

Olerup SSP® HLA-Cw*07

Product number:	101.615-24/04 – including <i>Taq</i> pol.
Lot number:	06F
Expiry date:	2010-August-01
Number of tests:	24 tests – Product No. 101.615-24 4 tests – Product No. 101.615-04
Number of wells per test:	32
Storage - pre-aliquoted primers:	dark at -20°C
- PCR Master Mix:	-20°C
- Adhesive PCR seals	RT
- Product Insert	RT

This Product Description is only valid for Lot No. 06F.

**CHANGES COMPARED TO THE PREVIOUS *OLERUP* SSP®
HLA-Cw*07 LOT**

The HLA-Cw*07 specificity and interpretation tables have been updated for the HLA-Cw alleles described since the previous *Olerup* SSP® HLA-Cw*07 lot was made (Lot No. X93).

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

Well	5'-primer	3'-primer	rationale
5	Added	Added	Primers added for the Cw*0753 and Cw*0757 alleles.
9	-	Added	Primer added to separate the Cw*0733N and *0751 alleles.
13	Changed	Added	Exchange of 5'primer to increase specificity, new primer added for the Cw*0756 allele.
18	Added	Added	Primer pair added for the Cw*0752 allele.
21	Added	Added	Primer pair added for the Cw*0754 allele.
26	Added	-	Primer added for the Cw*0755N allele.
27	Removed	-	Primer removed for the Cw*072702 allele.
31	Added	Added	Primer pair added for the Cw*0750 allele.

Changes in revision R01 compared to R00:

1. The Cw*0722 allele will be weakly amplified by primer mix 27.

PRODUCT DESCRIPTION

HLA-Cw*07 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the HLA-Cw*0701 to HLA-Cw*0757 alleles.

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-Cw*07' in silver/gray ink.

Well No. 1 is marked with the Lot No. '06F'.

The PCR plates are heat-sealed with a PCR-compatible foil.

Please note: When removing each 32 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-Cw*07 SSP subtypings will be influenced by the Cw*0214 allele, three Cw*03 alleles, three Cw*04 alleles, most Cw*05 alleles, most Cw*06 alleles, most Cw*08 alleles and the Cw*18 alleles when present on the other haplotype. In addition, the A*2910 allele will be amplified by primer mix 12, the B*0806 and B*0817 alleles will be amplified by primer mix 32, the B*2736 allele will be amplified by primer mix 7, the B*4060 allele by primer mixes 4, 18 and 30 and the B*5608 and B*5614 alleles will be weakly amplified by primer mix 25.

UNIQUELY IDENTIFIED ALLELES

All the HLA-Cw*07 alleles, i.e. **Cw*0701 to Cw*0757**, recognized by the HLA Nomenclature Committee in July 2008¹ will give rise to unique amplification patterns by the primers in the HLA-Cw*07 subtyping kit.

The HLA-Cw*07 subtyping kit cannot distinguish the Cw*070101 to Cw*070104 and Cw*070106 to Cw*070109 alleles, the Cw*07020101 to Cw*070202 alleles or the Cw*070401 and Cw*070402 alleles.

¹HLA-A alleles listed on the IMGT/HLA web page 2008-July-11, release 2.22.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

The 57 HLA-Cw*07 alleles give rise to 58 amplification patterns, as the Cw*070105 has a different amplification patterns than the other Cw*0701xx alleles, that can be combined in 1 653 homozygous and heterozygous combinations. 639 of these genotypes do not give rise to unique amplification patterns. (The different lengths of the specific PCR products in lanes 5, 8, 9, 11, 18 to 21, 23, 25, 26 and 31 were not considered in these calculations.)

```

+++++--- - - - - - + - - - - - - - - - + - 0739,0753 = 0750,0753
+++++---+ - - - - - + - - - + - - - - - + - 0706,0739 = 0706,0750
+++++---+ - - - - - + - - - + - - - - - - 0702,0706 = 0706,0754
+++++---+ - + - - - + - - - - - - - - - + 0709,0710 = 0724,0749
+++++---+ - + - - - + - - - - - - - - - + 0709,0713 = 0728,0749
+++++---+ - + - - - + - + - - - - - - - - + 0709,0715 = 0749,0752
+++++---+ - + - - - + - + - - - - - - - - + 0709,0733N = 0709,0751 = 0726,0749
+++++---+ - + - - - + - + - - - - - - - - - 0701,0733N = 0726,0729 =
                                         0726,0733N
+++++---+ - + - - - + - - - + - - - - - + 0709,0748 = 0744,0749
+++++---+ - + - - - + - - - + - - - - - + 0709,0754 = 0718,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0723 = 0721,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0725 = 0722,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0746 = 0730,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0732N = 0749,0755N
+++++---+ - + - - - + - - - - - + - - - - + 0709,0747 = 0735,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0742 = 0736,0749
+++++---+ - + - - - + - - - - - + - - - - + 0709,0739 = 0709,0750 = 0740,0749
+++++---+ - + - - - + - - - - - + - - - - + 0701,0749 = 0702,0709 = 0709,0729
                                         = 0709,0749
+++++---+ - + - - - + - - - - - - - - - - 0710,0728 = 0713,0724
+++++---+ - + - - - + - + - - - - - - - - - 0710,0752 = 0715,0724
+++++---+ - + - - - + - + - - - - - - - - - 0710,0726 = 0724,0751
+++++---+ - + - - - + - + - - - - - - - - - 0710,0744 = 0724,0748
+++++---+ - + - - - + - - - + - - - - - - 0710,0718 = 0719,0743 = 0724,0754
+++++---+ - + - - - + - - - - - + - - - - - 0710,0721 = 0723,0724
+++++---+ - + - - - + - - - - - + - - - - - 0710,0722 = 0724,0725
+++++---+ - + - - - + - - - - - + - - - - - 0710,0730 = 0724,0746
+++++---+ - + - - - + - - - - - + - - - - - 0710,0755N = 0724,0732N
+++++---+ - + - - - + - - - - - + - - - - - 0710,0735 = 0724,0747
+++++---+ - + - - - + - - - - - + - - - - - 0710,0736 = 0724,0742
+++++---+ - + - - - + - - - - - + - - - - - 0710,0740 = 0724,0739 = 0724,0750
+++++---+ - + - - - + - - - - - + - - - - - 0701,0710 = 0702,0724 = 0710,0724
+++++---+ - - - - - + - + - - - - - - - - - 0713,0752 = 0715,0728
+++++---+ - - - - - + - + - - - - - - - - - 0713,0726 = 0728,0751
+++++---+ - - - - - + - + - - - - - - - - - 0713,0744 = 0728,0748
+++++---+ - - - - - + - + - - - - - - - - - 0713,0718 = 0728,0754
+++++---+ - - - - - + - + - - - - - - - - - 0713,0721 = 0723,0728
+++++---+ - - - - - + - + - - - - - - - - - 0713,0722 = 0725,0728
+++++---+ - - - - - + - + - - - - - - - - - 0713,0730 = 0728,0746
+++++---+ - - - - - + - + - - - - - - - - - 0713,0755N = 0728,0732N
+++++---+ - - - - - + - + - - - - - - - - - 0713,0735 = 0728,0747
+++++---+ - - - - - + - + - - - - - - - - - 0713,0736 = 0728,0742
+++++---+ - - - - - + - + - - - - - - - - - 0713,0740 = 0728,0739 = 0728,0750
+++++---+ - - - - - + - + - - - - - - - - - 0701,0713 = 0702,0728 = 0713,0728
+++++---+ - - - - - + - + - - - - - - - - - 0715,0726 = 0751,0752
+++++---+ - - - - - + - + - - - - - - - - - 0715,0744 = 0748,0752
+++++---+ - - - - - + - + - - - - - - - - - 0715,0718 = 0752,0754
+++++---+ - - - - - + - + - - - - - - - - - 0715,0721 = 0723,0752

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++++-----	-----+	-+-----+	-----	0715,0722 = 0725,0752
++++-----	-----+	-+-----	+-----	0715,0730 = 0746,0752
++++-----	-----+	-+-----	-+-----	0715,0755N = 0732N,0752
++++-----	-----+	-+-----	---+----	0715,0735 = 0747,0752
++++-----	-----+	-+-----	----+---	0715,0736 = 0742,0752
++++-----	-----+	-+-----	-----+	0715,0740 = 0739,0752 = 0750,0752
++++-----	-----+	-+-----	-----	0701,0715 = 0702,0752 = 0715,0752
++++-----	-----+	---+----	-----	0726,0748 = 0744,0751
++++-----	-----+	---+----	-----	0718,0751 = 0726,0754
++++-----	-----+	---+----	-----	0721,0751 = 0723,0726
++++-----	-----+	---+----	-----	0722,0751 = 0725,0726
++++-----	-----+	---+----	-----	0726,0746 = 0730,0751
++++-----	-----+	---+----	-----	0726,0732N = 0751,0755N
++++-----	-----+	---+----	---+----	0726,0747 = 0735,0751
++++-----	-----+	---+----	---+----	0726,0742 = 0736,0751
++++-----	-----+	---+----	-----+	0726,0739 = 0726,0750 = 0740,0751
++++-----	-----+	---+----	-----	0701,0751 = 0702,0726 = 0726,0751
++++-----	-----+	---+----	-----	0718,0748 = 0744,0754
++++-----	-----+	---+----	-----	0721,0748 = 0723,0744
++++-----	-----+	---+----	-----	0722,0748 = 0725,0744
++++-----	-----+	---+----	-----	0730,0748 = 0744,0746
++++-----	-----+	---+----	-----	0732N,0744 = 0748,0755N
++++-----	-----+	---+----	---+----	0735,0748 = 0744,0747
++++-----	-----+	---+----	---+----	0736,0748 = 0742,0744
++++-----	-----+	---+----	-----+	0739,0744 = 0740,0748 = 0744,0750
++++-----	-----+	---+----	-----	0701,0748 = 0702,0744 = 0744,0748
++++-----	-----+	---+----	-----	0718,0723 = 0721,0754
++++-----	-----+	---+----	-----	0718,0725 = 0722,0754
++++-----	-----+	---+----	-----	0718,0746 = 0730,0754
++++-----	-----+	---+----	-----	0718,0732N = 0719,0731 =
				0754,0755N
++++-----	-----+	---+----	---+----	0718,0747 = 0735,0754
++++-----	-----+	---+----	---+----	0718,0742 = 0736,0754
++++-----	-----+	---+----	-----+	0718,0739 = 0718,0750 = 0740,0754
++++-----	-----+	---+----	-----	0701,0754 = 0702,0718 = 0718,0754
				= 0719,0727
++++-----	-----+	-----+	-----+	0720,0739 = 0720,0750
++++-----	-----+	-----+	-----	0721,0725 = 0722,0723
++++-----	-----+	-----+	-----	0721,0746 = 0723,0730
++++-----	-----+	-----+	-----	0721,0732N = 0723,0755N
++++-----	-----+	-----+	-----	0721,0747 = 0723,0735
++++-----	-----+	-----+	-----	0721,0742 = 0723,0736
++++-----	-----+	-----+	-----	0721,0739 = 0721,0750 = 0723,0740
++++-----	-----+	-----+	-----	0701,0723 = 0702,0721 = 0721,0723
++++-----	-----+	-----+	-----	0722,0746 = 0725,0730
++++-----	-----+	-----+	-----	0722,0732N = 0725,0755N
++++-----	-----+	-----+	-----	0722,0747 = 0725,0735
++++-----	-----+	-----+	-----	0722,0742 = 0725,0736
++++-----	-----+	-----+	-----	0722,0739 = 0722,0750 = 0725,0740
++++-----	-----+	-----+	-----	0701,0725 = 0702,0722 = 0722,0725
++++-----	-----+	-----+	-----	0730,0732N = 0746,0755N
++++-----	-----+	-----+	-----	0730,0747 = 0735,0746
++++-----	-----+	-----+	-----	0730,0742 = 0736,0746
++++-----	-----+	-----+	-----	0730,0739 = 0730,0750 = 0740,0746
++++-----	-----+	-----+	-----	0701,0746 = 0702,0730 = 0730,0746
++++-----	-----+	-----+	-----	0732N,0735 = 0747,0755N
++++-----	-----+	-----+	-----	0732N,0736 = 0742,0755N
++++-----	-----+	-----+	-----	0732N,0740 = 0739,0755N =
				0750,0755N

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++++-----	-----+	-----	-+-----	0701,0732N = 0702,0755N = 0732N,0755N
++++-----	-----+	-----	---++----	0735,0742 = 0736,0747
++++-----	-----+	-----	---+--+-	0735,0739 = 0735,0750 = 0740,0747
++++-----	-----+	-----	---+-----	0701,0747 = 0702,0735 = 0735,0747
++++-----	-----+	-----	---+--+-	0736,0739 = 0736,0750 = 0740,0742
++++-----	-----+	-----	---+-----	0701,0742 = 0702,0736 = 0736,0742
++++-----	-----+	-----	---+--+-	0701,0739 = 0701,0750 = 0702,0740 = 0739,0740 = 0740,0750
++++-----	-----	--+--+-	-----	0716,0719 = 0719,0726
++++-----	-----	---+-----	-----	0701,0719 = 0718,0719
+++--+--	-----+	-----	-----	0705,0753 = 0705,0757
+++--+--	-----	---+-----	-----	0706,0753 = 0706,0757
+++--+--	+-----	--+-----	-----+	0707,0753 = 0707,0757
+++--+--	+-----	-----	-----+	0709,0753 = 0709,0757
+++--+--	--+-----	-----	-----	0743,0753 = 0743,0757
+++--+--	--+-----	-----	-----	0724,0753 = 0724,0757
+++--+--	-----+	-----	-----	0728,0753 = 0728,0757
+++--+--	-----++	-----	-----	0714,0753 = 0714,0757
+++--+--	-----+	---+-----	-----	0701,0703 = 0703,0744 = 0703,0753 = 0717,0753
+++--+--	-----+	-----	-+-----	0731,0753 = 0731,0757
+++--+--	-----+	-----	-----	0727,0753 = 0727,0757
+++--+--	-----	-+-----	-----	0752,0753 = 0752,0757
+++--+--	-----	--+-----	-----	0716,0753 = 0716,0757 = 0726,0753 = 0726,0757
+++--+--	-----	---+-----	-----	0744,0753 = 0744,0757
+++--+--	-----	---+-----	-----	0718,0753 = 0718,0757
+++--+--	-----	---+-----	-----	0720,0753 = 0720,0757
+++--+--	-----	-----+	-----	0721,0753 = 0721,0757
+++--+--	-----	-----+	-----	0722,0753 = 0722,0757
+++--+--	-----	-----	+-----	0730,0753 = 0730,0757
+++--+--	-----	-----	-+-----	0753,0755N = 0755N,0757
+++--+--	-----	-----	---+-----	0735,0753 = 0735,0757
+++--+--	-----	-----	---+-----	0736,0753 = 0736,0757
+++--+--	-----	-----	-----+	0740,0753 = 0740,0757
+++--+--	-----	-----	-----	0701,0753 = 0701,0757 = 070105,0753 = 0753,0753 = 0753,0757
+++-----+	-----+	-----	-----	0701,0705 = 070105,0705
+++-----+	-----+	---+-----	-----	0706,0727 = 0706,0745 = 0718,0745
+++-----+	-----	--+--+-	-----	0706,0716 = 0706,0726
+++-----+	-----	---+-----	-----	0701,0706 = 070105,0706 = 0706,0706 = 0706,0718
+++-----	+-----	--+-----	-----+	0701,0707 = 070105,0707 = 0707,0709 = 0707,0726 = 0709,0716 = 0709,0726
+++-----	+-----	-----	-----+	0701,0709 = 070105,0709 = 0709,0709
+++-----	--+-----	---+-----	-----	0717,0724 = 0743,0744
+++-----	--+-----	-----	-+-----	0724,0731 = 0743,0755N
+++-----	--+-----	-----	-----	0701,0743 = 070105,0743 = 0724,0727 = 0724,0743
+++-----	--+-----	--+-----	-----	0716,0724 = 0724,0726
+++-----	--+-----	-----	-----	0701,0724 = 070105,0724 = 0724,0724
+++-----	-----+--	--+-----	-----	0716,0728 = 0726,0728
+++-----	-----+--	-----	-----	0701,0728 = 070105,0728 = 0728,0728

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+++-----	-----++	-----	-----	0701,0714 = 070105,0714
+++-----	-----+	---+-----	-+-----	0717,0755N = 0731,0744
+++-----	-----+	---+-----	-----	0701,0717 = 0717,0744 = 0727,0744
+++-----	-----+	-----	-+-----	0701,0731 = 070105,0731 =
				0727,0755N = 0731,0755N
+++-----	-----+	-----	-----	0701,0727 = 070105,0727
+++-----	-----	++-----	-----	0716,0752 = 0726,0752
+++-----	-----	++-----	-----	0701,0752 = 070105,0752 =
				0752,0752
+++-----	-----	--++-----	-----	0716,0744 = 0726,0744
+++-----	-----	--++-----	-----	0716,0718 = 0718,0726
+++-----	-----	--++-----	-----	0716,0720 = 0720,0726
+++-----	-----	--++-----	-----	0716,0721 = 0721,0726
+++-----	-----	--++-----	-----	0716,0722 = 0722,0726
+++-----	-----	--++-----	-----	0716,0730 = 0726,0730
+++-----	-----	--++-----	-----	0716,0755N = 0726,0755N
+++-----	-----	--++-----	-----	0716,0735 = 0726,0735
+++-----	-----	--++-----	-----	0716,0736 = 0726,0736
+++-----	-----	--++-----	-----	0716,0740 = 0726,0740
+++-----	-----	--++-----	-----	0701,0716 = 0701,0726 =
				070105,0716 = 070105,0726 =
				0716,0726 = 0726,0726
+++-----	-----	---+-----	-----	0701,0744 = 070105,0744 =
				0744,0744
+++-----	-----	---+-----	-----	0701,0718 = 070105,0718 =
				0718,0718
+++-----	-----	---+-----	-----	0701,0720 = 070105,0720 =
				0720,0720
+++-----	-----	---+-----	-----	0701,0721 = 070105,0721 =
				0721,0721
+++-----	-----	---+-----	-----	0701,0722 = 070105,0722 =
				0722,0722
+++-----	-----	---+-----	-----	0701,0730 = 070105,0730 =
				0730,0730
+++-----	-----	---+-----	-----	0701,0755N = 070105,0755N =
				0755N,0755N
+++-----	-----	---+-----	-----	0701,0735 = 070105,0735 =
				0735,0735
+++-----	-----	---+-----	-----	0701,0736 = 070105,0736 =
				0736,0736
+++-----	-----	---+-----	-----	0701,0740 = 070105,0740 =
				0740,0740
+++-----	-----	---+-----	-----	0701,0701 = 0701,070105
++-+-----	-----+	-----	-----	0705,0739 = 0705,0750
++-+-----	-----+	-----	-----	0707,0739 = 0707,0750
++-+-----	-----+	-----	-----	0702,0707 = 0707,0729 = 0707,0733N
				= 0707,0749 = 0707,0751 =
				0716,0749
++-+-----	-----+	-----	-----	0716,0729 = 0716,0733N =
				0727,0733N
++-+-----	-----+	-----	-----	0710,0716 = 0743,0751
++-+-----	-----+	-----	-----	0710,0731 = 0732N,0743
++-+-----	-----+	-----	-----	0739,0743 = 0743,0750
++-+-----	-----+	-----	-----	0702,0743 = 0710,0727 = 0710,0743
++-+-----	-----+	-----	-----	0714,0739 = 0714,0750
++-+-----	-----+	-----	-----	0716,0732N = 0731,0751
++-+-----	-----+	-----	-----	0716,0739 = 0716,0750
++-+-----	-----+	-----	-----	0702,0716 = 0716,0751 = 0727,0751
++-+-----	-----+	-----	-----	0731,0739 = 0731,0750

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+++-----	-----+	-----	-+-----	0702,0731 = 0727,0732N = 0731,0732N
+++-----	-----+	-----	-----+-	0727,0739 = 0727,0750
+++-----	-----+	-----	-----	0705,0705 = 0705,0727
+++-----	+-----	-+-----	-----+	0707,0707 = 0707,0716
+++-----	-+-----	-----	-----	0727,0743 = 0743,0743
+++-----	-----++	-----	-----	0714,0714 = 0714,0727
+++-----	-----+	-----	-+-----	0727,0731 = 0731,0731
+-----	-----+	-----	-----+-	0739,0757 = 0750,0757
+-----	-----+	-----++	-----	0717,0719 = 0719,0748
+-----	-----+	-----+	-----+-	0719,0739 = 0719,0750
+-----	-----+	-----+	-----	070105,0754 = 0702,0719 = 0719,0754
+-----	-----+	-----	-----+-	070105,0739 = 070105,0750
+-----	-----	-----+	-----	070105,0719 = 0719,0719
+-----	-----+	-----+	-----	070105,0703 = 0703,0757 = 0717,0757
+-----	-----	-----	-----	070105,0757 = 0757,0757
+-----	-----+	-----+	-----+-	0703,0739 = 0703,0750
+-----	-----+	-----+	-----	0702,0703 = 0703,0748
+-----	-----+	-----	-----+-	0712,0739 = 0712,0750
+-----	-----+	-----+	-----	0702,0711 = 0704,0756 = 0711,0756
+-----	-----+	-----	-----+-	0704,0739 = 0704,0750
+-----	-----+	-----	-----+-	0739,0745 = 0745,0750
+-----	+-----	-----+	-----	0717,0733N = 0733N,0748
+-----	+-----	-----+	-----+-	0733N,0739 = 0733N,0750
+-----	+-----	-----+	-----	0733N,0749 = 0749,0751
+-----	+-----	-----+	-----	0702,0733N = 0729,0733N = 0729,0751 = 0733N,0733N = 0733N,0751
+-----	+-----	-----+	-----+	0717,0749 = 0748,0749
+-----	+-----	-----+	-----	0717,0729 = 0729,0748
+-----	+-----	-----	-----++	0739,0749 = 0749,0750
+-----	+-----	-----	-----+-	0729,0739 = 0729,0750
+-----	+-----	-----	-----+	0702,0749 = 0729,0749 = 0749,0749
+-----	+-----	-----	-----	0702,0729 = 0729,0729
+-----	+-----	-----	-----+-	0708,0739 = 0708,0750
+-----	-+-----	-----	-----	0710,0717 = 0710,0748
+-----	-+-----	-----	-----+-	0710,0739 = 0710,0750
+-----	-+-----	-----	-----	0702,0710 = 0710,0710
+-----	-+-----	-----	-----+-	0739,0741 = 0741,0750
+-----	-+-----	-----	-----	0717,0756 = 0748,0756
+-----	-+-----	-----	-----+-	0739,0756 = 0750,0756
+-----	-+-----	-----	-----	0702,0756 = 0756,0756
+-----	-+-----	-----	-----	0713,0717 = 0713,0748
+-----	-+-----	-----	-----+-	0713,0739 = 0713,0750
+-----	-+-----	-----	-----	0702,0713 = 0713,0713
+-----	-+-----	-----	-----	0715,0717 = 0715,0748
+-----	-+-----	-----	-----+-	0715,0739 = 0715,0750
+-----	-+-----	-----	-----	0702,0715 = 0715,0715
+-----	-+-----	-----	-----	0717,0751 = 0748,0751
+-----	-+-----	-----	-----+-	0739,0751 = 0750,0751
+-----	-+-----	-----	-----	0702,0751 = 0751,0751
+-----	-+-----	-----	-----	0717,0754 = 0748,0754
+-----	-+-----	-----	-----	0717,0723 = 0723,0748
+-----	-+-----	-----	-----	0717,0725 = 0725,0748
+-----	-+-----	-----	-----	0717,0746 = 0746,0748
+-----	-+-----	-----	-----	0717,0732N = 0732N,0748
+-----	-+-----	-----	-----	0717,0737 = 0737,0748

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+--+-----	-----+	---+-----	---+-----	0717,0747 = 0747,0748
+--+-----	-----+	---+-----	---+-----	0717,0742 = 0742,0748
+--+-----	-----+	---+-----	-----+-	0717,0738 = 0738,0748
+--+-----	-----+	---+-----	-----+-	0717,0739 = 0717,0750 = 0739,0748 = 0748,0750
+--+-----	-----+	---+-----	-----	0702,0717 = 0702,0748 = 0717,0748 = 0748,0748
+--+-----	-----+	---+-----	-----+-	0739,0754 = 0750,0754
+--+-----	-----+	---+-----	-----	0702,0754 = 0754,0754
+--+-----	-----+	---+-----	-----+-	0723,0739 = 0723,0750
+--+-----	-----+	---+-----	-----+-	0702,0723 = 0723,0723
+--+-----	-----+	---+-----	-----+-	0725,0739 = 0725,0750
+--+-----	-----+	---+-----	-----	0702,0725 = 0725,0725
+--+-----	-----+	---+-----	+-----+-	0739,0746 = 0746,0750
+--+-----	-----+	---+-----	+-----	0702,0746 = 0746,0746
+--+-----	-----+	---+-----	-+-----+-	0732N,0739 = 0732N,0750
+--+-----	-----+	---+-----	-+-----	0702,0732N = 0732N,0732N
+--+-----	-----+	---+-----	-+-----+-	0737,0739 = 0737,0750
+--+-----	-----+	---+-----	-+-----	0702,0737 = 0737,0737
+--+-----	-----+	---+-----	---+--+-	0739,0747 = 0747,0750
+--+-----	-----+	---+-----	---+-----	0702,0747 = 0747,0747
+--+-----	-----+	---+-----	---+--+-	0739,0742 = 0742,0750
+--+-----	-----+	---+-----	---+-----	0702,0742 = 0742,0742
+--+-----	-----+	---+-----	---+--+-	0738,0739 = 0738,0750
+--+-----	-----+	---+-----	---+-----	0702,0738 = 0738,0738
+--+-----	-----+	---+-----	---+--+-	0702,0739 = 0702,0750 = 0739,0739 = 0739,0750
+--+-----	-----+	---+-----	-----	0703,0703 = 0703,0717
+--+-----	-----+	---+-----	-----	0711,0712 = 0711,0741
+--+-----	-----+	---+-----	-----	0704,0712 = 0704,0741
+--+-----	-----+	---+-----	-----	0712,0712 = 0712,0741

0701 = 070101-070104 + 070106-070109

SPECIFICITY TABLE

HLA-Cw*07 SSP subtyping

Specificities and sizes of the PCR products of the 32 primer mixes used for HLA-Cw*07 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-Cw*07 alleles ³	Other amplified HLA-Class I alleles ⁴
1⁵	80 bp	800 bp	070101-0705, 0706 ^{weakly} , 0707-0710 [?] , 0712-0717 [?] , 0718 ^{weakly} , 0719 ^{weakly} , 0720-0725 [?] , 0726, 072701 [?] , 072702 ^w , 0728 [?] , 0729 [?] , 0730, 0731 [?] , 0732N, 0733N [?] -0735 [?] , 0736, 0737-0741 [?] , 0742, 0743-0745 [?] , 0746, 0747 [?] , 0748 [?] , 0749, 0751 ^w , 0752, 0753- 0756 ^w , 0757	
2	290 bp	800 bp	070101-070104, 070106-070109, 0705- 0707, 0709, 0714, 0716, 0718, 0720-0722, 0724, 0726-0728, 0730, 0731, 0735, 0736, 0740, 0743, 0744, 0752, 0753, 0755N	0517
3⁵	110 bp	800 bp	070101-070109, 0706, 0709, 0718-0722, 0724, 0726, 0728, 0730, 0735, 0736, 0740, 0744, 0752, 0753, 0755N, 0757	
4	185 bp	1070 bp	07020101-070202, 0710, 0713, 0715, 0719, 0723, 0725, 0729, 0732N, 0733N, 0737- 0739, 0742, 0746-0751, 0754, 0756	B*4060
5^{5,9}	70, 145, 245 bp	800 bp	0703, 0753, 0757	
6⁵	100 bp	1070 bp	070401-070402, 0711, 0712	
7	190 bp	1070 bp	0705	B*2736

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8¹⁰	285, 645 bp	1070 bp	0706, 0745	
9^{6,11}	215, 240, 425 bp	800 bp	0707, 0709, 0729, 0733N, 0749	0617, 1801-1803
10	185 bp	1070 bp	0708	
11¹²	275, 305 bp	800 bp	0710, 0724, 0743	
12⁵	130 bp	1070 bp	0712, 0741	050101-050104, 0503-0508, 0510-0516, 0518, 0519, 080101-0806, 0808-0814, 0816, A*2910
13^{5,7}	90 bp	1070 bp	0711, 0756	
14	240 bp	800 bp	0713, 0728	0517
15	290 bp	800 bp	0714	
16	395 bp	800 bp	07020101-0705, 0708, 0710-0715, 0717, 0723, 0725, 072701-072702, 0729, 0731-0733N, 0737-0739, 0741-0743, 0745-0751, 0754, 0756	0617, 1801-1803
17^{5,8}	130 bp	1070 bp	070401-070402, 0711	0807
18^{5,13}	120, 230 bp	800 bp	0715, 0752	0503, B*4060
19¹⁴	220, 465 bp	800 bp	0707, 0716, 0726, 0733N, 0751	
20^{5,15}	145, 170 bp	1070 bp	0703, 0717, 0744, 0748	0517
21^{5,7, 16}	100, 225 bp	800 bp	0706, 0718, 0719, 0754	
22	250 bp	800 bp	0720	0315, 0332, 0345, 0403, 0406, 0416
23¹⁷	155, 185 bp	1070 bp	0721, 0723	
24⁵	130 bp	1070 bp	0722, 0725	
25^{5,18}	105, 150 bp	1070 bp	0730, 0746	B*5608^{weakly} , B*5614^{weakly}
26^{5,19}	100, 250, 300 bp	1070 bp	0731, 0732N, 0755N	
27⁵	120 bp	1070 bp	0722 ^{weakly} , 0737	
28	260 bp	800 bp	0735, 0747	
29	255 bp	1070 bp	0736, 0742	
30	275 bp	1070 bp	0738	B*4060
31^{5, 20}	80, 415 bp	1070 bp	0739, 0740, 0750	

32	245 bp	1070 bp	0707, 0709, 0749	0214, 06020101-06020102, 060203, 0604-0610, 0612-0617, 1801-1803, B*0806, B*0817
-----------	--------	---------	------------------	---

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-Cw*07 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective 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 bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.

PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherent feature of the primer pair(s) of a primer mix. More often it is due to other factors such as too low amount of DNA in the PCR reactions, taking too long time in setting up the PCR reactions, working at elevated room temperature or using thermal cyclers that are not pre-heated.

²The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-Cw*07 subtyping.

In addition, wells number 2, 3, 5, 9, 11, 14 to 16, 18, 19, 21, 22 and 28 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

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

³For several HLA-Cw*07 alleles 1st, 5th, 6th and 7th 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, 5th, 6th and 7th exons are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-Cw alleles non-HLA-Cw*07 alleles will be amplified by primer mixes 2, 9, 12, 14, 16, 17, 18, 20, 22 and 32. In addition, the A*2910 allele will be amplified by primer mix 12, the B*0806 and B*0817 alleles will be amplified by primer mix 32, the B*2736 allele will be amplified by primer mix 7, the B*4060 allele by primer mixes 4, 18 and 30 and the B*5608 and B*5614 alleles will be weakly amplified by primer mix 25.

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

⁶Primer mix 9 has a tendency of primer oligomer formation.

⁷Primer mixes 13 and 21 have a tendency of giving rise to nonspecific amplifications.

⁸Primer mix 17 might give rise to less specific PCR products than the other Cw*07 primer mixes.

⁹Primer mix 5: Specific PCR fragment of 70 bp in the Cw*0753 allele. Specific PCR fragment of 145 bp in the Cw*0757 allele. Specific PCR fragment of 245 bp in the Cw*0703 allele.

¹⁰Primer mix 8: Specific PCR fragment of 285 bp in the Cw*0745 allele. Specific PCR fragment of 645 bp in the Cw*0706 allele.

¹¹Primer mix 9: Specific PCR fragment of 215 bp in the Cw*0733N and Cw*0617 alleles. Specific PCR fragment of 240 bp in the Cw*0729 allele. Specific PCR fragment of 425 bp in the Cw*0707, 0709 and 0749 and the Cw*1801-1803 alleles.

¹²Primer mix 11: Specific PCR fragment of 275 bp in the Cw*0724 allele. Specific PCR fragment of 305 bp in the Cw*0710 and 0743 alleles.

¹³Primer mix 18: Specific PCR fragment of 120 bp in the Cw* 0752 allele. Specific PCR fragment of 230 bp in the Cw*0715 and the Cw*0503 alleles, and in the B*4060 allele.

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¹⁴Primer mix 19: Specific PCR fragment of 220 bp in the Cw*0726, 0733N and 0751 alleles. Specific PCR fragment of 465 bp in the Cw*0707 and 0716 alleles.

¹⁵Primer mix 20: Specific PCR fragment of 145 bp in the Cw*0703 and 0717 and Cw*0517 alleles. Specific PCR fragment of 170 bp in the Cw*0744 and 0748 alleles.

¹⁶Primer mix 21: Specific PCR fragment of 100 bp in the Cw*0754 allele. Specific PCR fragment of 225 bp in the Cw*0706, 0718 and 0719 alleles.

¹⁷Primer mix 23: Specific PCR fragment of 155 bp in the Cw*0723 allele. Specific PCR fragment of 185 bp in the Cw*0721 allele.

¹⁸Primer mix 25: Specific PCR fragment of 105 bp in the Cw*0746 and B*5606^{weakly} and 5614^{weakly} alleles. Specific PCR fragment of 150 bp in the Cw*0730 allele.

¹⁹Primer mix 26: Specific PCR fragment of 100 bp in the Cw*0732N allele. Specific PCR fragment of 250 bp in the Cw*0755N allele. Specific PCR fragment of 300 bp in the Cw*0731 allele.

²⁰Primer mix 31: Specific PCR fragment of 80 bp in the Cw*0750 allele. Specific PCR fragment of 415 bp in the Cw*0739 and 0740 alleles.

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

INTERPRETATION TABLE**HLA-Cw*07 SSP subtyping****Amplification patterns of the Cw*0701 to Cw*0757 alleles**

	Well ⁵															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	80	290	110	185	70	100	190	285	215	185	275	130	90	240	290	395
PCR product(s)					145			645	240		305					
					245				425							
Length of int.	800	800	800	1070	800	1070	1070	1070	800	1070	800	1070	1070	800	800	800
pos. control ¹																
5'-primer(s) ²	1049	368	270	368	47	540	363	355	47	368	355	512	289	419	369	47
	5'-Agg ³	5'-gTA ³	5'-AAC ³	5'-gTC ³	5'-Agg ³	5'-gAC ³	5'-AAT ³	5'-CCT ³	5'-Agg ³	5'-gTT ³	5'-TCA ³	5'-gTg ³	5'-Agg ³	5'-gTT ³	5'-TAC ³	5'-Agg ³
					512			992	419		385		1049			
					5'-gTT ³			5'-TAA ³	5'-gTA ³		5'-ggT ³		5'-Agg ³			
3'-primer(s) ³	1087	618	341	512	121	601	512	601	90	512	618	601	343	618	616	270
	5'-AgT ³	5'-CCT ³	5'-CgT ³	5'-CCA ³	5'-ggC ³	5'-CTT ³	5'-CCA ³	5'-CTT ³	5'-AAg ³	5'-CCA ³	5'-CCT ³	5'-CTT ³	5'-ACT ³	5'-CCT ³	5'-TgT ³	5'-TAC ³
					539			1016	302				1087			
					5'-TCT ³			5'-CAC ³	5'-ggT ³				5'-AgC ³			
					616				618							
					5'-CgT ³				5'-CCT ³							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HLA-Cw allele ⁴																
*070101-070104, 070106- 070109	1	2	3													
*070105	1		3													
*07020101- 070202	1			4												16
*0703	1				5											16
*070401-070402	1					6										16
*0705	1	2					7									16
*0706	w	2	3					8								
*0707	?	2							9							
*0708	?									10						16
*0709	?	2	3						9							
*0710	?			4							11					16
*0711						6							13			16
*0712	?					6						12				16
*0713	?			4										14		16
*0714	?	2													15	16
*0715	?			4												16
*0716	?	2														
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

INTERPRETATION TABLE**HLA-Cw*07 SSP subtyping**

Amplification patterns of the Cw*0701 to Cw*0757 alleles

Well ⁵																
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
130	120	220	145	100	250	155	130	105	100	120	260	255	275	80	245	Length of spec.
	230	465	170	225		185		150	250					415		PCR product(s)
								300								
1070	800	800	1070	800	800	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	Length of int.
																pos. control ¹
512	368	47	486	368	134	199	524	206	361	539	390	122	368	47	97	5'-primer(s) ²
5'-gTT ^{3'}	5'-gTC ^{3'}	5'-Agg ^{3'}	5'-TAC ^{3'}	5'-gTC ^{3'}	5'-CCA ^{3'}	5'-gTT ^{3'}	5'-CCA ^{3'}	5'-AgA ^{3'}	5'-AgT ^{3'}	5'-gCg ^{3'}	5'-gAA ^{3'}	5'-CCA ^{3'}	5'-gTC ^{3'}	5'-Agg ^{3'}	5'-TCg ^{3'}	
	3 rd I		490	6 th I		504	539	419	411		410	410		1049		
	5'-TgT ^{3'}		5'-CgA ^{3'}	5'-gTC ^{3'}		5'-CAC ^{3'}	5'-gTg ^{3'}	5'-gTC ^{3'}	5'-TAg ^{3'}		5'-gTg ^{3'}	5'-gTT ^{3'}		5'-AgC ^{3'}		
			512						560							
			5'-gTg ^{3'}						5'-CCT ^{3'}							
601	559	90	618	427	341	341	618	270	618	618	618	341	603	289	302	3'-primer(s) ³
5'-CTT ^{3'}	5'-CTC ^{3'}	5'-Ag ^{3'}	5'-CCT ^{3'}	5'-gTg ^{3'}	5'-CgT ^{3'}	5'-CgT ^{3'}	5'-CCT ^{3'}	5'-TAC ^{3'}	5'-CCT ^{3'}	5'-CCT ^{3'}	5'-CCT ^{3'}	5'-CgT ^{3'}	5'-TTg ^{3'}	5'-AgT ^{3'}	5'-ggT ^{3'}	
	668	97		1043		618		527				618		1087		
	5'-TgA ^{3'}	5'-gTA ^{3'}		5'-CAA ^{3'}		5'-CCT ^{3'}		5'-CCC ^{3'}				5'-CCT ^{3'}		5'-AgT ^{3'}		
		341														
		5'-Cgg ^{3'}														
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
																HLA-Cw allele ⁴
																*070101-070104, 070106- 070109
																*070105
																*07020101- 070202
			20													*0703
17																*070401-070402
																*0705
				21												*0706
			19												32	*0707
																*0708
															32	*0709
																*0710
17																*0711
																*0712
																*0713
																*0714
			18													*0715
			19													*0716
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

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Length of spec.	80	290	110	185	70	100	190	285	215	185	275	130	90	240	290	395
PCR product					145			645	240		305					
					245				425							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*0717	?															16
*0718	w	2	3													
*0719	w		3	4												
*0720	?	2	3													
*0721	?	2	3													
*0722	?	2	3													
*0723	?			4												16
*0724	?	2	3								11					
*0725	?			4												16
*0726	1	2	3													
*072701	?	2														16
*072702	w	2														16
*0728	?	2	3											14		
*0729	?			4					9							16
*0730	1	2	3													
*0731	?	2														16
*0732N	1			4												16
*0733N	?			4					9							16
*0735	?	2	3													
*0736	1	2	3													
*0737	?			4												16
*0738	?			4												16
*0739	?			4												16
*0740	?	2	3													
*0741	?											12				16
*0742	1			4												16
*0743	?	2									11					16
*0744	?	2	3													
*0745	?							8								16
*0746	1			4												16
*0747	?			4												16
*0748	?			4												16
*0749	1			4					9							16
*0750				4												16
*0751	w			4												16
*0752	1	2	3													
*0753	w	2	3		5											
*0754	w			4												16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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130	120	220	145	100	250	155	130	105	100	120	260	255	275	80	245	Length of spec.
	230	465	170	225		185		150	250					415		PCR product
									300							
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
			20													*0717
				21												*0718
				21												*0719
				22												*0720
						23										*0721
							24			w						*0722
						23										*0723
																*0724
							24									*0725
		19														*0726
																*072701
																*072702
																*0728
																*0729
								25								*0730
								26								*0731
								26								*0732N
		19														*0733N
											28					*0735
												29				*0736
										27						*0737
													30			*0738
														31		*0739
														31		*0740
																*0741
												29				*0742
																*0743
			20													*0744
																*0745
								25								*0746
											28					*0747
			20													*0748
															32	*0749
														31		*0750
		19														*0751
	18															*0752
																*0753
				21												*0754
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*0755N	w	2	3													
*0756	w			4									13			16
*0757	1		3		5											
*0214																
*0315, 0332, 0345, 0403, 0406, 0416																
*050101-050104, 0504- 0508, 0510-0516, 0518, 0519, 0801- 0806, 0808-0814, 0816												12				
*0503												12				
*0517		2												14		
*06020101-06020102, 060203, 0604-0610, 0612-0616N																
*0617, 1801-1803									9							16
*0807																
HLA-Cw allele ⁴																
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A*2910												12				
B*0806, B*0817																
B*2736							7									
B*4060				4												
B*5608, B*5614																
Well 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 wells, or a band of 800 base pairs, for some wells. Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-Cw*07 subtyping. In addition, wells number 2, 3, 5, 9, 11, 14 to 16, 18, 19, 21, 22 and 28 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

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

²The nucleotide position, in the 1st, 2nd, 3rd or 7th exon or the 3rd or 6th intron, matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

³The nucleotide position, in the 2nd, 3rd, 4th or 7th exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

⁴The HLA-Cw*0734 allele has been renamed to HLA-Cw*072702.

⁵Primer mix 5: Specific PCR fragment of 70 bp in the Cw*0753 allele. Specific PCR fragment of 145 bp in the Cw*0757 allele. Specific PCR fragment of 245 bp in the Cw*0703 allele.

Primer mix 8: Specific PCR fragment of 285 bp in the Cw*0745 allele. Specific PCR fragment of 645 bp in the Cw*0706 allele.

Primer mix 9: Specific PCR fragment of 215 bp in the Cw*0733N and Cw*0617 alleles. Specific PCR fragment of 240 bp in the Cw*0729 allele. Specific PCR fragment of 425 bp in the Cw*0707, 0709 and 0749 and the Cw*1801-1803 alleles.

No.: **06F**

Lot-specific Information

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17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
									26							*0755N
																*0756
																*0757
															32	*0214
					22											*0315, 0332, 0345, 0403, 0406, 0416
																*050101-050104, 0504- 0508, 0510-0516, 0518, 0519, 0801- 0806, 0808-0814, 0816
	18															*0503
			20													*0517
															32	*06020101-06020102, 060203, 0604-0610, 0612-0616N
															32	*0617
17																*0807
																HLA-Cw allele ⁴
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
																A*2910
															32	B*0806, B*0817
																B*2736
	18												30			B*4060
								w								B*5608, B*5614
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Primer mix 11: Specific PCR fragment of 275 bp in the Cw*0724 allele. Specific PCR fragment of 305 bp in the Cw*0710 and 0743 alleles.

Primer mix 18: Specific PCR fragment of 120 bp in the Cw* 0752 allele. Specific PCR fragment of 230 bp in the Cw*0715 and the Cw*0503 alleles, and in the B*4060 allele.

Primer mix 19: Specific PCR fragment of 220 bp in the Cw*0726, 0733N and 0751 alleles. Specific PCR fragment of 465 bp in the Cw*0707 and 0716 alleles.

Primer mix 20: Specific PCR fragment of 145 bp in the Cw*0703 and 0717 and Cw*0517 alleles. Specific PCR fragment of 170 bp in the Cw*0744 and 0748 alleles.

Primer mix 21: Specific PCR fragment of 100 bp in the Cw*0754 allele. Specific PCR fragment of 225 bp in the Cw*0706, 0718 and 0719 alleles.

Primer mix 23: Specific PCR fragment of 155 bp in the Cw*0723 allele. Specific PCR fragment of 185 bp in the Cw*0721 allele.

Primer mix 25: Specific PCR fragment of 105 bp in the Cw*0746 and B*5606^{weakly} and 5614^{weakly} alleles. Specific PCR fragment of 150 bp in the Cw*0730 allele.

Primer mix 26: Specific PCR fragment of 100 bp in the Cw*0732N allele. Specific PCR fragment of 250 bp in the Cw*0755N allele. Specific PCR fragment of 300 bp in the Cw*0731 allele.

Primer mix 31: Specific PCR fragment of 80 bp in the Cw*0750 allele. Specific PCR fragment of 415 bp in the Cw*0739 and 0740 alleles.

'w', may be weakly amplified.

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

CELL LINE VALIDATION SHEET																					
HLA-Cw*07 SSP subtyping kit																					
					Well																
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	200620201	200735102	200620203	200620204	200850805	200735106	200620207	200735108	200850809	200620210	200620211	200620212	200850813	200620214	200735115	200620216	
	IHCW cell line		Cw*																		
1	9001	SA	*0702		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	
2	9280	LK707	*0701	*1505	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	9011	E4181324	*1202		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	9275	GU373	*0304	*0401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	9009	KAS011	*0602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	9353	SM	*0304	*0702	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	
7	9020	QBL	*0501		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
8	9007	DEM	*0602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	9026	YAR	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	9107	LKT3	*0102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	9051	PITOUT	*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	9052	DBB	*0602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
13	9067	BTB	*0102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	9071	OLGA	*0102	*0304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	9075	DKB	*0304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	9037	SWEIG007	*0202		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	9008	WILJON	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	9257	32367	*0102	*0705	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-	+	
19	9038	BM16	*0701		+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	9059	SLE005	*0304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	9064	AMALA	*0303		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	9056	KOSE	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	9124	IHL	*0102	*1502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	9035	JBUSH	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	9049	IBW9	*0802		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
26	9285	WT49	*0701		+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	9191	CH1007	*0704	*1505	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	
28	9320	BEL5GB	*0501	*1601	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
29	9050	MOU	*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	9021	RSH	*1701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
31	9019	DUCAF	*0501		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
32	9297	HAG	*1701	*1703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
33	9098	MT14B	*0304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
34	9104	DHIF	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
35	9302	SSTO	*0501		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
36	9024	KT17	*0303	*0401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
37	9065	HHKB	*0702		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	
38	9099	LZL	*0303		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	9315	CML	*0202	*0701	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
40	9134	WHONP199	*0602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
41	9055	H0301	*0802		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
42	9066	TAB089	*0102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
43	9076	T7526	*0102	*0801	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
44	9057	TEM	*1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	9239	SHJO	*0602	*1701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	9013	SCHU	*0702		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	
47	9045	TUBO	*0704	*1502	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	
48	9303	TER-ND	*0401	*1601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-Cw*07 SSP

Product number: 101.615-24/04 – including *Taq* pol.

Lot number: 06F

Expiry date: 2010-August-01

Number of tests: 24 tests – Product No. 101.615-24

4 tests – Product No. 101.615-04

Number of wells per test: 32

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2006-202-01	13	2008-508-13	25	2007-351-25
2	2007-351-02	14	2006-202-14	26	2008-508-26
3	2006-202-03	15	2007-351-15	27	2008-508-27
4	2006-202-04	16	2006-202-16	28	2007-351-28
5	2008-508-05	17	2007-351-17	29	2007-351-29
6	2007-351-06	18	2008-508-18	30	2006-202-30
7	2006-202-07	19	2006-202-19	31	2008-508-31
8	2007-351-08	20	2007-351-20	32	2007-351-32
9	2008-508-09	21	2008-508-21		
10	2006-202-10	22	2007-351-22		
11	2006-202-11	23	2007-351-23		
12	2006-202-12	24	2006-202-24		

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

No DNAs carrying the alleles to be amplified by primer solutions 2, 5, 8 to 11, 13 to 15, 18 to 21, 23 to 31 were available. The specificities of the primers in primer solutions 5, 9 to 11, 13, 14, 18 to 20, 24 to 27, 30 and 31 were tested by separately adding one additional 5'-primer, respectively one additional 3'-primer. In primer solutions 2, 15 and 21 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 8, 23, 28 and 29 it was only possible to test the 3'-primers, the 5'-primers were not possible to test.

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

Date of approval: 2009-May-25

Approved by:

Quality Control, Supervisor

No.: **06F**

Lot-specific Information

www.olerup.com

Declaration of Conformity

Product name: *Olerup* SSP® HLA-Cw*07
Product number: 101.615-24/04
Lot number: 06F

Intended use: HLA-Cw*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 III, 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.

Saltsjöbaden, Sweden
2009-May-25

Olle Olerup
Managing Director



No.: **06F**

Lot-specific Information

www.olerup.com**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:** support-at@olerup.com**Web page:** <http://www.olerup.com>**Olerup Inc.**, 901 S. Bolmar St., Suite R, West Chester, PA 19382**Tel:** 1-877-OLERUP1**Fax:** 610-344-7989**E-mail:** info.us@olerup.com**Web page:** <http://www.olerup.com>For information on *Olerup* SSP distributors worldwide, contact **Olerup GmbH**.