

Olerup SSP™ HLA-B*07

Product number: 101.512-24/03 – licensed for PCR
101.512-24u/03u - not licensed for PCR
Lot number: Y40
Expiry date: 2009-September-01
Number of tests: 24 tests – Product No. 101.512-24
3 tests – Product No. 101.512-03
Number of tubes per test: 32
Storage - pre-aliquoted primers: dark at -20°C
- PCR Master Mix: -20°C

This Product Description is only valid for Lot No. Y40.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP™ HLA-B*07 LOT

The HLA-B*07 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup SSP™* HLA-B*07 lot was made (**Lot No. X03**).

The primers of the tubes detailed below have been exchanged, added or modified compared to the previous lot.

Tube	5'-primer	3'-primer	rationale
7	New	New	Primer pair added for the B*0752 allele.
8	New	New	Primer pair added for the B*0759 allele.
9	New	New	Primer pair added for the B*0758 allele.
15	-	New	Primers added for the B*0754 and B*0757 alleles.
18	-	New	Primer added for the B*0754 allele.
20	New	New	Primer pairs added for the B*0751 and B*0759 alleles.
21	New	-	Primer added for the B*0752 allele.
25	New	New	Primer pair added for the B*0760 allele.
26	-	New	Primers added for the B*0751 and B*0760 alleles.
27	New	-	Primer added for the B*0756 allele.
28	New	-	Primer added for the B*0756 allele.
29	New	New	Primer pair added for the B*0758 allele.
31	-	New	Primer pair added for the B*0755 allele.

PRODUCT DESCRIPTION

HLA-B*07 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*0702 to B*0760 alleles.

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.

32 PCR reactions with a reaction volume of 10 µl are performed per sample.

Note: 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 32 PCR reactions in a 32 well cut PCR plate.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

The 32 well cut PCR plate is marked with 'HLA-B*07 Y40'.

Well No. 1 is marked with '1'.

The PCR plates are covered with a PCR-compatible foil.

Please note: When removing each 32 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 SSP subtypings will be influenced by the B*08, most B*13, three B*14, fifteen B*15, the B*18, the B*27, twelve B*35, the B*37, the B*38, the B*39, the B*40, the B*41, the B*42, nine B*44, the B*4506, two B*46, the B*48, the B*49, seven B*51, the B*5208, the B*54, the B*55, most B*56, two B*57, the B*5807, the B*59, the B*67, B*7301, the B*81 and B*82 alleles when present on the other haplotype. In addition, the Cw*0305, Cw*0325 and Cw*0327 alleles will be amplified by primer mixes 35, 36 and 31, the Cw*0738 allele will be amplified by primer mixes 10, 12, 13, 14, 18 and 29 and the Cw*0808 allele will be amplified by primer mixes 26 and 31.

UNIQUELY IDENTIFIED ALLELES

All the HLA-B*07 alleles, i.e. **B*0702 to B*0760**, recognized by the HLA Nomenclature Committee in October 2007¹ will give rise to unique amplification patterns by the primers in the HLA-B*07 subtyping kit².

The HLA-B*07 subtyping kit cannot distinguish the B*070201 to 070207 alleles, the B*070501 to 070503 alleles or the B*071801 and 071802 alleles.

¹**Nomenclature for factors of the HLA system, 1998.** *Tissue Antigens* 1999; **53**: 407-446.

HLA-B alleles listed on the IMGT/HLA web page 2007-October-05, release 2.19.0, www.ebi.ac.uk/imgt/hla.

²The B*0750, B*3707 and B*4808 alleles will give rise to identical amplification patterns. These alleles can e.g. be distinguished by the HLA-B low resolution primer set.

RESOLUTION IN HOMO- AND HETEROZYGOTES

The 59 HLA-B*07 alleles can be combined in 1 770 homozygous and heterozygous combinations. 803 of these genotypes do not give rise to unique amplification patterns. (The differently sized specific PCR fragments generated by primer mixes 7 to 10, 13 to 15, 17 to 21, 25 to 29 and 31 were not considered in these calculations.)

+++++++-	-----+	-----+	-----	0716,0752	=	0750,0752
+++++++-	-----+	-----+	-----	0716,0725	=	0725,0750
+++++++-	-----+	-----	-----+	0716,0719	=	0719,0750
+++++++-	-----+	-----	-----	0704,0716	=	0704,0750
+++++++-	+-----	-----	-----+	0705,0708	=	0732,0749N
+++++++-	+-----	-----	-----+	0705,0716	=	0705,0750
+++++++-	+-----	-----	-----+	0707,0732	=	0732,0747
+++++++-	+-----	+-----	-----+	0710,0732	=	0732,0746
+++++++-	+-----	+-----	-----+	0721,0732	=	0732,0759
+++++++-	+-----	-----	-----+	0702,0732	=	0706,0708
+++++++-	-----+	-----	-----+	0716,0734	=	0734,0750
+++++++-	-----+	-----	-----	0716,0759	=	0750,0759
+++++++-	-----+	-----	-----+	0706,0716	=	0706,0750
+++++++-	+-----+	-----	-----+	0716,0758	=	0750,0758
+++++++-	+-----+	-----	-----	0716,0749N	=	0749N,0750
+++++++-	+-----+	+-----	-----	0712,0738	=	0714,0738 = 0718,0738
+++++++-	+-----	-----	-----	0708,0714	=	0708,0718
+++++++-	+-----	+-----	-----	0707,0738	=	0738,0747
+++++++-	+-----	-----	-----	0707,0708	=	0708,0747
+++++++-	+-----	+-----	+-----	0714,0727	=	0718,0727
+++++++-	+-----	+-----	-----	0712,0716	=	0712,0750
+++++++-	+-----	-----	-----	0714,0716	=	0714,0750 = 0716,0718
					=	0718,0750
+++++++-	+-----	-----	-----	0703,0714	=	0703,0718
+++++++-	+-----	+-----	+-----	0707,0727	=	0727,0747
+++++++-	+-----	-----	-----	0707,0716	=	0707,0750 = 0716,0747
					=	0747,0750
+++++++-	+-----	-----	-----	0703,0707	=	0703,0747
+++++++-	+-----	+-----	-----	0709,0738	=	0717,0738
+++++++-	+-----	-----	-----	0708,0709	=	0708,0717
+++++++-	+-----	+-----	-----	0715,0738	=	0738,0754
+++++++-	+-----	+-----	-----	0710,0738	=	0738,0746

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+++++--	--+-----	+-----	-----	0710,0716 = 0710,0750
+++++--	--+-----	-+-----	-+-----	0728,0738 = 0738,0742
+++++--	--+-----	-+-----	-----+	0733,0738 = 0738,0755
+++++--	--+-----	-+-----	-----	0702,0738 = 0736,0738
+++++--	--+-----	+-----	-----	0703,0710 = 0708,0710 = 0708,0746
+++++--	--+-----	-----	-+-----	0708,0728 = 0708,0742
+++++--	--+-----	-----	-----+	0708,0733 = 0708,0755
+++++--	---+---+	+-----	-----	0711,0716 = 0711,0750
+++++--	---+---+	+-----	+-----	0709,0727 = 0717,0727
+++++--	---+---+	-----	-----	0709,0716 = 0709,0750 = 0716,0717 = 0717,0750
+++++--	---+-----	-----	-----	0703,0709 = 0703,0717
+++++--	-----+--+	-----	-----+	0716,0743 = 0743,0750
+++++--	-----+--+	-----	-----+	0716,0731 = 0731,0750
+++++--	-----+--+	-----+	-----	0716,0748 = 0748,0750
+++++--	-----+--+	-----	-----	0716,0726 = 0726,0750
+++++--	-----++	+-----	+-----	0715,0727 = 0727,0757
+++++--	-----++	+-----	-----	0716,0757 = 0750,0757
+++++--	-----++	-+-----	-----	0716,0754 = 0750,0754
+++++--	-----++	-----	-----	0715,0716 = 0715,0750
+++++--	-----+	+-----	+-----	0727,0728 = 0727,0742
+++++--	-----+	+-----	+-----+	0727,0733 = 0727,0755
+++++--	-----+	+-----	+-----	0702,0727 = 0727,0745 = 0727,0746
+++++--	-----+	+-----	-----	0716,0746 = 0746,0750
+++++--	-----+	-+-----	-----	0716,0736 = 0736,0750
+++++--	-----+	--+---+	+-----	0716,0720 = 0720,0750
+++++--	-----+	--+-----	-----	0716,0735 = 0735,0750
+++++--	-----+	---+-----	-+-----	0716,0751 = 0750,0751
+++++--	-----+	---+-----	-----	0716,0721 = 0721,0750
+++++--	-----+	---+-----	-----	0716,0722 = 0722,0750
+++++--	-----+	---+-----	-----	0716,0723 = 0723,0750
+++++--	-----+	---+-----	+-----	0716,0724 = 0724,0750
+++++--	-----+	---+-----	-----	0716,0739 = 0739,0750
+++++--	-----+	-----	+-----+	0716,0760 = 0750,0760
+++++--	-----+	-----	+-----	0716,0745 = 0745,0750
+++++--	-----+	-----	-+-----	0716,0728 = 0716,0742 = 0728,0750 = 0742,0750
+++++--	-----+	-----	--+-----	0716,0756 = 0750,0756
+++++--	-----+	-----	--+-----	0716,0741 = 0741,0750
+++++--	-----+	-----	---+-----	0716,0730 = 0730,0750
+++++--	-----+	-----	---+-----	0716,0744 = 0744,0750
+++++--	-----+	-----	---+-----	0716,0753 = 0750,0753
+++++--	-----+	-----	---+-----	0716,0740 = 0740,0750
+++++--	-----+	-----	---+-----	0716,0733 = 0716,0755 = 0733,0750 = 0750,0755
+++++--	-----+	-----	-----	0702,0716 = 0702,0750
+++++--	-----	-----	-+-----	0703,0728 = 0703,0742
+++++--	-----	-----	-----+	0703,0733 = 0703,0755
+++++--	-+---+	---+-----	-----	0714,0752 = 0718,0752
+++++--	-+---+	-----+	-----	0714,0725 = 0718,0725
+++++--	-+---+	-----	--+-----	0714,0729 = 0718,0729
+++++--	-+---+	-----	-----	0704,0714 = 0704,0718
+++++--	-+-----	---+-----	-----	0707,0752 = 0747,0752

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+++++--	-+-----	-----+	-----	0707,0725 = 0725,0747
+++++--	-+-----	-----	--+-----	0707,0729 = 0729,0747
+++++--	-+-----	-----	-----	0704,0707 = 0704,0747
+++++--	---+-----	----+---	-----	0709,0752 = 0717,0752
+++++--	---+-----	-----+	-----	0709,0725 = 0717,0725
+++++--	---+-----	-----	--+-----	0709,0729 = 0717,0729
+++++--	---+-----	-----	-----	0704,0709 = 0704,0717
+++++--	-----	----+--+	-----	0722,0725 = 0725,0752 = 0739,0752
+++++--	-----	----+---	+-----	0728,0752 = 0742,0752
+++++--	-----	----+---	--+-----	0722,0729 = 0729,0752 = 0741,0752
+++++--	-----	----+---	-----+	0719,0722 = 0719,0752 = 0733,0752
				= 0752,0755
+++++--	-----	----+---	-----	0702,0752 = 0704,0722 = 0704,0752
				= 0722,0752 = 0752,0752
+++++--	-----	-----+	-+-----	0725,0728 = 0725,0742
+++++--	-----	-----+	--+-----	0725,0729 = 0725,0741 = 0729,0739
+++++--	-----	-----+	-----	0702,0725 = 0704,0739 = 0725,0739
+++++--	-----	-----	+-----	0728,0729 = 0729,0742
+++++--	-----	-----	+-----	0704,0728 = 0704,0742
+++++--	-----	-----	--+-----	0704,0756 = 0729,0730 = 0729,0756
+++++--	-----	-----	--+---+	0719,0729 = 0719,0741 = 0729,0733
				= 0729,0755
+++++--	-----	-----	--+-----	0702,0729 = 0704,0729 = 0704,0741
				= 0729,0741
+++++--	++-----	-----	-----+	0705,0707 = 0705,0747
+++++--	+---++-	-----	-----+	0734,0749N = 0734,0758
+++++--	+-----	---+-----	-----+	0705,0721 = 0705,0759
+++++--	+-----	-----	-----+	0705,0744 = 0705,0758 = 0706,0758
+++++--	+-----	-----	-----+	0702,0705 = 0705,0749N =
				0706,0749N
+++++--	-+---++-	-----	-----+	0707,0734 = 0718,0734 = 0734,0747
+++++--	-+---+--	---+-----	-----	0714,0759 = 0718,0759
+++++--	-+-----	---+-----	-----	0707,0759 = 0747,0759
+++++--	-+-----	-----	-----+	0706,0707 = 0706,0747
+++++--	---+-----	---+-----	-----	0709,0759 = 0717,0759
+++++--	---++++-	-----	-----+	0713,0734 = 0715,0734
+++++--	---++++-	---+-----	-----+	0721,0734 = 0734,0759
+++++--	---++++-	-----	-----+	0702,0734 = 0731,0734 = 0734,0744
+++++--	-----	---+-----	+-----	0728,0759 = 0742,0759 = 0751,0759
+++++--	-----	---+-----	-----+	0706,0721 = 0706,0759 = 0740,0759
+++++--	-----	---+-----	-----+	0733,0759 = 0755,0759
+++++--	-----	---+-----	-----	0702,0759 = 0721,0759 = 0759,0759
+++++--	++---+--	-----	-----+	0714,0758 = 0718,0758
+++++--	++---+--	-----	-----	0714,0749N = 0718,0749N
+++++--	++-----	-----	-----+	0707,0758 = 0747,0758
+++++--	++-----	-----	-----	0707,0749N = 0747,0749N
+++++--	+---+-----	-----	-----+	0709,0758 = 0717,0758
+++++--	+---+-----	-----	-----	0709,0749N = 0717,0749N
+++++--	+---++-	-----	-----+	0743,0749N = 0743,0758
+++++--	+---+-----	-----	-----+	0731,0749N = 0731,0758
+++++--	+-----	-----	-+---+--	0728,0758 = 0742,0758
+++++--	+-----	-----	+-----	0728,0749N = 0742,0749N
+++++--	+-----	-----	-----+	0733,0758 = 0755,0758

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+++++--- +----- - - - - - +---	0702,0758 = 0744,0749N = 0744,0758 = 0749N,0758 = 0758,0758
+++++--- +----- - - - - - +--	0733,0749N = 0749N,0755
+++++--- +----- - - - - - -	0702,0749N = 0749N,0749N
+++++--- -+-+--- +----- - - - - -	0710,0714 = 0710,0718
+++++--- -+-+--- +----- - - - - -	0707,0710 = 0710,0747
+++++--- -+-+--- +----- - - - - -	0711,0714 = 0711,0718
+++++--- -+-+--- -+----- - - - - -	0709,0712 = 0712,0717
+++++--- -+-+--- - - - - - -	0709,0714 = 0709,0718 = 0717,0718
+++++--- -+-+--- +----- - - - - -	0707,0711 = 0711,0747
+++++--- -+-+--- - - - - - -	0707,0709 = 0707,0717 = 0709,0747 = 0717,0747
+++++--- -+---++- - - - - -	0713,0714 = 0713,0718
+++++--- -+---++- - - - - +	0714,0748 = 0718,0748
+++++--- -+---++- - - - - +---	0707,0743 = 0714,0743 = 0718,0743 = 0743,0747
+++++--- -+---++- - - - - -	0714,0726 = 0718,0726
+++++--- -+---++- +----- - - - - -	0714,0757 = 0718,0757
+++++--- -+---++- -+----- - - - - -	0712,0715 = 0712,0754 = 0714,0754 = 0718,0754
+++++--- -+---++- - - - - -	0714,0715 = 0715,0718
+++++--- -+---++- - - - - -	0714,0737 = 0718,0737
+++++--- -+---++- +----- - - - - -	0714,0746 = 0718,0746
+++++--- -+---++- -+----- -+-----	0712,0728 = 0712,0742
+++++--- -+---++- -+----- - - - +---	0712,0731 = 0712,0744
+++++--- -+---++- -+----- - - - - -	0702,0712 = 0712,0736 = 0712,0747 = 0714,0736 = 0718,0736
+++++--- -+---++- --+---+ +-----	0714,0720 = 0718,0720
+++++--- -+---++- --+---+ - - - - -	0714,0735 = 0718,0735
+++++--- -+---++- ---+--- -+-----	0714,0751 = 0718,0751
+++++--- -+---++- ---+--- - - - - -	0714,0721 = 0718,0721
+++++--- -+---++- ---+--- - - - - -	0714,0722 = 0718,0722
+++++--- -+---++- ---+--- - - - - -	0714,0723 = 0718,0723
+++++--- -+---++- ---+--- +-----	0714,0724 = 0718,0724
+++++--- -+---++- ---+--- - - - - -	0714,0739 = 0718,0739
+++++--- -+---++- ---+--- +-----	0714,0745 = 0718,0745
+++++--- -+---++- ---+--- -+-----	0714,0742 = 0718,0728 = 0718,0742
+++++--- -+---++- ---+--- --+---+	0714,0756 = 0718,0756
+++++--- -+---++- ---+--- --+---+	0714,0741 = 0718,0741
+++++--- -+---++- ---+--- - - - +---	0714,0730 = 0718,0730
+++++--- -+---++- ---+--- - - - +---	0707,0731 = 0714,0731 = 0714,0744 = 0718,0731 = 0718,0744 = 0731,0747
+++++--- -+---++- - - - - - +---	0714,0755 = 0718,0755
+++++--- -+---++- - - - - - -	0702,0714 = 0702,0718 = 0714,0747 = 0718,0747
+++++--- -+---++- - - - - - -	0707,0713 = 0713,0747
+++++--- -+---++- - - - - - +	0707,0748 = 0747,0748
+++++--- -+---++- - - - - - -	0707,0726 = 0726,0747
+++++--- -+---++- +----- - - - - -	0707,0757 = 0747,0757
+++++--- -+---++- -+----- - - - - -	0707,0754 = 0747,0754
+++++--- -+---++- - - - - - -	0707,0715 = 0715,0747
+++++--- -+---++- - - - - - +	0707,0737 = 0737,0747

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+++++---	-+-----	+-----	-----	0707,0746 = 0746,0747
+++++---	-+-----	-+-----	-----	0707,0736 = 0736,0747
+++++---	-+-----	--+---+	++-----	0707,0720 = 0720,0747
+++++---	-+-----	--+-----	-----	0707,0735 = 0735,0747
+++++---	-+-----	---+-----	-+-----	0707,0751 = 0747,0751
+++++---	-+-----	---+-----	-----	0707,0721 = 0721,0747
+++++---	-+-----	----+---	-----	0707,0722 = 0722,0747
+++++---	-+-----	-----+--	-----	0707,0723 = 0723,0747
+++++---	-+-----	-----+--	++-----	0707,0724 = 0724,0747
+++++---	-+-----	-----+--	-----	0707,0739 = 0739,0747
+++++---	-+-----	-----+--	+-----	0707,0745 = 0745,0747
+++++---	-+-----	-----+--	-+-----	0707,0728 = 0707,0742 = 0728,0747 = 0742,0747
+++++---	-+-----	-----+--	--++-----	0707,0756 = 0747,0756
+++++---	-+-----	-----+--	--+-----	0707,0741 = 0741,0747
+++++---	-+-----	-----+--	---+-----	0707,0730 = 0730,0747
+++++---	-+-----	-----+--	-----+--	0707,0744 = 0744,0747
+++++---	-+-----	-----+--	-----+--	0707,0755 = 0733,0747 = 0747,0755
+++++---	-+-----	-----+--	-----+--	0702,0707 = 0702,0747 = 0707,0747 = 0747,0747
+++++---	--++-----	+-----	-----	0709,0710 = 0710,0717
+++++---	--++-----	+-----	-----	0710,0715 = 0710,0757
+++++---	--++-----	+-----	-+-----	0710,0728 = 0710,0742
+++++---	--++-----	+-----	-----+--	0710,0733 = 0710,0755
+++++---	--++-----	+-----	-----+--	0702,0710 = 0710,0710 = 0710,0746
+++++---	---+++-	-----	-----+--	0709,0743 = 0717,0743
+++++---	---+++-	-----	-----+--	0709,0731 = 0717,0731
+++++---	---+++-	+-----	-----	0711,0713 = 0711,0726
+++++---	---+++-	-----	-----	0709,0713 = 0713,0717
+++++---	---+++-	-----+--	-----	0709,0748 = 0717,0748
+++++---	---+++-	-----	-----	0709,0726 = 0717,0726
+++++---	---+++-	++-----	-----	0711,0736 = 0711,0754
+++++---	---+++-	+-----	-+-----	0711,0728 = 0711,0742
+++++---	---+++-	+-----	-----+--	0711,0733 = 0711,0755
+++++---	---+++-	+-----	-----	0702,0711 = 0709,0711 = 0709,0757 = 0711,0711 = 0711,0715 = 0711,0717 = 0711,0746 = 0711,0757 = 0717,0757
+++++---	---+---+	-+-----	-----	0709,0754 = 0717,0754
+++++---	---+---+	-----	-----	0709,0715 = 0715,0717
+++++---	---+---+	-----	-----	0709,0737 = 0717,0737
+++++---	---+---+	+-----	-----	0709,0746 = 0717,0746
+++++---	---+---+	-+-----	-----	0709,0736 = 0717,0736
+++++---	---+---+	--+---+	++-----	0709,0720 = 0717,0720
+++++---	---+---+	--+-----	-----	0709,0735 = 0717,0735
+++++---	---+---+	---+-----	-+-----	0709,0751 = 0717,0751
+++++---	---+---+	---+-----	-----	0709,0721 = 0717,0721
+++++---	---+---+	----+---	-----	0709,0722 = 0717,0722
+++++---	---+---+	-----+--	-----	0709,0723 = 0717,0723
+++++---	---+---+	-----+--	++-----	0709,0724 = 0717,0724
+++++---	---+---+	-----+--	-----	0709,0739 = 0717,0739
+++++---	---+---+	-----+--	+-----	0709,0745 = 0717,0745
+++++---	---+---+	-----+--	-+-----	0709,0728 = 0709,0742 = 0717,0742

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+++++---	---+----	-----	--++----	0709,0756 = 0717,0756
+++++---	---+----	-----	--+-----	0709,0741 = 0717,0741
+++++---	---+----	-----	---+----	0709,0730 = 0717,0730
+++++---	---+----	-----	-----+--	0709,0744 = 0717,0744
+++++---	---+----	-----	-----+--	0709,0733 = 0709,0755 = 0717,0755
+++++---	---+----	-----	-----	0702,0709 = 0702,0717 = 0709,0709
				= 0709,0717
+++++---	-----++-	-----	-----+--	0713,0731 = 0713,0743 = 0715,0743
+++++---	-----+--	-----+	-----+--	0731,0748 = 0739,0743
+++++---	-----+--	-----	+-----	0728,0743 = 0742,0743
+++++---	-----+--	-----	-----+--	0702,0743 = 0726,0731 = 0731,0743
				= 0743,0744
+++++---	-----+--	-----	+-----	0728,0731 = 0731,0742
+++++---	-----+--	-----	-----+--	0731,0733 = 0731,0755
+++++---	-----+--	-----	-----+--	0702,0731 = 0731,0731 = 0731,0744
+++++---	-----++-	+-----	-----	0713,0746 = 0713,0757 = 0726,0757
+++++---	-----++-	+-----	-----	0713,0736 = 0713,0754 = 0726,0754
+++++---	-----++-	-----+	-----	0713,0739 = 0713,0748 = 0715,0748
+++++---	-----++-	-----	+-----	0713,0728 = 0713,0742
+++++---	-----++-	-----	-----+	0713,0733 = 0713,0755
+++++---	-----++-	-----	-----	0702,0713 = 0713,0715 = 0713,0726
				= 0715,0726
+++++---	-----+--	-----+	+-----	0728,0748 = 0742,0748
+++++---	-----+--	-----+	-----	0702,0748 = 0726,0739 = 0739,0748
+++++---	-----+--	-----	+-----	0726,0728 = 0726,0742
+++++---	-----+	++-----	-----	0736,0757 = 0746,0754 = 0754,0757
+++++---	-----+	+-----	+-----	0728,0757 = 0742,0757
+++++---	-----+	+-----	-----+	0733,0757 = 0755,0757
+++++---	-----+	+-----	-----	0702,0757 = 0715,0746 = 0715,0757
				= 0746,0757 = 0757,0757
+++++---	-----+--	+-----	+-----	0728,0754 = 0742,0754
+++++---	-----+--	+-----	-----+	0733,0754 = 0754,0755
+++++---	-----+--	+-----	-----	0702,0754 = 0715,0736 = 0715,0754
				= 0736,0754 = 0754,0754
+++++---	-----+--	-----	+-----	0715,0728 = 0715,0742
+++++---	-----+--	-----	-----+	0715,0733 = 0715,0755
+++++---	-----+--	-----	-----	0702,0715 = 0715,0715
+++++---	-----+	-----	+-----	0728,0737 = 0737,0742
+++++---	-----+	-----	-----+	0733,0737 = 0737,0755
+++++---	-----	+-----	+-----	0728,0746 = 0742,0746
+++++---	-----	+-----	-----+	0733,0746 = 0746,0755
+++++---	-----	+-----	-----	0702,0746 = 0746,0746
+++++---	-----	+-----	+-----	0728,0736 = 0736,0742
+++++---	-----	+-----	-----+	0733,0736 = 0736,0755
+++++---	-----	+-----	-----	0702,0736 = 0736,0736
+++++---	-----	--++--+	++-----	0720,0721 = 0720,0751
+++++---	-----	--+---+	++-----+	0720,0733 = 0720,0755 = 0720,0760
+++++---	-----	--+---+	++-----	0702,0720 = 0720,0720 = 0720,0724
				= 0720,0728 = 0720,0735 =
				0720,0742 = 0720,0745 = 0724,0735
+++++---	-----	--+-----	+-----	0728,0735 = 0735,0742
+++++---	-----	--+-----	-----+	0733,0735 = 0735,0755
+++++---	-----	--+-----	-----	0702,0735 = 0735,0735

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+++++---	-----	---+---+	++-----	0721,0724 = 0724,0751
+++++---	-----	---+---	++-----+	0721,0760 = 0751,0760
+++++---	-----	---+---	-+-----+	0733,0751 = 0751,0755
+++++---	-----	---+---	-+-----	0702,0751 = 0721,0728 = 0721,0742
				= 0721,0751 = 0728,0751 =
				0742,0751 = 0751,0751
+++++---	-----	---+---	-----+	0721,0733 = 0721,0755
+++++---	-----	---+---	-----	0702,0721 = 0721,0721
+++++---	-----	---+---	-+-----	0722,0728 = 0722,0742
+++++---	-----	---+---	-----+	0722,0733 = 0722,0755
+++++---	-----	---+---	-----	0702,0722 = 0722,0722
+++++---	-----	---+---	-+-----	0723,0728 = 0723,0742
+++++---	-----	---+---	-----+	0723,0733 = 0723,0755
+++++---	-----	---+---	-----	0702,0723 = 0723,0723
+++++---	-----	---+---	++-----+	0724,0733 = 0724,0755 = 0724,0760
+++++---	-----	---+---	++-----	0702,0724 = 0724,0724 = 0724,0728
				= 0724,0742 = 0724,0745
+++++---	-----	-----+	-+-----	0728,0739 = 0739,0742
+++++---	-----	-----+	-----+	0733,0739 = 0739,0755
+++++---	-----	-----+	-----	0702,0739 = 0739,0739
+++++---	-----	-----	++-----+	0702,0760 = 0742,0760 = 0745,0760
+++++---	-----	-----	++-----	0728,0745 = 0742,0745
+++++---	-----	-----	+-----+	0733,0745 = 0745,0755
+++++---	-----	-----	+-----	0702,0745 = 0745,0745
+++++---	-----	-----	-+++-----	0728,0756 = 0742,0756
+++++---	-----	-----	-++-----	0728,0741 = 0741,0742
+++++---	-----	-----	-+-----	0728,0730 = 0730,0742
+++++---	-----	-----	-+-----	0728,0744 = 0742,0744
+++++---	-----	-----	-+-----+	0728,0755 = 0733,0742 = 0742,0755
+++++---	-----	-----	-+-----	0702,0728 = 0702,0742 = 0728,0742
				= 0742,0742
+++++---	-----	-----	--++-----	0733,0756 = 0755,0756
+++++---	-----	-----	--++-----	0702,0756 = 0730,0741 = 0730,0756
				= 0741,0756 = 0756,0756
+++++---	-----	-----	--+-----+	0733,0741 = 0741,0755
+++++---	-----	-----	--+-----	0702,0741 = 0741,0741
+++++---	-----	-----	---+-----	0730,0733 = 0730,0755
+++++---	-----	-----	---+-----	0702,0730 = 0730,0730
+++++---	-----	-----	---+-----	0733,0744 = 0744,0755
+++++---	-----	-----	---+-----	0702,0744 = 0744,0744
+++++---	-----	-----	---+-----	0702,0733 = 0702,0755
+++++--+	-----+	-----	--+-----	0716,0729 = 0729,0750
+++++--+	--+-----+	-+-----	-----	0703,0738 = 0716,0738
+++++--+	-----+	+-----	+-----	0703,0727 = 0716,0727
+++++--+	-----+	-----	-----	0703,0716 = 0703,0737 = 0703,0750
				= 0716,0716 = 0716,0737 =
				0716,0750
+++--+--	-----+	-----+	-----	0704,0748 = 0725,0726 = 0725,0748
+++--+--	-----	-----+	-----+	0719,0725 = 0725,0733 = 0725,0755
+++--+--	-----	-----+	-----	0704,0725 = 0725,0725
+++--+--	-----	-----	-----+	0704,0719 = 0704,0733 = 0704,0755
				= 0719,0755
+++--+--	-----+	-----	-----+	0726,0734 = 0734,0743

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+++--+-	-----+--	-----	----+--	0733,0743 = 0743,0755
+++--+-	-----+--	-----	----+--	0726,0743 = 0743,0743
+++--+-	-----+--	-----+	----+--	0733,0748 = 0748,0755
+++--+-	-----+--	-----+	----+--	0726,0748 = 0748,0748
+++--+-	-----+--	-----	----+--	0726,0733 = 0726,0755
+++--+-	-----	-----	----+--	0740,0755 = 0753,0755
+++--+-	-----	-----	----+--	0733,0755 = 0755,0755
++-+++-	--+-----	-----	----+--	0732,0733 = 0732,0753
++-+++-	--+-----	-----	----+--	0706,0732 = 0732,0740
++-+++-	+-----	-----	----+--	0705,0733 = 0705,0753
++-+++-	+-----	-----	----+--	0705,0705 = 0705,0706 = 0705,0740
++-+++-	-----	-----	----+--	0706,0733 = 0706,0753
++-+++-	-----	-----	----+--	0706,0706 = 0706,0740
+--+++-	-+--+--	-+-----	-----	0707,0712 = 0712,0712 = 0712,0714
				= 0712,0718
+--+++-	-+--+--	-----	-----	0707,0714 = 0707,0718 = 0714,0718
				= 0718,0718
+---+--	-----	-----	----+--	0719,0740 = 0719,0753
+---+--	-----	-----	----+--	0719,0719 = 0719,0733
+---+--	-----	-----	++-++-	0740,0760 = 0753,0760
+---+--	-----	-----	++-++-	0733,0760 = 0760,0760
+---+--	-----	-----	----+--	0733,0740 = 0733,0753 = 0740,0753
				= 0753,0753
-++-++-	--+-----	-----	----+--	0732,0737 = 0732,0750
-++-++-	--+-----	-+-----	-----	0708,0738 = 0737,0738 = 0738,0738
				= 0738,0750
-++-++-	--+-----	-----	-----	0708,0737 = 0708,0750
-++-++-	-----	+-----	+-----	0727,0727 = 0727,0737 = 0727,0750
-++-++-	-----	-----	-----	0737,0750 = 0750,0750

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These products use ARMSTM 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-B*07 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 GenoM™-6 robotic workstation (GenoVision Europe Tel: +43 1 710 15 00 or GenoVision Inc. USA Tel: +1 610 430 88 41; <http://www.genovision.com>). Using GenoM™-6-extracted DNA ACD, EDTA and heparinised blood can be used as starting material. Because of its high purity, GenoM™-6-extracted DNA can be diluted when used in combination with Olerup SSP™ products. The recommended DNA concentration is 15 ng/μl.

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: GenoM™-6-extracted DNA, 15 ng/μl.

DNA extracted by other methods, 30 ng/μl.

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

PCR AMPLIFICATION

101.512-24/03 – licensed for PCR

For one HLA-B*07 subtyping, add at room temperature in a 0.5 ml tube:

38 x 2 μl = 76 μl DNA (30 ng/μl)

38 x 3 μl = 114 μl PCR Master Mix complete with *Taq* – mix well
before taking your aliquot

38 x 5 μl = 190 μl dH₂O

Mix well, dispense 10 μl of the DNA-PCR Master Mix-H₂O mixture into each of the 32 wells of a HLA-B*07 subtyping. **Well No. 1 of the 32 well PCR plate is marked with '1'**. Close the 32 well PCR plate with the provided lids.

101.512-24u/03u – not licensed for PCR

For one HLA-B*07 subtyping, add at room temperature in a 0.5 ml tube:

38 x 2 μl = 76 μl DNA (30 ng/μl)

38 x 3 μl = 114 μl PCR Master Mix without *Taq* – mix well before
taking your aliquot

3.0 μl *Taq* polymerase (5 units/μl)

38 x 5 μl – 3.0 μl = 187 μl dH₂O

Mix well, dispense 10 μl of the DNA-PCR Master Mix-*Taq*-H₂O mixture into each of the 32 wells of an HLA-B*07 subtyping. **Well No. 1 of the 32 well PCR plate is marked with '1'**. Close the 32 well PCR plate with the provided lids.

Use a 96 well thermal cycler with a heated lid. The temperature gradient across the heating block should be < 1°C.

PCR cycling parameters:

1. 1 cycle	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. **Note:** **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.

PCR MASTER MIXES

The PCR Master Mix complete with *Taq* contains:

<i>Taq</i> polymerase	0.4 unit per 10 µl SSP reaction
nucleotides	final concentration of each dNTP is 200 µM
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 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 µM
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°C for 4 weeks, but the PCR Master Mixes are then no longer stable for 24 months.

SPECIFICITY TABLE

HLA-B*07 SSP subtyping

Specificities and sizes of the PCR products of the 32 primer mixes used for HLA-B*07 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 ^{3,4}
1⁵	400 bp	800 bp	070201-0707, 0709, 0710 ^{weakly} , 0711, 0712, 0714-0726, 0728-0731, 0733-0736, 0739-0749N, 0751-0760	3910, 3916, 3917, 3920, 4201, 4202, 4204-4209, 4506, 670101-670102, 8102
2	285 bp	1070 bp	070201-0706, 0708-0711, 0713, 0715-0717, 0720-0732, 0734-0739, 0741-0752, 0754-0759	3566, 3707, 4015, 4016, 4031, 4032, 4045, 420501-420502, 480101-480102, 4805-4812, 4814-4816, 4818, 4819, 8101-8103
3	235 bp	1070 bp	070201-0704, 0707-0713, 0715, 0716, 071801-071802, 0720-0727, 0729-0731, 0735-0739, 0741-0752, 0754-0759	9538, 3566, 3707, 4031-4033, 4052, 4059, 4606, 4808
4^{6,7}	105 bp	800 bp	070201-0703, 070501-071802, 0720-0724, 0727-0732, 0735-0739, 0741, 0742, 0744-0747, 0749N-0752, 0754, 0756-0759	3566, 3707, 4015, 4016, 4023, 4032, 4805, 4808
5^{7,8}	220 bp	1070 bp	070201-070207, 0704-0707, 0709-0715, 0717-0726, 0728, 0730, 0731, 0733-0736, 0739-0749N, 0751-0760	2701-270402, 270502-2711, 2713-2715, 2717, 2719-2721, 2724-2728, 2730-2738, 4201, 4202, 4204-4206, 4208, 4209, 5402, 5510, 670101-6702, 7301, 8101-8103
6^{7,8}	215 bp	1070 bp	0703, 0708, 0716, 0727,	1314, 1401, 1407N, 1568, 1571, 180101-1803, 1805-

			0732, 0738, 0750	1815, 1817N-1824, 1826, 1827, 2712, 2716, 2718, 2723, 2729, 3550, 370101-3713, 380101-3804, 3806-3817, 39010101-39010102L, 390103-3903, 3905-390602, 3907 [?] , 3908-3911, 391301-3920, 3922-3943, 400201-400602, 4008, 4009, 4011, 4013, 4018-4020, 4024, 4026-4029, 4035, 4037, 4039, 4040, 4044, 4050, 4056, 4057, 4064, 4068, 4070, 4071, 4074, 4075, 4078, 4207, 480101-4819
7^{6,9}	110, 215 bp	1070 bp	0704, 0719, 0725, 0729, 0752	080101-0805, 0807-0812, 0814-0819N, 0821-0824, 0826-0830N, 0832-0834, 4101-4105, 4107, 4108, 4201, 4202, 4204-4207, 4209, 5520
8¹⁰	160, 235 bp	1070 bp	070501-0706, 0732, 0734, 0759	400101-400105, 4007, 4010, 4012, 401401-4016, 4021-4023, 4025, 4030, 4034, 4036, 4038, 4043, 4045-4049, 4054, 4055, 4061-4063, 4065-4067, 4069, 4072-4074, 4076, 4077, 4108, 420501-420502, 4431, 480101-480102, 480301-480302, 4805-4807, 4809-4812, 4814-4816, 4818, 4819, 8101-8103
9^{7,8,11}	240, 365, 390 bp	1070 bp	070501-070503, 0749N, 0758	
10¹²	285, 415 bp	800 bp	0707, 0712, 0714, 071801-071802, 0747	9538, 400101-400105, 4007, 4010, 4012, 401401-401403, 4021-4023, 4025, 4033, 4036, 4038, 4042, 4043, 4046-4049, 4052, 4054, 4055, 4059-4063, 4065-4067, 4069, 4072-4074, 4076, 4077, 4108, 4431, 4606, 480301-480302, 4817,
11	210 bp	1070 bp	0708, 0710, 0732, 0738	Cw*0738 1807, 2701-270402, 270502-270508, 270510-2711, 2713-2715, 2717, 2719-2721, 2723-2728, 2730-2738, 3550, 3806, 3807, 4008, 4013, 4068, 4806,

12	230 bp	1070 bp	0709, 0711, 0717	7301 0828, 9538, 3566, 4038, 4052, 4059, 4060, 4209, 4606, 4814, Cw*0738
13^{6,7,13}	85, 290 bp	1070 bp	0712, 0714, 071801-071802, 0731, 0734, 0743	4030, 4034, 4059, 4108, 420501-420502, 4817, Cw*0738
14^{6,14}	110, 395 bp	1070 bp	0713, 0726, 0734, 0743, 0748	0813, 0825, 9538, 2736, 400101-400105, 4007, 4010, 4012, 401401-401403, 4021, 4022N, 4025, 4030, 4031, 4033, 4034, 4036, 4038, 4042, 4043, 4045-4049, 4052, 4054, 4055, 4059-4063, 4065-4067, 4069, 4072-4074, 4076, 4077, 4431, 4606, 480101-480102, 480301-480302, 4806, 4807, 4809-4812, 4814-4818, 8101- 8103, Cw*0738
15¹⁵	385, 425 bp	1070 bp	0711, 0713, 0715, 0754, 0757	0806, 0815, 0817, 3920, 3927, 4073, 4506, 6702, 7301
16⁸	230 bp	1070 bp	0716, 0727, 0737, 0738, 0750	1314, 1568, 1571, 180101, 180103, 1802, 1805-1815, 1817N-1824, 1826, 1827, 2701, 2718, 2723, 2729, 3550, 370101-3713, 380101-380202, 3804, 3806-3812, 3815-3817, 3905, 3907 [?] , 3908, 3911, 391301-391302, 3920, 3937, 400201-400602, 4008, 4009, 4011, 4013, 4018-4020, 4024, 4026-4029, 4035, 4037, 4039, 4040, 4044, 4056, 4057, 4064, 4068, 4070, 4071, 4074, 4075, 4078, 480101-4819, 5710
17^{7,16}	345, 410 bp	1070 bp	0710, 0711, 0727, 0746, 0757	0806, 0817, 3817, 3920, 7301
18^{7,17}	265, 385, 435 bp	1070 bp	0712, 0736, 0738, 0754	0803, 3566, 380101-380102, 3805-3807, 3809-3814, 3816, 4059, 4060, 4418, 4506, 4817, 4818, 4901, 4903-4905, Cw*0738
19^{7,18}	205, 250, 295 bp	800 bp	0720, 0735	1514, 1591, 9531, 3545, 3571, 4410, 4414, 4417, 4431, 4443, 4445, 4451, 4454, 5123, 5707, 5807, 8201, 8202
20¹⁹	160, 205,	1070 bp	0721, 0751, 0759	

	275 bp			
21 ²⁰	100, 165 bp	1070 bp	0722, 0752	
22 ¹⁷	380 bp	1070 bp	0723	
23 ⁶	85 bp	1070 bp	0720, 0724	4063
24 ⁶	125 bp	1070 bp	0725, 0739, 0748	2736, 3566, 400101-400105, 4007, 4010, 4012, 401401- 401403, 4021, 4022N, 4025, 4030, 4031, 4033, 4034, 4036, 4038, 4042, 4043, 4045-4049, 4052, 4054, 4055, 4059-4063, 4065, 4066, 4069, 4072-4074, 4076, 4077, 4108, 420501- 420502, 4431, 4606, 480101- 480102, 480301-480302, 4806, 4807, 4809-4812, 4814, 4816-4819, 8101-8103
25 ^{7,21}	220, 425 bp	800 bp	0720, 0724, 0727, 0745, 0760	0821, 0825, 1507, 1545, 1555, 1568, 9526, 3505, 3522, 3551, 3558, 3572, 3817, 4005, 4071, 4454, 4612, Cw*0305, Cw*0325, Cw*0327
26 ^{6,22}	95, 220, 290 bp	800 bp	0720, 0724, 0728, 0742, 0751, 0760	0814, 0821, 0825, 1507, 1545, 1555, 1568, 9526, 2732, 3505, 3522, 3551, 3558, 3572, 4005, 4071, 4454, 4612, Cw*0305, Cw*0325, Cw*0327, Cw*0808
27 ²³	165, 215 bp	800 bp	0729, 0741, 0756	1576, 9501, 3576, 5401-5406, 5408N-5413, 550101-5505, 5507-5509, 5511-5517, 5519- 5528, 5601-5604, 560502, 5607, 5609-5613, 5615, 5618- 5621
28 ^{6,7,24}	100, 170 bp	800 bp	0730, 0756	1576, 9501, 3576, 5401-5406, 5408N-5413, 550101-5505, 5507-5509, 5511-5517, 5519- 5528, 5601-5604, 560502, 5607, 5609-5613, 5615, 5618- 5621
29 ^{6,7,25}	95, 305 bp	800 bp	0731, 0734, 0743, 0744, 0758	4108, 420501-420502, Cw*0738
30 ²⁰	190 bp	800 bp	070501-0706, 0732, 0740, 0753	1301-130204, 1307N-1309, 1311, 1313-1321, 2707, 2711, 2720, 2724, 2727, 2733, 3531, 400101-400203, 4004, 40060101-4008, 4010-4016, 4019, 4021-4023, 4025, 4027, 4029, 4030, 4034-4038, 4040,

				4043, 4045-4050, 4053-4058, 4061, 4062, 4064-4070, 4072- 4078, 4431, 480101-480102, 480301-4807, 4809-4816, 4818, 4819, 5110, 5116, 5131, 5134, 5208, 5509, 5522, 5524, 8101-8103
31²⁶	215, 280 bp	800 bp	0719, 0733, 0753, 0755, 0760	1405, 1507, 1545, 1555, 1568, 9526, 1814, 2707, 2711, 2724, 2732-2734, 3505, 3522, 3531, 3551, 3558, 3572, 3709, 3903, 3914, 3924, 3929, 3937, 400201-4003, 4005, 4008, 4009, 4013, 4018, 4019, 4024, 4027, 4029, 4035, 4037, 4039, 4040, 4050, 4056-4058, 4071, 4078, 4208, 4454, 4612, 4804, 4813, 4819, 5504, Cw*0305, Cw*0325, Cw*0327, Cw*0808
32²⁷	190 bp	1070 bp	0734	080101-0806, 0808N-0810, 0812, 0813, 0815-0820, 0822- 0824, 0826, 0827, 0829-0834, 1306, 1542, 1583, 1586, 1826, 3560, 3712, 380101, 380201- 3807, 3809-3817, 39010101- 39010102L, 390103-390602, 3908-3914, 3916, 3918-3920, 3922-3924, 3926-3928, 3930, 3931, 3934-3937, 3939, 3941, 3942, 4039, 4051, 4101- 410302, 4105-4108, 4201, 4202, 4204-4208, 5121, 5136, 5401, 5402, 5404, 5405N, 5407, 5408N, 5410-5413, 550101-5505, 5507, 5510- 5513, 5515-5521, 5525, 5526, 5528, 5610, 5612, 5901, 5902, 670101-6702

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 SSP subtypings. 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 bp or more. Size differences shorter than 20 bp are not given. For high resolution SSP kits the length 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 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-B*07 subtyping.

In addition, tubes number 4, 10, 19, 25, 26, 27, 28, 29, 30 and 31 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.

³For several HLA-B alleles 1st 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 the 1st exon 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 8, 10 to 19, 24, 26 and 29 to 32. In addition, the Cw*0305, Cw*0325 and Cw*0327 alleles will be amplified by primer mixes 35, 36 and 31, the Cw*0738 allele will be amplified by primer mixes 10, 12, 13, 14, 18 and 29 and the Cw*0808 allele will be amplified by primer mixes 26 and 31.

⁵Primer mix 1 may give rise to a weak false band of approx. 600 base pairs.

⁶Specific PCR fragments shorter than 125 base pairs are less intense and not as sharp as longer specific bands.

⁷Primer mixes 4, 5, 6, 9, 13, 17, 18, 19, 25, 28 and 29 may give rise to a primer oligomer artefact. Most pronounced for primer mixes 17 and 28.

⁸Primer mixes 5, 6, 9 and 16 may yield somewhat less specific PCR product than the other HLA-B*07 primer mixes.

⁹Primer mix 7: Specific PCR fragment of 110 bp in the B*0704, B*0719, B*0725, B*0753 and the B*080101-0805, B*0807-0812, B*0814-0819N, B*0821-0824, B*0826-0830N, B*0832-0834, B*4101-4105, B*4107, B*4108, B*4201, B*4202, B*4204 to B*4207, B*4209 and B*5520 alleles. Specific PCR fragment of 215 bp in the B*0729 allele.

¹⁰Primer mix 8: Specific PCR fragment of 160 bp in the B*0759 allele. Specific PCR fragment of 235 bp in the B*070501-0706, B*0732, B*0734 and the B*400101-400105, B*4007, B*4010, B*4012, B*401401-4016, B*4021-4023, B*4025, B*4030, B*4034, B*4036, B*4038, B*4043, B*4045-4049, B*4054, B*4055, B*4061-4063, B*4065-4067, B*4069, B*4072-4074, B*4076, B*4077, B*4108, B*420501-420502, B*4431, B*480101-480102, B*480301-480302, B*4805-4807, B*4809-4812, B*4814-4816, B*4818, B*4819 and B*8101-8103 alleles.

¹¹Primer mix 9: Specific PCR fragment of 240 bp in B*0749 allele. Specific PCR fragment of 365 bp in the B*070501-070503 alleles. Specific PCR fragment of 390 bp in the B*0758 allele.

¹²Primer mix 10: Specific PCR fragment of 285 bp in the B*0707, B*0712, B*0714, B*071801-071802 and the B*400101-400105, B*4007, B*4010, B*4012, B*401401-401403, B*4021-4023, B*4025, B*4033, B*4036, B*4038, B*4042, B*4043, B*4046-4049, B*4052, B*4054, B*4055, B*4059-4063, B*4065-4067, B*4069, B*4072-4074, B*4076, B*4077, B*4108, B*4431, B*4606, B*480301-480302, B*4817 and Cw*0738 alleles. Specific PCR fragment of 415 bp in B*0747 allele.

¹³Primer mix 13: Specific PCR fragment of 85 bp in the B*0731, B*0734, B*0743 and the B*4108, B*420501-420502 and Cw*0738 alleles. Specific PCR fragment of 290 bp in the B*0712, B*0714, B*071801-071802 and the B*4030, B*4034, B*4059 and B*4817 alleles.

¹⁴Primer mix 14: Specific PCR fragment of 110 bp in the B*0726, B*0734, B*0743, B*0748 and the B*0813, B*0825, B*9538, B*2736, B*400101-400105, B*4007, B*4010, B*4012, B*401401-140103, B*4021, B*4022N, B*4025, B*4030, B*4031, B*4033, B*4034, B*4036, B*4038, B*4042, B*4043, B*4045-4049, B*4052, B*4054, B*4055, B*4059-4063, B*4065-4067, B*4069, B*4072-4074, B*4078, B*4077, B*4431, B*4606, B*480101-480102, B*480301-480302, B*4806, B*4807,

B*4809-4812, B*4814-4818, B*8101-8103 and Cw*0738 alleles. Specific PCR fragment of 395 bp in the B*0713 allele.

¹⁵Primer mix 15: Specific PCR fragment of 385 bp in the B*0754 and the B*4506 alleles. Specific PCR fragment of 425 bp in the B*0711, B*0713, B*0715, B*0757 and the B*0806, B*0815, B*0817, B*3920, B*3927, B*4073, B*6702 and B*7301 alleles.

¹⁶Primer mix 17: Specific PCR fragment of 345 bp in the B*0746 alleles. Specific PCR fragment of 410 bp in the the B*0710, B*0711, B*0727, B*0757 and B*0806, B*0817, B*3817, B*3920 and B*7301 alleles.

¹⁷Primer mix 18: Specific PCR fragment of 265 bp in the B*0712 and the B*4059, B*4060 and Cw*0738 alleles. Specific PCR fragment of 385 bp in the B*0754 allele. Specific PCR fragment of 435 bp in the B*0736, B*0738 and the B*0803, B*3566, B*380101-380102 B*3805-3807, B*3809-3814, B*3816, B*4418, B*4506, B*4817, B*4818, B*4901 and B*4903-4905 alleles.

¹⁸Primer mix 19: Specific PCR fragment of 250 bp in the B*0720 and the B*1514, B*1591, B*9531, B*3545, B*3571, B*4410, B*4414, B*4417, B*4431, B*4443, B*4445, B*5123, B*5707, B*5807, B*8201 and B*8202. Specific PCR fragment of 250 bp in the B*4454 allele. Specific PCR fragment of 290 bp in the B*0735 allele.

¹⁹Primer mix 20: Specific PCR fragment of 160 bp in the B*0759 allele. Specific PCR fragment of 205 bp in the B*0751 allele. Specific PCR fragment of 275 bp in the B*0721 allele.

²⁰Primer mix 21: Specific PCR fragment of 100 bp in the B*0752 allele. Specific PCR fragment of 165 bp in the B*0722 allele.

²¹Primer mix 25: Specific PCR fragment of 220 bp in the B*0720, B*0724, B*0745, B*0760 and the B*0821, B*0825, B*1507, B*1545, B*1555, B*1568, B*9526, B*3505, B*3522, B*3551, B*3558, B*3572, B*4005, B*4071, B*4454, B*4612, Cw*0305, Cw*0325 and Cw*0327 alleles. Specific PCR fragment of 425 bp in the B*0727 and B*3817 alleles.

²²Primer mix 26: Specific PCR fragment of 95 bp in the B*0728 and B*0814 and B*2732 alleles. Specific PCR fragment of 220 bp in the B*0720, B*0724, B*0751, B*0760 and the B*0821, B*0825, B*1507, B*1545, B*1555, B*1568, B*9526, B*3505, B*3522, B*3551, B*3558, B*3572, B*4005, B*4071, B*4454, B*4612, Cw*0305, Cw*0325, Cw*0327 and Cw*0808 alleles. Specific PCR fragment of 290 bp in the B*0742 allele.

²³Primer mix 27: Specific PCR fragment of 165 bp in the B*0741, B*0756 and the B*1576, B*9501, B*3576, B*5401-5406, B*5408N-5413, B*550101-5505, B*5507-5509, B*5511-5517, B*5519-5528, B*5601-5604, B*560502, B*5607, B*5609-5613, B*5615, B*5618-5621 alleles. Specific PCR fragment of 215 bp in the B*0729 allele.

²⁴Primer mix 28: Specific PCR fragment of 100 bp in the B*0730 allele. Specific PCR fragment of 170 bp in the B*0756 and the B*1576, B*9501, B*3576, B*5401-5406, B*5408N-5413, B*550101-5505, B*5507-5509, B*5511-5517, B*5519-5528, B*5601-5604, B*560502, B*5607, B*5609-5613, B*5615, B*5618-5621 alleles.

²⁵Primer mix 29: Specific PCR fragment of 95 bp in the B*0731, B*0734, B*0743, B*0744 and the B*4108, B*420501-420502 and Cw*0738 alleles. Specific PCR fragment of 305 bp in the B*0758 allele.

²⁶Primer mix 31: Specific PCR fragment of 215 bp in the B*0755 and the B*1507, B*1545, B*1568, B*9526, B*4612 and B*4819 alleles. Specific PCR fragment of 280 bp in the B*0719, B*0733, B*0753, B*0760 and the B*1405, B*1555, B*1814, B*2707, B*2711, B*2724, B*2732-2734, B*3505, B*3522, B*3531, B*3551, B*3558, B*3572, B*3709, B*3903, B*3914, B*3924, B*3929, B*3937, B*400201-4003, B*4005, B*4008, B*4009, B*4013, B*4018, B*4019, B*4024, B*4027, B*4029, B*4035, B*4037, B*4039, B*4040, B*4050, B*4056-4058, B*4071, B*4078, B*4208, B*4454, B*4804, B*4813, B*5504, Cw*0305, Cw*0325, Cw*0327 and Cw*0808 alleles.

²⁷Primer mix 32 may give rise to a faint band in the B*1401 to 1407N, B*3701, B*3703-3712, B*3917, Cw*0103, Cw*04010101 to 040102, Cw*0403 to 0407, Cw*0409 to 0417, Cw*0501, Cw*0503, Cw*0505 to 0512, Cw*0609, Cw*080101 to 0805, Cw*0807, Cw*0808, Cw*0810, Cw*0812 and Cw*1801 to 1802.

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

INTERPRETATION TABLE

HLA-B*07 SSP subtyping

Amplification patterns of the B*0702 to B*0760 alleles

	Tube ⁵															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Length of int. pos. control ¹	800	1070	1070	800	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	44	363	412	540	103	103	97	412	650	44	103	419	355	44	44	103
	5'-ggC ³	5'-AgC ³	5'-ATg ³	5'-Cgg ³	5'-CCT ³	5'-CCT ³	5'-TCg ³	5'-ATA ³	5'-CCT ³	5'-ggC ³	5'-CCT ³	5'-gTC ³	5'-TCA ³	5'-ggC ³	5'-ggC ³	5'-CCT ³
					103	103	540	636	693	363	103	419	560	539		103
					5'-CCT ³	5'-CCT ³	5'-gAC ³	5'-CAC ³	5'-ggT ³	5'-Agg ³	5'-CCT ³	5'-gTC ³	5'-CAC ³	5'-gCT ³		5'-CCT ³
							545									
							5'-AgT ³									
3'-primer(s) ³	272	605	605	605	282	277	272	605	893	287	272	610	605	270	259	292
	5'-TgT ³	5'-gCT ³	5'-gCT ³	5'-gCT ³	5'-gCC ³	5'-ggT ³	5'-TgT ³	5'-gCT ³	5'-CCT ³	5'-TCC ³	5'-TgA ³	5'-CTC ³	5'-gCT ³	5'-TAC ³	5'-CTC ³	5'-gTA ³
	272						610	754	916	605	272			610	299	
	5'-TgT ³						5'-CTC ³	5'-AgA ³	5'-gAT ³	5'-gCT ³	5'-TgC ³			5'-CTC ³	5'-TCA ³	
															302	
															5'-ggT ³	
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HLA-B allele ⁴																
*070201-070207	+	+	+	+	+											
*0703	+	+	+	+		+										
*0704	+	+	+		+		+									
*070501-070503	+	+		+	+			+	+							
*0706	+	+		+	+			+								
*0707	+		+	+	+					+						
*0708		+	+	+		+					+					
*0709	+	+	+	+	+							+				
*0710	W	+	+	+	+						+					
*0711	+	+	+	+	+							+			+	
*0712	+		+	+	+					+			+			
*0713		+	+	+	+									+	+	
*0714	+			+	+					+			+			
*0715	+	+	+	+	+										+	
*0716	+	+	+	+		+										+
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

INTERPRETATION TABLE

HLA-B*07 SSP subtyping

Amplification patterns of the B*0702 to B*0760 alleles

Tube ⁵																
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec.
410	385	250	205	165				425	220	215	170	305		280		PCR product
	435	295	275						290							
1070	1070	800	1070	1070	1070	1070	1070	800	800	800	800	800	800	800	1070	Length of int.
																pos. control ¹
44	44	363	25	481	322	560	103	44	363	97	142	560	412	363	412	5'-primer(s) ²
5'-ggC ^{3'}	5'-ggC ^{3'}	5'-AgC ^{3'}	5'-CCg ^{3'}	5'-CgA ^{3'}	5'-gCC ^{3'}	5'-CCT ^{3'}	5'-CCT ^{3'}	5'-ggC ^{3'}	5'-AgC ^{3'}	5'-TCg ^{3'}	5'-TCg ^{3'}	5'-CAC ^{3'}	5'-ATA ^{3'}	5'-AgC ^{3'}	5'-ATA ^{3'}	
	379	409	363	545			527	363		142	215	650				
	5'-ACC ^{3'}	5'-ggC ^{3'}	5'-AgC ^{3'}	5'-AgT ^{3'}			5'-TgT ^{3'}	5'-AgC ^{3'}		5'-TCg ^{3'}	5'-gCC ^{3'}	5'-CCT ^{3'}				
			636							148		852				
			5'-CAC ^{3'}							5'-TgC ^{3'}		5'-CAG ^{3'}				
218	259	572	131	605	419	605	191	301	418	272	272	605	559	538	559	3'-primer(s) ³
5'-gCA ^{3'}	5'-CTC ^{3'}	5'-gCg ^{3'}	5'-ggA ^{3'}	5'-gCT ^{3'}	5'-CgT ^{3'}	5'-gCT ^{3'}	5'-CgA ^{3'}	5'-gTC ^{3'}	5'-gTC ^{3'}	5'-TgT ^{3'}	5'-TgT ^{3'}	5'-gCT ^{3'}	5'-CTC ^{3'}	5'-CCA ^{3'}	5'-CgT ^{3'}	
272	309	616	527				605	544	527			916		603		
5'-TgC ^{3'}	5'-ATC ^{3'}	5'-AgA ^{3'}	5'-CCg ^{3'}				5'-gCT ^{3'}	5'-ggT ^{3'}	5'-CCg ^{3'}			5'-gAC ^{3'}		5'-gTC ^{3'}		
301	605		754					559	559							
5'-gTC ^{3'}	5'-gCT ^{3'}		5'-AgA ^{3'}					5'-CAG ^{3'}	5'-CAG ^{3'}							
302									613							
5'-ggT ^{3'}									5'-gCT ^{3'}							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
																HLA-B allele ⁴
																*070201-070207
																*0703
																*0704
													+			*070501-070503
													+			*0706
																*0707
																*0708
																*0709
+																*0710
+																*0711
	+															*0712
																*0713
																*0714
																*0715
																*0716
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*0717	+	+		+	+							+				
*071801-071802	+		+	+	+					+			+			
*0719	+				+		+									
*0720	+	+	+	+	+											
*0721	+	+	+	+	+											
*0722	+	+	+	+	+											
*0723	+	+	+	+	+											
*0724	+	+	+	+	+											
*0725	+	+	+		+		+									
*0726	+	+	+		+									+		
*0727		+	+	+		+										+
*0728	+	+		+	+											
*0729	+	+	+	+			+									
*0730	+	+	+	+	+											
*0731	+	+	+	+	+								+			
*0732		+		+		+		+			+					
*0733	+				+											
*0734	+	+			+			+					+	+		
*0735	+	+	+	+	+											
*0736	+	+	+	+	+											
*0737		+	+	+												+
*0738		+	+	+		+					+					+
*0739	+	+	+	+	+											
*0740	+				+											
*0741	+	+	+	+	+											
*0742	+	+	+	+	+											
*0743	+	+	+		+								+	+		
*0744	+	+	+	+	+											
*0745	+	+	+	+	+											
*0746	+	+	+	+	+											
*0747	+	+	+	+	+					+						
*0748	+	+	+		+									+		
*0749N	+	+	+	+	+				+							
*0750, 3707, 4808 ⁶		+	+	+		+										+
*0751	+	+	+	+	+											
*0752	+	+	+	+	+		+									
*0753	+				+											
*0754	+	+	+	+	+										+	
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec. PCR product
410	385	250	205	165				425	220	215	170	305		280		
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
																*0717
																*071801-071802
														+		*0719
		+				+		+	+							*0720
			+													*0721
				+												*0722
					+											*0723
						+		+	+							*0724
							+									*0725
																*0726
+								+								*0727
									+							*0728
										+						*0729
											+					*0730
												+				*0731
													+			*0732
														+		*0733
												+			+	*0734
		+														*0735
	+															*0736
																*0737
	+															*0738
							+									*0739
													+			*0740
										+						*0741
									+							*0742
												+				*0743
												+				*0744
+								+								*0745
																*0746
																*0747
							+									*0748
																*0749N
																*0750, 3707, 4808 ⁶
			+						+							*0751
				+												*0752
													+	+		*0753
	+															*0754
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*0755	+	+	+		+											
*0756	+	+	+	+	+											
*0757	+	+	+	+	+										+	
*0758	+	+	+	+	+				+							
*0759	+	+	+	+	+			+								
*0760	+				+											
*080101-0802, 0804, 0805, 0808N-0810, 0812, 0816, 0818, 0819N, 0822-0824, 0826, 0827, 0829, 0830N, 0832-0834, 4101-410302, 4105, 4107							+									
*0803							+									
*0806															+	
*0807, 0811, 4104							+									
*0813														+		
*0814							+									
*0815							+								+	
*0817							+								+	
*0820, 1306, 1542, 1583, 1586, 3560, 3904, 3912, 4051, 4106, 5121, 5136, 5407, 5518, 5901, 5902																
*0821							+									
*0825														+		
*0828							+					+				
*1301-130204, 1307N- 1309, 1311, 1313, 1315-1321, 4053, 5110, 5116, 5131, 5134, 5208																
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec. PCR product
410	385	250	205	165				425	220	215	170	305		280		
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
														+		*0755
										+	+					*0756
+																*0757
												+				*0758
			+													*0759
								+	+					+		*0760
															+	*080101-0802, 0804, 0805, 0808N-0810, 0812, 0816, 0818, 0819N, 0822-0824, 0826, 0827, 0829, 0830N, 0832-0834, 4101-410302, 4105, 4107
	+														+	*0803
+															+	*0806
																*0807, 0811, 4104
															+	*0813
									+							*0814
															+	*0815
+															+	*0817
															+	*0820, 1306, 1542, 1583, 1586, 3560, 3904, 3912, 4051, 4106, 5121, 5136, 5407, 5518, 5901, 5902
								+	+							*0821
								+	+							*0825
																*0828
													+			*1301-130204, 1307N 1309, 1311, 1313, 1315-1321, 4053, 5110, 5116, 5131, 5134, 5208
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1314, 4004, 40060101-400602, 4011, 4064, 4070, 4075						+										+
*1401, 1407N, 180102, 1803, 2712, 2716, 3915, 3925N, 3932, 3933, 3938Q, 3940N, 3943						+										
*1405																
*1507, 1545, 1555, 9526, 3505, 3522, 3551, 3558, 3572, 4612																
*1514, 1591, 9531, 3545, 3571, 4410, 4414, 4417, 4443, 4445, 4451, 5123, 5707, 5807, 8201, 8202																
*1568, 4005, 4071						+										+
*1571, 180101, 180103, 1802, 1805, 1806, 1808-1813, 1815, 1817N-1824, 1827, 2718, 2729, 370101-3706, 3708, 3710, 3711, 3713, 3808, 4020, 4026, 4028, 4044, 4802						+										+
*1576, 9501, 3576, 5403, 5406, 5409, 5508, 5514, 5523, 5527, 5601-5604, 560502, 5607, 5609, 5611, 5613, 5615, 5618-5621																
*9538			+							+		+		+		
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec. PCR product
410	385	250	205	165				425	220	215	170	305		280		
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
													+			*1314, 4004, 40060101-400602, 4011, 4064, 4070, 4075
																*1401, 1407N, 180102, 1803, 2712, 2716, 3915, 3925N, 3932, 3933, 3938Q, 3940N, 3943
														+		*1405
								+	+					+		*1507, 1545, 1555, 9526, 3505, 3522, 3551, 3558, 3572, 4612
		+														*1514, 1591, 9531, 3545, 3571, 4410, 4414, 4417, 4443, 4445, 4451, 5123, 5707, 5807, 8201, 8202
								+	+					+		*1568, 4005, 4071
																*1571, 180101, 180103, 1802, 1805, 1806, 1808-1813, 1815, 1817N-1824, 1827, 2718, 2729, 370101-3706, 3708, 3710, 3711, 3713, 3808, 4020, 4026, 4028, 4044, 4802
										+	+					*1576, 9501, 3576, 5403, 5406, 5409, 5508, 5514, 5523, 5527, 5601-5604, 560502, 5607, 5609, 5611, 5613, 5615, 5618-5621
																*9538
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1807, 2723, 3550						+					+					+
*1814, 3709, 4003, 4009, 4018, 4024						+										+
*1826, 3712, 380201- 380202, 3804, 3815, 3905, 3908, 3911, 391301-391302						+										+
*2701					+						+					+
*2702-270402, 270502-270508, 270510, 2706, 2708- 2710, 2713-2715, 2717, 2719, 2721, 2725, 2726, 2728, 2730, 2731, 2735, 2737, 2738					+						+					
*270509					+											
*2707, 2711, 2724, 2733					+						+					
*2720, 2727					+						+					
*2732					+						+					
*2734					+						+					
*2736					+						+			+		
*3531, 4058																
*3566		+	+	+								+				
*380101, 3809-3812, 3816						+										+
*380102						+										+
*3803, 39010101- 39010102L, 390103- 390202, 390601- 390602, 3909, 3918, 3919, 3922, 3923, 3926, 3928, 3930, 3931, 3934-3936, 3939, 3941, 3942						+										
*3805																
*3806, 3807						+					+					+
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec.
410	385	250	205	165				425	220	215	170	305		280		PCR product
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
																*1807, 2723, 3550
														+		*1814, 3709, 4003, 4009, 4018, 4024
															+	*1826, 3712, 380201- 380202, 3804, 3815, 3905, 3908, 3911, 391301-391302
																*2701
																*2702-270402, 270502-270508, 270510, 2706, 2708- 2710, 2713-2715, 2717, 2719, 2721, 2725, 2726, 2728, 2730, 2731, 2735, 2737, 2738
																*270509
													+	+		*2707, 2711, 2724, 2733
													+			*2720, 2727
									+					+		*2732
														+		*2734
							+									*2736
													+	+		*3531, 4058
	+						+									*3566
	+														+	*380101, 3809-3812, 3816
	+															*380102
															+	*3803, 39010101- 39010102L, 390103- 390202, 390601- 390602, 3909, 3918, 3919, 3922, 3923, 3926, 3928, 3930, 3931, 3934-3936, 3939, 3941, 3942
	+														+	*3805
	+														+	*3806, 3807
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*3813, 3814						+										
*3817						+										+
*3903, 3914, 3924						+										
*3907						?										?
*3910, 3916	+					+										
*3917	+					+										
*3920	+					+									+	+
*3927						+									+	
*3929						+										
*3937, 4039						+										+
*400101-400105, 4007, 4010, 4012, 401401-401403, 4021, 4022N, 4025, 4036, 4043, 4046-4049, 4054, 4055, 4061, 4062, 4065, 4066, 4069, 4072, 4076, 4077								+		+				+		
*400201-400203, 4019, 4027, 4029, 4035, 4037, 4040, 4056, 4057, 4078, 4804, 4813						+										+
*4008, 4013						+					+					+
*4015, 4016		+		+				+								
*4023				+				+		+						
*4030, 4034								+					+	+		
*4031		+	+											+		
*4032		+	+	+												
*4033			+							+				+		
*4038								+		+		+		+		
*4042										+				+		
*4045		+						+						+		
*4050						+										
*4052, 4606			+							+		+		+		
*4059			+							+		+	+	+		
*4060										+		+		+		
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec. PCR product
410	385	250	205	165				425	220	215	170	305		280		
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
	+														+	*3813, 3814
+								+							+	*3817
														+	+	*3903, 3914, 3924
																*3907
															+	*3910, 3916
																*3917
+															+	*3920
															+	*3927
														+		*3929
														+	+	*3937, 4039
							+							+		*400101-400105, 4007, 4010, 4012, 401401-401403, 4021, 4022N, 4025, 4036, 4043, 4046-4049, 4054, 4055, 4061, 4062, 4065, 4066, 4069, 4072, 4076, 4077
														+	+	*400201-400203, 4019, 4027, 4029, 4035, 4037, 4040, 4056, 4057, 4078, 4804, 4813
														+	+	*4008, 4013
														+		*4015, 4016
														+		*4023
							+							+		*4030, 4034
							+									*4031
																*4032
							+									*4033
							+							+		*4038
							+									*4042
							+							+		*4045
														+	+	*4050
							+									*4052, 4606
	+						+									*4059
	+						+									*4060
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*4063								+		+				+		
*4067								+		+				+		
*4068						+					+					+
*4073								+		+				+	+	
*4108							+	+		+			+			
*4201, 4202, 4204, 4206	+				+		+									
*420501-420502	+	+			+		+	+					+			
*4207	+					+	+									
*4208	+				+											
*4209	+				+		+					+				
*4418, 4901, 4903-4905																
*4431								+		+				+		
*4454																
*4506	+														+	
*480101-480102, 4807, 4809-4812, 4816		+				+		+						+		+
*480301-480302, 4074						+		+		+				+		+
*4805		+		+		+		+								+
*4806		+				+		+			+			+		+
*4814		+				+		+				+		+		+
*4815		+				+		+						+		+
*4817						+				+			+	+		+
*4818		+				+		+						+		+
*4819		+				+		+								+
*5401, 5404, 5405N, 5408N, 5410-5413, 550101-5503, 5505, 5507, 5511-5513, 5515-5517, 5519, 5521, 5525, 5526, 5528, 5610, 5612																
*5402					+											
*5504																
*5509, 5522, 5524																
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec. PCR product
410	385	250	205	165				425	220	215	170	305		280		
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
						+	+									*4063
													+			*4067
													+			*4068
							+						+			*4073
							+					+			+	*4108
															+	*4201, 4202, 4204, 4206
							+					+			+	*420501-420502
															+	*4207
														+	+	*4208
																*4209
	+															*4418, 4901, 4903- 4905
		+					+						+			*4431
		+						+	+					+		*4454
	+															*4506
							+						+			*480101-480102, 4807, 4809-4812, 4816
							+						+			*480301-480302, 4074
													+			*4805
							+						+			*4806
							+						+			*4814
													+			*4815
	+						+									*4817
	+						+						+			*4818
							+						+	+		*4819
										+	+				+	*5401, 5404, 5405N, 5408N, 5410-5413, 550101-5503, 5505, 5507, 5511-5513, 5515-5517, 5519, 5521, 5525, 5526, 5528, 5610, 5612
										+	+				+	*5402
										+	+			+	+	*5504
										+	+		+			*5509, 5522, 5524
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

Length of spec.	400	285	235	105	220	215	110	160	240	285	210	230	85	110	385	230
PCR product							215	235	365	415			290	395	425	
									390							
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*5510					+											
*5520							+									
*5710																+
*670101-670102	+				+											
*6702					+										+	
*7301					+						+				+	
*8101, 8103		+			+			+						+		
*8102	+	+			+			+						+		
HLA-B allele ⁴																
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cw*0305, 0325, 0327																
Cw*0738										+		+	+	+		
Cw*0808																
Tube No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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-B*07 subtyping. In addition, tubes number 4, 10, 19, 25, 26, 27, 28, 29, 30 and 31 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, 3rd or 4th exon, 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 2nd, 3rd or 4th exon, 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.

345	265	205	160	100	380	85	125	220	95	165	100	95	190	215	190	Length of spec.
410	385	250	205	165				425	220	215	170	305		280		PCR product
	435	295	275						290							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
															+	*5510
										+	+				+	*5520
																*5710
															+	*670101-670102
															+	*6702
+																*7301
							+						+			*8101, 8103
							+						+			*8102
																HLA-B allele ⁴
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.
								+	+					+		Cw*0305, 0325, 0327
	+											+				Cw*0738
									+					+		Cw*0808
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Tube No.

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

⁵The B*0750, B*3707 and B*4808 alleles will give rise to identical amplification patterns. These alleles can e.g. be distinguished by the HLA-B low resolution primer set.

⁶Primer mix 7: Specific PCR fragment of 110 bp in the B*0704, B*0719, B*0725, B*0753 and the B*080101-0805, B*0807-0812, B*0814-0819N, B*0821-0824, B*0826-0830N, B*0832-0834, B*4101-4105, B*4107, B*4108, B*4201, B*4202, B*4204 to B*4207, B*4209 and B*5520 alleles. Specific PCR fragment of 215 bp in the B*0729 allele.

Primer mix 8: Specific PCR fragment of 160 bp in the B*0759 allele. Specific PCR fragment of 235 bp in the B*070501-0706, B*0732, B*0734 and the B*400101-400105, B*4007, B*4010, B*4012, B*401401-4016, B*4021-4023, B*4025, B*4030, B*4034, B*4036, B*4038, B*4043, B*4045-4049, B*4054, B*4055, B*4061-4063, B*4065-4067, B*4069, B*4072-4074, B*4076, B*4077, B*4108, B*420501-420502, B*4431, B*480101-480102, B*480301-480302, B*4805-4807, B*4809-4812, B*4814-4816, B*4818, B*4819 and B*8101-8103 alleles.

Primer mix 9: Specific PCR fragment of 240 bp in B*0749 allele. Specific PCR fragment of 365 bp in the B*070501-070503 alleles. Specific PCR fragment of 390 bp in the B*0758 allele.

Primer mix 10: Specific PCR fragment of 285 bp in the B*0707, B*0712, B*0714, B*071801-071802 and the B*400101-400105, B*4007, B*4010, B*4012, B*401401-401403, B*4021-4023, B*4025, B*4033, B*4036, B*4038, B*4042, B*4043, B*4046-4049, B*4052, B*4054, B*4055, B*4059-4063, B*4065-4067, B*4069, B*4072-4074, B*4076, B*4077, B*4108, B*4431, B*4606, B*480301-480302, B*4817 and Cw*0738 alleles. Specific PCR fragment of 415 bp in B*0747 allele.

Primer mix 13: Specific PCR fragment of 85 bp in the B*0731, B*0734, B*0743 and the B*4108, B*420501-420502 and Cw*0738 alleles. Specific PCR fragment of 290 bp in the B*0712, B*0714, B*071801-071802 and the B*4030, B*4034, B*4059 and B*4817 alleles.

Primer mix 14: Specific PCR fragment of 110 bp in the B*0726, B*0734, B*0743, B*0748 and the B*0813, B*0825, B*9538, B*2736, B*400101-400105, B*4007, B*4010, B*4012, B*401401-140103, B*4021, B*4022N, B*4025, B*4030, B*4031, B*4033, B*4034, B*4036, B*4038, B*4042, B*4043, B*4045-4049, B*4052, B*4054, B*4055, B*4059-4063, B*4065-4067, B*4069, B*4072-4074, B*4078, B*4077, B*4431, B*4606, B*480101-480102, B*480301-480302, B*4806, B*4807, B*4809-4812, B*4814-4818, B*8101-8103 and Cw*0738 alleles. Specific PCR fragment of 395 bp in the B*0713 allele.

Primer mix 15: Specific PCR fragment of 385 bp in the B*0754 and the B*4506 alleles. Specific PCR fragment of 425 bp in the B*0711, B*0713, B*0715, B*0757 and the B*0806, B*0815, B*0817, B*3920, B*3927, B*4073, B*6702 and B*7301 alleles.

Primer mix 17: Specific PCR fragment of 345 bp in the B*0746 alleles. Specific PCR fragment of 410 bp in the the B*0710, B*0711, B*0727, B*0757 and B*0806, B*0817, B*3817, B*3920 and B*7301 alleles.

Primer mix 18: Specific PCR fragment of 265 bp in the B*0712 and the B*4059, B*4060 and Cw*0738 alleles. Specific PCR fragment of 385 bp in the B*0754 allele. Specific PCR fragment of 435 bp in the B*0736, B*0738 and the B*0803, B*3566, B*380101-380102 B*3805-3807, B*3809-3814, B*3816, B*4418, B*4506, B*4817, B*4818, B*4901 and B*4903-4905 alleles.

Primer mix 19: Specific PCR fragment of 250 bp in the B*0720 and the B*1514, B*1591, B*9531, B*3545, B*3571, B*4410, B*4414, B*4417, B*4431, B*4443, B*4445, B*5123, B*5707, B*5807, B*8201 and B*8202. Specific PCR fragment of 250 bp in the B*4454 allele. Specific PCR fragment of 290 bp in the B*0735 allele.

Primer mix 20: Specific PCR fragment of 160 bp in the B*0759 allele. Specific PCR fragment of 205 bp in the B*0751 allele. Specific PCR fragment of 275 bp in the B*0721 allele.

Primer mix 21: Specific PCR fragment of 100 bp in the B*0752 allele. Specific PCR fragment of 165 bp in the B*0722 allele.

Primer mix 25: Specific PCR fragment of 220 bp in the B*0720, B*0724, B*0745, B*0760 and the B*0821, B*0825, B*1507, B*1545, B*1555, B*1568, B*9526, B*3505, B*3522, B*3551, B*3558, B*3572, B*4005, B*4071, B*4454, B*4612, Cw*0305, Cw*0325 and Cw*0327 alleles. Specific PCR fragment of 425 bp in the B*0727 and B*3817 alleles.

Primer mix 26: Specific PCR fragment of 95 bp in the B*0728 and B*0814 and B*2732 alleles. Specific PCR fragment of 220 bp in the B*0720, B*0724, B*0751, B*0760 and the B*0821, B*0825, B*1507, B*1545, B*1555, B*1568, B*9526, B*3505, B*3522, B*3551, B*3558, B*3572, B*4005, B*4071, B*4454, B*4612, Cw*0305, Cw*0325, Cw*0327 and Cw*0808 alleles. Specific PCR fragment of 290 bp in the B*0742 allele.

Primer mix 27: Specific PCR fragment of 165 bp in the B*0741, B*0756 and the B*1576, B*9501, B*3576, B*5401-5406, B*5408N-5413, B*550101-5505, B*5507-5509, B*5511-5517, B*5519-5528, B*5601-5604, B*560502, B*5607, B*5609-5613, B*5615, B*5618-5621 alleles. Specific PCR fragment of 215 bp in the B*0729 allele.

Primer mix 28: Specific PCR fragment of 100 bp in the B*0730 allele. Specific PCR fragment of 170 bp in the B*0756 and the B*1576, B*9501, B*3576, B*5401-5406, B*5408N-5413, B*550101-5505, B*5507-5509, B*5511-5517, B*5519-5528, B*5601-5604, B*560502, B*5607, B*5609-5613, B*5615, B*5618-5621 alleles.

Primer mix 29: Specific PCR fragment of 95 bp in the B*0731, B*0734, B*0743, B*0744 and the B*4108, B*420501-420502 and Cw*0738 alleles. Specific PCR fragment of 305 bp in the B*0758 allele.

Primer mix 31: Specific PCR fragment of 215 bp in the B*0755 and the B*1507, B*1545, B*1568, B*9526, B*4612 and B*4819 alleles. Specific PCR fragment of 280 bp in the B*0719, B*0733, B*0753, B*0760 and the B*1405, B*1555, B*1814, B*2707, B*2711, B*2724, B*2732-2734, B*3505, B*3522, B*3531, B*3551, B*3558, B*3572, B*3709, B*3903, B*3914, B*3924, B*3929, B*3937, B*400201-4003, B*4005, B*4008, B*4009, B*4013, B*4018, B*4019, B*4024, B*4027, B*4029, B*4035, B*4037, B*4039, B*4040, B*4050, B*4056-4058, B*4071, B*4078, B*4208, B*4454, B*4804, B*4813, B*5504, Cw*0305, Cw*0325, Cw*0327 and Cw*0808 alleles.

'w', might be weakly amplified.

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

CELL LINE VALIDATION SHEET																				
HLA-B*07 SSP subtyping kit																				
					Tube															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				Prod. No.:	200626801	200626802	200626803	200626804	200626805	200626806	200738407	200738408	200738409	200626810	200626811	200626812	200626813	200626814	200738415	200626816
	cell line		B*																	
1	9001	SA	*0702		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
2	9002	MZ0707082	*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*52011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9010	AMAI	*5301		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*3701		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
6	9016	RML	*5101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*1801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
8	9025	DEU	*35		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*3801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
10	9107	LKT3	*5401		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*44031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*5701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9067	BTB	*27052		-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-
14	9071	OLGA	*1501	*1520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*4001		-	-	-	-	-	-	-	+	-	+	-	-	-	+	-	-
16	9036	SPO010	*4402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9039	JVM	*1801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
18	9089	BOB	*5101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*1801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
20	9059	SLE005	*4001		-	-	-	-	-	-	-	+	-	+	-	-	-	+	-	-
21	9064	AMALA	*1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*3503		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9061	31227ABO	*1801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
24	9035	JBUSH	*3801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
25	9049	IBW9	*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*5801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		MAM	*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*44		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*44031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*4201		+	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*1801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
32	9297	HAG	*4102		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*4001		-	-	-	-	-	-	-	+	-	+	-	-	-	+	-	-
34	9104	DHIF	*38		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
35	9302	SSTO	*44		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*1501	*3501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*0702		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*0801	*2705	-	-	-	-	+	-	+	-	-	-	+	-	-	-	-	-
40	9134	WHONP199	*1302	*46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*4601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*4601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*3801		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+
45	9058	OMV	*4501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*0702		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*5101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*35	*44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	9255	GEE018	*0705	*1519	+	+	-	+	+	-	-	+	+	-	-	-	-	-	-	-

CERTIFICATE OF ANALYSIS

Olerup SSP™ HLA-B*07 SSP

Product number: 101.512-24/03 – licensed for PCR
101.512-24/03u – not licensed for PCR
Lot number: Y40
Expiry date: 2009-September-01
Number of tests: 24 tests – Product No. 101.512-24
3 tests – Product No. 101.512-03
Number of tubes per test: 32

Tube specifications:

Tube No.	Production No.	Tube No.	Production No.	Tube No.	Production No.
1	2006-268-01	13	2006-268-13	25	2007-384-25
2	2006-268-02	14	2006-268-14	26	2007-384-26
3	2006-268-03	15	2007-384-15	27	2007-384-27
4	2006-268-04	16	2006-268-16	28	2007-384-28
5	2006-268-05	17	2006-268-17	29	2007-384-29
6	2006-268-06	18	2006-384-18	30	2006-268-30
7	2007-384-07	19	2006-268-19	31	2007-384-31
8	2007-384-08	20	2007-384-20	32	2006-268-32
9	2007-384-09	21	2007-384-21		
10	2006-268-10	22	2007-384-21		
11	2006-268-11	23	2006-268-23		
12	2006-268-12	24	2006-268-24		

The specificity of each primer solution of the kit has been tested against 49 well characterized cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 12, 13, 17, 19 to 23 and 25 to 29 were available. The specificities of the primers in primer solutions 12, 13, 17, 19, 23, 25, 26, 27 and 29 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solution 20 it was only possible to test the 5'-primer, the 3'-primer were not possible to test. In primer solutions 21, 22 and 28 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. Additional 3'-primer in primer solution 11 was tested by separately adding one additional 5'-primer. Additional 5'-primer in primer solution 13 was tested by separately adding one additional 3'-primer.

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

Date of approval: 2007-December-16

Approved by:

Quality Control, Supervisor

Declaration of Conformity

Product name: Olerup SSP™ HLA-B*07
Product number: 101.512-24/03, 101.512-24u/03u
Lot number: Y40

Intended use: HLA-B*07 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 9001:2000 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-December-16

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.

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PCRTM is a trademark of F. Hoffmann-La Roche Ltd.
ARMSTM is a trademark of Zeneca Ltd.

HLA-B*07
101.512-24/03 – licensed for PCR
101.512-24u/03u – not licensed for PCR
Lot No.: **Y40**

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www.olerup.com

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