www.olerup.com

Olerup SSP[™] HLA-A*66

Product number:	101.427-06 – licensed for PCR
	101.427-06u – <u>not</u> licensed for PCR
Lot number:	Y03
Expiry date:	2009-July-01
Number of tests:	6
Number of tubes per test:	8
Storage - pre-aliquoted primers:	dark at -20°C
- PCR Master Mix:	-20°C

This Product Description is only valid for Lot No. Y03.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[™] HLA-A*66 LOT

The HLA-A*66 specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup* SSPTM HLA-A*66 lot was made (Lot No. V91).

The primers of the tube detailed below has been exchanged, added or modified compared to the previous kit.

Tube	5'-primer	3'-primer	rationale
2	Modified	-	Primer modified for increased specificity.



www.olerup.com

2

PRODUCT DESCRIPTION

HLA-A*66 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the HLA-A*66 group of alleles A*6601 to A*6606.

The primer solutions are pre-aliquoted into 0.2 ml PCR tubes. Each tube in the set contains a dried primer solution consisting of a specific primer mix, i.e. allele- and group-specific primers as well as a *control primer pair* matching non-allelic sequences.

PCR Master Mix complete with Taq, Taq polymerase, nucleotides, buffer, glycerol and cresol red, as well as PCR lids are included in the licensed kit.

PCR Master Mix without Taq, nucleotides, buffer, glycerol and cresol red, as well as PCR lids are included in the unlicensed kit.

8 PCR reactions with a reaction volume of 10 μ l are performed per sample.

<u>Note</u>: The pellets in the tubes may vary in form and colour. This does not affect the performance of the product.

PLATE LAYOUT

Each test consists of 8 PCR reactions in an 8 well cut PCR plate.

1 2 3 4 5 6 7 8

The 8 well cut PCR plate is marked with 'HLA-A*66'.

Well No. 1 is marked with the lot number 'Y03'.

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*66 SSP subtypings will be influenced by the A*01 alleles, ten A*02 alleles, the A*11 alleles, two A*24 alleles, the A*25 alleles, the A*26 alleles, two A*31 allele, the A*3313, the A*34 alleles, the A*36, the A*4301 allele, most A*68 alleles and the A*6901 allele when present on the other haplotype.

UNIQUELY IDENTIFIED ALLELES

All the HLA-A*66 alleles, i.e. **A*6601 to A*6606 alleles**, recognized by the HLA Nomenclature Committee in July 2007¹ will give rise to unique amplification patterns by the primers in the HLA-A*66 subtyping kit.

¹*Nomenclature for factors of the HLA system, 1998*. *Tissue Antigens* 1999: **53**: 407-446. HLA-A alleles listed on the IMGT/HLA web page 2007-July-09, release 2.18.0, www.ebi.ac.uk/imgt/hla.



RESOLUTION IN HOMO- AND HETEROZYGOTES

The 6 HLA-A*66 alleles can be combined in 21 homozygous and heterozygous combinations. Ten of these genotypes do not give rise to unique amplification patterns.

++++++-- 6602,6604 = 6604,6606 ++++-++ 6601,6603 = 6603,6606 ++++-+- 6601,6602 = 6601,6606 = 6602,6606 = 6606,6606 +++-++- 6601,6604 = 6604,6604



www.olerup.com

LICENSES

101.427-06 – licensed for PCR. Notice to purchaser: Limited License.

The purchase price of this product includes limited, non-transferable rights under U.S. Patents 4,683,202, 4,683,195 and 4,965,188 and their foreign counterparts, owned by Roche Molecular Systems, Inc. and F. Hoffman-La Roche Ltd ("Roche"), to use only this amount of the product to practice the Polymerase Chain Reaction ("PCR") Process described in said patents solely for the HLA Typing applications of the purchaser solely for organ or tissue or bone marrow transplantation, and explicitly excludes analysis of forensic evidence or parentage determination. The rights to use this product to perform and to offer commercial service for HLA Typing for organ or tissue transplantation using PCR, including reporting the results of the purchaser's activities for a fee or other commercial consideration, is also hereby granted. Further information on purchasing licenses to practice PCR may be obtained by contacting in the United States, the Director of Licensing at Roche Molecular Systems, inc., 1145 Atlantic Avenue, Alameda, California 94501, and outside the United States, the PCR Licensing Manager, F. Hoffmann-La Roche Ltd, Grenzacherstr. 124, CH-4070 Basel, Switzerland.

101.427-06u - not licensed for PCR.

Notice to purchaser: Disclaimer of License.

This product is optimized for use in the Polymerase Chain Reaction ("PCR") Process which is covered by patents owned by Roche Molecular Systems, Inc. and F. Hoffmann-La Roche Ltd ("Roche"). No license under these patents to use the PCR Process is conveyed expressly or by implication to the purchaser of this product. Further information on purchasing licenses to practice PCR may be obtained by contacting in the United States, the Director of Licensing at Roche Molecular Systems, inc., 1145 Atlantic Avenue, Alameda, California 94501.

101.427-06 and 101.427-06u

These products use ARMS[™] technology and is sold under license from Zeneca Limited. ARMS is the subject of European Patent No. 0332435, US Patent No. 5595890 and corresponding world-wide patents. ARMS is a trademark of Zeneca Limited.

GUARANTEE

Olerup SSP AB guarantees that the primers in the HLA-A*66 subtyping kit have the specificities given in the Specificity and Interpretation Tables of the product insert and in the GenoVision version of the HELMBERG-SCORETM software. When stored at -20° C, the dried primers are stable for 22 months from the date

of manufacture. When stored at -20° C, the PCR Master Mix complete with *Taq* and the PCR Master Mix without *Taq* are stable for 24 months from the date of manufacture.

The kit is shipped at ambient temperature.



PROTOCOL

DNA EXTRACTION

Extracted, highly pure DNA is needed for SSP typings. We recommend isolation of DNA using GenoPrep B200 or GenoPrep B350 cartridges on the GenoMTM-6 robotic workstation (GenoVision Europe *Tel:* +43 1 710 15 00 or GenoVision Inc. USA *Tel:* +1 610 430 88 41; <u>http://www.genovision.com</u>). Using GenoMTM-6-extracted DNA ACD, EDTA and heparinised blood can be used as starting material. Because of its high purity, GenoMTM-6-extracted DNA can be diluted when used in combination with *Olerup* SSPTM products. The recommended DNA concentration is 15 ng/ul.

Alternatively – BUT DO NOT USE HEPARINISED BLOOD WITH THESE METHODS - the DNA can be extracted using trimethylammoniumbromide salts (DTAB/CTAB) or by salting out. Dissolve the extracted DNA in dH₂O.

IMPORTANT:

Optimal DNA concentration using: Geno M^{TM} -6-extracted DNA, 15 ng/µl. DNA extracted by other methods, 30 ng/µl.

Concentration exceeding 50 ng/ μ l will increase the risk for nonspecific amplifications and weak extra bands, especially for HLA Class I high resolution SSP typings.

PCR AMPLIFICATION

101.427-06 – licensed for PCR

For one HLA-A*66 subtyping, add at room temperature in a 0.5 ml tube:

 $10 \times 2 \mu l = 20 \mu l DNA (30 ng/\mu l)$

- 10 x 3 μ l = 30 μ l PCR Master Mix complete with *Taq* mix well before taking your aliquot
- $10 \times 5 \mu l = 50 \mu l dH_2O$

Mix well, dispense 10 μ l of the DNA-PCR Master Mix-H₂O mixture into each of the 8 wells of an HLA-A*66 subtyping. *Well No. 1 of the 8 well PCR plate is marked with the lot number.* Close the 8 well PCR strip with the provided lids.

101.427-06u – <u>not</u> licensed for PCR

For one HLA-A^{*}66 subtyping, add at room temperature in a 0.5 ml tube:

 $10 \times 2 \mu l = 20 \mu l DNA (30 ng/\mu l)$

10 x 3 μ l = 30 μ l PCR Master Mix without *Taq* – mix well before taking your aliquot

0.8 µl Taq polymerase (5 units/µl)

 $10 \ge 5 \mu l - 0.8 \mu l = 49.2 \mu l dH_2O$

Mix well, dispense 10 μ l of the DNA-PCR Master Mix-*Taq*-H₂O mixture into each of the 8 wells of an HLA-A*66 subtyping. *Well No. 1 of the 8 well PCR plate is marked with the lot number.* Close the 8 well PCR strip with the provided lids.

Use a 96 well thermal cycler with a heated lid. The temperature gradient across the heating block should be $< 1^{\circ}$ C.

PCR cycling param 1. 1 cycle	eters: 94°C	2 min	denaturation
2. 10 cycles	94°C	10 sec.	denaturation
	65°C	60 sec.	annealing and extension
3. 20 cycles	94°C	10 sec.	denaturation
	61°C	50 sec.	annealing
	72°C	30 sec.	extension

The same PCR cycling parameters are used for all the Olerup SSP kits.

AGAROSE GEL ELECTROPHORESIS

Prepare a 2% (w/v) agarose gel in 0.5 x TBE buffer. Dissolve the agarose by boiling in a microwave oven. Let the gel solution cool to 60° C. Stain the gel prior to casting with ethidium bromide (10 mg/ml), 5 µl per 100 ml gel solution. For maximal ease of handling use our ethidium bromide dropper bottles (Product No. 103.301-10), 1 drop of ethidium bromide solution per 50-75 ml of gel. <u>Note:</u> Ethidium bromide is a powerful carcinogen.

Load the PCR products, preferably using an 8-channel pipette. Load a DNA size marker (100 base pair ladder, Product No. 103.201-100) in one well per row.

Run the gel in 0.5 x TBE buffer, without re-circulation of the buffer, for 15-20 minutes at 8-10 V/cm.

DOCUMENTATION AND INTERPRETATION

Put the gel on a UV transilluminator and document by photography.

Record the presence and absence of specific PCR products. The relative lengths of the specific PCR products are helpful in the interpretation of the results.

Record the presence and relative lengths of the internal positive control bands. The differently sized control bands will help in the correct orientation of the typing as well as in kit identification.

Lanes without either control band or specific PCR products should be repeated.

Interpret the typings with the *lot-specific Interpretation and Specificity Tables*.

INTERPRETATION SOFTWARE

The interpretation software (Product No. 110.101) can be helpful in the interpretation of the typings.



www.olerup.com

PCR MASTER MIXES

The PCR Master Mix complete with <i>Tag</i> contains:					
<i>Taq</i> polymerase	0.4 unit per 10 μl SSP reaction				
nucleotides	final concentration of each dNTP is 200 μ M				
PCR buffer	final concentrations: 50 mM KCl, 1.5 mM MgCl ₂ , 10 mM Tris-HCl pH 8.3, 0.001% w/v gelatin				
glycerol	final concentration of glycerol is 5%				
cresol red	final concentration of cresol red is 100 $\mu\text{g/ml}$				

The same PCR Master Mix complete with *Taq* is used for all the licensed Olerup SSP kits.

The PCR Master Mix without Taq contains:

nucleotides	final concentration of each dNTP is 200 μ M
PCR buffer	final concentrations: 50 mM KCl, 1.5 mM MgCl ₂ ,
	10 mM Tris-HCl pH 8.3, 0.001% w/v gelatin
glycerol	final concentration of glycerol is 5%
cresol red	final concentration of cresol red is 100 µg/ml

The same PCR Master Mix without *Taq* is used for all the unlicensed Olerup SSP kits.

The PCR Master Mix complete with *Taq* and the PCR Master Mix without *Taq* can be shipped at ambient temperature.

When stored at -20° C, the PCR Master Mix complete with *Taq* and the PCR Master Mix without *Taq* are stable for 24 months from the date of manufacture. Vials with the PCR Master Mixes can be kept at $+4^{\circ}$ C for 4 weeks, but the PCR Master Mixes are then no longer stable for 24 months.



SPECIFICITY TABLE

HLA-A*66 SSP subtyping

Specificities and sizes of the PCR products of the 8 primer mixes used for HLA-A*66 SSP subtyping

Primer Mix	Approx. size of spec. PCR product ¹	Size of control band ²	Amplified HLA- A*66 alleles	Other amplified HLA Class I alleles ³
1	175 bp	800 bp	6601, 6604, 6605, 6606	250101-2505, 260101-2603, 2605- 2608, 2610-2633, 2635, 4301
2 ⁴	100 bp	1070 bp	6601, 6604, 6606	0113, 0117, 110101- 1111, 1113-1116, 1120-1132, 2502, 2613, 2619, 2633, 3401 ^{weakly} , 3402- 3404, 3405 ^{weakly} , 3408
3	425 bp	1070 bp	6601, 6602, 6604, 6606	0234-023503, 0256, 0262, 0278, 9203, 2419, 3401-3408, 680101-68020103, 6806-6814, 6816- 6819, 6821-6830, 6832-6835, 6837- 6840, 6901
4	165 bp	1070 bp	6602, 6603, 6606	3103, 3104, 3402- 3404, 3406-3408
5 ^{4,5}	70, 105 bp	800 bp	6604	0255, 2603, 2606, 2621, 2630, 6805, 6815, 6820
6 ⁴	80 bp	800 bp	6601, 6604, 6605, 6606	0113, 110101-1111, 1113-1116, 1119- 1132, 2419, 2444, 2603, 2606, 2621, 3103, 3401-3408
7 8 ⁴	560 bp 100 bp	1070 bp 1070 bp	6603 6605	0216 01010101-0104N, 0106, 0108-0112, 0114-0116N, 0118N- 0127N, 1117, 1119, 2444, 250101- 250102, 2503-2506,

9

260101-2612, 2614-
2618, 2620-2629,
2631, 2632, 2634,
2635, 3103, 3313,
3601-3604, 4301,
7410, 8001

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*66 SSP subtypings.

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 band may sometimes be observed. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

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 tubes, or a band of 800 base pairs, for some tubes.

Tube 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*66 subtyping.

In addition, tubes number 5 and 6 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

PLEASE NOTE: All the SSP kits, except the B*37, B*41, B*42, B*46, B*47, B*48, B*49, B*50, B*53, B*67, B*78, B*81 and B*82 kits and the Cw*01, Cw*02, Cw*08, Cw*12,Cw*14, Cw*15, Cw*16, Cw*17 and Cw*18 kits, from *Olerup* SSP AB can be uniquely identified by the number of tubes and the kit-specific pattern of the two differently sized control bands.

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

³Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*66 alleles will be amplified by primer mixes 1 to 8.

⁴Specific PCR fragments shorter than 125 base pairs have a lower intensity than longer PCR bands.

⁵Primer mix 5: Specific PCR fragment of 70 bp in the A*0255, 2603, 2606, 2621, 2630, 6805, 6815 and 6820 alleles. Specific PCR fragment of 105 bp in the A*6604 allele.



INT	ERPI	RETA	TION	I TAB	BLE			
Н	LA-A*	66 SS	P sub	otypin	g			
Amplification p	atterns	s of the	HLA-			6 allele	es	
		1	I	Tu	be ⁴	1	1	1
	1	2	3	4	5	6	7	8
Length of spec.	175	100	425	165	70	80	560	100
PCR product					105			
Length of int.	800	1070	1070	1070	800	800	1070	1070
pos. control ¹								
5'-primer(s) ²	418	282	28	423	261	302	282	282
	^{5'} -AgA ^{3'}	^{5'} -CAg ^{3'}	^{5'} -TCg ^{3'}	^{5'} -gCT ^{3'}	^{5'} -AAC ^{3'}	^{5'} -ggA ^{3'}	^{5'} -CAC ^{3'}	^{5'} -CAC ^{3'}
	423				517			
	^{5'} -gCT ^{3'}				^{5'} -AgA ^{3'}			
3'-primer(s) ³	559	341	282	559	292	341	559	341
	⁵ '-CCg ^{3'}	⁵ '-CgT ^{3'}	^{5'} -gAC ^{3'}	^{5'} -CTC ^{3'}	⁵ '-gTg ^{3'}	⁵ '-CgT ^{3'}	5'-CTC ^{3'}	^{5'} -CgT ^{3'}
					583			
					^{5'} -gTg ^{3'}			
Tube No.	1	2	3	4	5	6	7	8
HLA-A allele								
*6601	+	+	+			+		
*6602			+	+				
*6603				+			+	
*6604	+	+	+		+	+		
*6605	+					+		+
*6606	+	+	+	+		+		
*01010101-0104N, 0106,								
0108-0112, 0114-0116N,								
0118N-0127N, 1117, 2506,								+
2604, 2609, 2634, 3313,								
3601-3604, 7410, 8001								
*0113, 110101-1111, 1113-								
1116, 1120-1132		+				+		
*0117		+						
*0216							+	
*0234-023503, 0256, 0262,								
0278, 9203, 680101-								
68020103, 6806-6814,								
6816-6819, 6821-6830,			+					
6832-6835, 6837-6840,								
6901								
Tube No.	1	2	3	4	5	6	7	8
	ı -		-	-	-	-		-



www.olerup.com

Length of spec.	175	100	425	165	70	80	560	100
PCR product					105			
Tube No.	1	2	3	4	5	6	7	8
*0255, 6805, 6815, 6820					+			
*1119, 2444						+		+
*2419			+			+		
*250101-250102, 2503- 2505, 260101-2602, 2605, 260701-2608, 2610-2612, 2614-2618, 2620, 2622- 2629, 2631, 2632, 2635, 4301	+							+
*2502, 2613, 2619, 2633	+	+						
*2603, 2606, 2621	+				+	+		+
*2630	+				+			
*3103				+		+		+
*3104				+				
*3401, 3405		w	+			+		
*3402-3404, 3406, 3408		+	+	+		+		
*3407			+	+		+		
HLA-A allele								
Tube No.	1	2	3	4	5	6	7	8

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 tubes, or a band of 800 base pairs, for some tubes.

Tube 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*66 subtyping.

In addition, tubes number 5 and 6 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

PLEASE NOTE: All the SSP kits, except the B*37, B*41, B*42, B*46, B*47, B*48, B*49, B*50, B*53, B*67, B*78, B*81 and B*82 kits and the Cw*01, Cw*02, Cw*08, Cw*12,Cw*14, Cw*15, Cw*16, Cw*17 and Cw*18 kits, from *Olerup* SSP AB can be uniquely identified by the number of tubes and the kit-specific pattern of the two differently sized control bands.

²The nucleotide position, in the 1st, 2nd or 3rd exons, matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as in *Tissue Antigens* 1998, **51:II**, 417-466. The sequence of the 3 terminal nucleotides of the primer is given.

³The nucleotide position, in the 2nd or 3rd exons, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as in *Tissue Antigens* 1998, **51:II**, 417-466. The sequence of the 3 terminal nucleotides of the primer is given.

⁴Primer mix 5: Specific PCR fragment of 70 bp in the A*0255, 2603, 2606, 2621, 2630, 6805, 6815 and 6820 alleles. Specific PCR fragment of 105 bp in the A*6604 allele. 'w', might be weakly amplified.



www.olerup.com

	CELL LINE VALIDATION SHEET HLA-A*66 SSP subtyping kit											
		HLA-A	<u>*66 SS</u>	P subty	/pir	ng	kit					
								Tu	ibe			
					1	2	3	4	5	6	7	8
					-	0	3	4	10	6	7	8
					50	06	20	20	20	20	06	06
				9	314	735	314	325	325	325	735	735
				ot No.:	200314501	00735902	200314503	200625204	200625205	200625206	200735907	200735908
		cell line	A*		N	N	N	N	N		N	N
	9001		*2402	<u>^</u>	+-	-	-	-	-	-	-	-
2		LK707	*0201		+-	-	-	-	-	-	-	-
3		E4181324	*0101		1 -	-	-	-	-	-	-	+
4		GU373	*3001		- 1	-	-	-	-	-	-	-
5		KAS011	*0101		- 1	-	-	-	-	-	-	+
6	9353		*0201	*2603	+	-	-	-	+	+	-	+
7	9020		*2601		+	-	-	-	-	-	-	+
8		DEM	*0201		1-	-	-	-	-	-	-	-
9	9026		*2601		+	-	-	-	-	-	-	+
10		LKT3	*2402		1-	-	-	-	-	-	-	-
11		PITOUT	*2902		- 1	-	-	-	-	-	-	-
12	9052	DBB	*0201		-	-	-	-	-	-	-	-
13	9067	втв	*0201		-	-	-	-	-	-	-	-
14	9071	OLGA	*3101		-	-	-	-	-	-	-	-
15	9075	DKB	*2402		-	-	-	-	-	-	-	-
16	9037	SWEIG007	*2902		-	-	-	-	-	-	-	-
17	9008	WILJON	*2501		+	-	-	-	-	-	-	+
18	9257	32367	*3303	*7401	-	-	-	-	-	-	-	-
19	9038	BM16	*0201		-	-	-	-	-	-	-	-
20	9059	SLE005	*0201		-	-	-	-	-	-	-	-
21		AMALA	*0217		-	-	-	-	-	-	-	-
22		KOSE	*0201		-	-	-	-	-	-	-	-
23	9124		*0201	*3401	-	+	+	-	-	+	-	-
24		JBUSH	*3201		-	-	-	-	-	-	-	-
25		IBW9	*3301		-	-	-	-	-	-	-	-
26		WT49	*0205		-	-	-	-	-	-	-	-
27		CH1007	*2410	*2901	-	-	-	-	-	-	-	-
28		BEL5GB	*0201	*2902	-	-	-	-	-	-	-	-
29		MOU	*2902	*0000	1-	-	-	-		-	-	-
30	9021		*3001	*6802	-	-	+	-	-	-	-	-
31 32			*0201			-	-	-	-	-	-	-
32		HAG	*0201			-	-	-	-	-	-	-
33		MT14B DHIF	*3101 *3101		+-	-	-	-	-	-	-	-
34		SSTO	*3201		-	-	-	-	-	-	-	-
36		KT17	*0206	*1101	-	+	-	-	-	+	-	-
37		ННКВ	*0301		-	-	-	-	-	-	-	-
38	9099		*0217		-	-	-	-	-	-	-	-
39	9315		*0101	*0301	1-	-	-	-	-	-	-	+
40		WHONP199	*0207	*3001	1-	-	-	-	-	-	-	-
41		H0301	*0301		- 1	-	-	-	-	-	-	-
42		TAB089	*0207		- 1	-	-	-	-	-	-	-
43		T7526	*0207		1-	-	-	-	-	-	-	-
44		TEM	*6601		+	+	+	-	-	+	-	-
45		SHJO	*2301	*2402	-	-	-	-	-	-	-	-
46		SCHU	*0301		-	-	-	-	-	-	-	-
47		TUBO	*0216	*0301	-	-	-	-	-	-	+	-
48		TER-ND	*0201	*1101	-	+	-	-	-	+	-	
				•	•			• • • •	•	•		



CERTIFICATE OF ANALYSIS

Olerup SSP [™] HLA-A*66 SSP	
Product number:	101.427-06 – licensed for PCR
	101.427-06u – <u>not</u> licensed for PCR
Lot number:	Y03
Expiry date:	2009-July-01
Number of tests:	6
Number of tubes per test:	8

Tube specifications:

Tube No.	Production No.				
1	2003-145-01				
2	2007-359-02				
3	2003-145-03				
4	2006-252-04				
5	2006-252-05				
6	2006-252-06				
7	2007-359-07				
8	2007-359-08				

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

The specificities of additional primers in primer solution 5 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: 2007-September-14

Approved by:

Quality Control, Supervisor



www.olerup.com

Declaration of Conformity

Product name: Product number: Lot number:	<i>Olerup</i> SSP [™] HLA-A*66 101.427-06, 101.427-06u Y03
Intended use:	HLA-A*66 high resolution histocompatibility testing
Manufacturer:	<i>Olerup</i> SSP AB Hasselstigen 1 SE-133 33 Saltsjöbaden, Sweden <i>Phone:</i> +46-8-717 88 27 <i>Fax:</i> +46-8-717 88 18

T A

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 9001:2000 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 2007-September-14

Olle Olerup Managing Director



WARRANTY

Olerup SSP AB warrants its products to the original purchaser against defects in materials and workmanship under normal use and application. *Olerup* SSP AB's sole obligation under this warranty shall be to replace, at no charge, any product that does not meet the performance standards stated on the product specification sheet.

This warranty applies only to products that have been handled and stored in accordance with *Olerup* SSP AB's recommendations, and does not apply to products that have been the subject of alternation, misuse, or abuse.

All claims under this warranty must be directed to *Olerup* SSP AB in writing and must be accompanied by a copy of the purchaser's invoice. This warranty is in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose. In no case shall *Olerup* SSP AB be liable for incidental or consequential damages.

This product may not be reformulated, repacked or resold in any form without the written consent of *Olerup* SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

Handle all samples as if capable of transmitting disease. All work should be performed wearing gloves and appropriate protection.

 $Olerup SSP^{TM}$ is a trademark of Olerup SSP AB. PCRTM is a trademark of F. Hoffmann-La Roche Ltd. ARMSTM is a trademark of Zeneca Ltd.



ADDRESSES:

Manufacturer: Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden. Tel: +46-8-717 88 27 Fax: +46-8-717 88 18 E-mail: info-ssp@olerup.com Web page: http://www.olerup.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:* <u>support-at@olerup.com</u> *Web page:* <u>http://www.olerup.com</u>

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.

