESCRIPTION

# **HLA-B\*73 SSP typing**

#### CONTENT

The primer set contains 5'- and 3'-primers for identifying the B\*73:01 to B\*73:02 alleles

#### PLATE LAYOUT

Each HLA-B\*73 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

The 8 well PCR plate is marked with 'B73' in silver/gray ink.

Well No. 1 is marked with the Lot No. '52K'.

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

Only HLA-B\*73 alleles will be amplified by the HLA-B\*73 typing kit. Thus, the interpretation of HLA- B\*73 typings is not influenced by other groups of HLA-B alleles or alleles of other HLA Class I loci.

#### **UNIQUELY IDENTIFIED ALLELES**

All the HLA-B\*73, i.e. **B\*73:01 to B\*73:02**, recognized by the HLA Nomenclature Committee in July 2010<sup>1</sup> will be amplified by the primers in the HLA-B\*73 SSP kit.

<sup>1</sup>HLA-B alleles listed on the IMGT/HLA web page 2010-July-16, release 3.1.0, www.ebi.ac.uk/imgt/hla.

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

The two HLA-B\*73 alleles can be combined in 3 homozygous and heterozygous combinations. All these genotypes give rise to unique amplification patterns.

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### SPECIFICITY TABLE

# HLA-B\*73 SSP subtyping

Specificities and sizes of the PCR products of the 3 primer mixes used for **HLA-B\*73 SSP subtyping** 

Primer Mix	Size of spec. PCR product <sup>1</sup>	Size of control band <sup>2</sup>	Amplified HLA-B*73 alleles
1	150 bp	800 bp	*73:01-73:02
2	220 bp	1070 bp	*73:01
3	220 bp	1070 bp	*73:02

<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-B\*73 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.

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

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INTERPRETATION TABLE				
HLA-B*73 SSP subtyping				
Amplification patterns of the B*73	:01 to 73:	02 allele	S	
		Well		
	1	2	3	
Length of spec.	150	220	220	
PCR product				
Length of int.	800	1070	1070	
pos. control <sup>1</sup>				
5'-primer <sup>2</sup>	165	379	379	
	5' -ACC 3'	<sup>5'</sup> -ACA <sup>3'</sup>	<sup>5'</sup> -ACA <sup>3'</sup>	
3'-primer <sup>3</sup>	272	556	556	
	<sup>5'</sup> -TgC <sup>3'</sup>	<sup>5'</sup> -gCC <sup>3'</sup>	<sup>5'</sup> -gCT <sup>3'</sup>	
Well No.	1	2	3	
HLA-B allele				
*73:01	1	2		
*73:02	1		3	
HLA-B allele				
Well No.	1	2	3	

<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.

<sup>&</sup>lt;sup>2</sup>The nucleotide position, in the 2<sup>nd</sup> or 3<sup>rd</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> or 3<sup>rd</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.

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CELL LINE VALIDATION SHEET						Γ	
HLA-B*73 SSP primer set							
					Well		I
					1	2	3
				Prod. No.:	201077001	201077002	201077003
		VC cell line		B*			
1	9001	SA	*07:02		-	-	-
2		LK707	*52:01	*73:01	+	+	-
3		E4181324	*52:01		-	-	-
4		GU373	*15:10	*53:01	-	-	-
5		KAS011	*37:01	*= 4 0 4	-	-	-
6	9353		*39:01	*51:01	-	-	-
7	9020		*18:01		-	-	-
8	9025		*35:01		-	-	-
9	9026		*38:01		<u>-</u>	Ė	-
10		LKT3	*54:01		-	-	-
11 12	9051	PITOUT	*44:03 *57:01		Ŀ	÷	-
13		JESTHOM	*27:05		-	Ė	-
14		OLGA	*15:01	*15:20	-		_
15	9071		*40:01	15.20	-		-
16		SWEIG007	*40:02		-		_
17		CTM3953540	*08:01	*55:01	-		_
18		32367	*14:01	*56:01	-	-	
19		BM16	*18:01	30.01	H	E	-
20		SLE005	*40:01				_
21		AMALA	*15:01		-	-	-
22		KOSE	*35:03		-	_	_
23	9124		*40:02	*56:02	-	_	_
24		JBUSH	*38:01	30.02	-	-	_
25		IBW9	*14:02		-	-	_
26		WT49	*58:01		-	-	-
27		CH1007	*07:05	*51:01	-	-	-
28		BEL5GB	*44:02	*44:03	-	-	-
29	9050		*44:03		-	-	-
30	9021		*42:01		-	-	-
31		DUCAF	*18:01		Ι-	-	-
32		HAG	*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	CML	*08:01	*27:05	-	-	-
40	9134	WHONP199	*13:02	*46:01	L-		-
41	9055	H0301	*14:02		-	-	-
42	9066	TAB089	*46:01		-	-	-
43	9076	T7526	*46:01		-	-	-
44	9057	TEM	*38:01		-	-	-
45	9239	SHJO	*42:01	*50:01	-	-	-
46	9013	SCHU	*07:02		-	-	-
47	9045	TUBO	*51:01		-	-	-
48	9303	TER-ND	*35:01	*44:03	Ŀ	-	-

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**101.555-06u – without** *Taq* **polymerase** 

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Lot No.: 52K Lot-specific information www.olerup-ssp.com

# **CERTIFICATE OF ANALYSIS**

Olerup SSP® HLA-B\*73 SSP

Product number: 101.555-06u – without *Taq* polymerase

Lot number: 52K

Expiry date: 2013-April-01

Number of tests: 6 Number of wells per test: 3

#### Well specifications:

Well No.	Production No.
1	2010-770-01
2	2010-770-02
3	2010-770-03

The specificity of each primer solution of the HLA-B\*73 primer set has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solution 3 were available. The specificities of the primers in primer solution 3 was tested by separately adding one additional 3'-primer, the 3'-primer could not be tested.

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

Date of approval: 2010-October-29

Approved by:

**Quality Control, Supervisor** 

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101.555-06u – without *Taq* polymerase General "Instructions for Use"

General "Instructions for Use"
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Lot No.: 52K Lot-specific information www.olerup-ssp.com

# **Declaration of Conformity**

**Product name:** Olerup SSP<sup>®</sup> HLA-B\*73

Product number: 101.555-06u

Lot number: 52K

**Intended use:** HLA-B\*73 high resolution histocompatibility testing

Manufacturer: Olerup SSP AB

Hasselstigen 1

SE-133 33 Saltsjöbaden, 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, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

The Authorized Representative located within the Community is: Olerup SSP AB.

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

Saltsjöbaden, Sweden 2010-October-29

Olle Olerup Managing Director HLA-B\*73 **Product Insert** Page 8 of 8 **101.555-06u – without** *Taq* **polymerase** General "Instructions for Use"

IFU-02 Rev. No. 02 can be downloaded from

Lot No.: **52K** Lot-specific information www.olerup-ssp.com

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