

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Olerup SSP® HLA-C*07

Product number:	101.615-24/04 – including <i>Taq</i> pol. 101.615-24u/04u – without <i>Taq</i> pol.
Lot number:	4D7
Expiry date:	2018-07-01
Number of tests:	24 tests – Product No. 101.615-24/24u 4 tests – Product No. 101.615-04/04u
Number of wells per test:	93+1
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. 4D7.

Complete product documentation consists of generic Instructions for Use (IFU), lot specific Product Insert, Worksheet and Certificate.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® HLA-C*07 Lot (41Y)

The HLA-C*07 kit is updated for new alleles to enable separation of:

- Confirmed¹ alleles as listed in the IMGT/HLA database
- Polymorphisms in exons outside of the region encoding the peptide binding domain
- Null and Alternatively expressed alleles

A well containing Negative Control primer pairs has been added.

The format of the Product Insert and Worksheet have been changed.

One well has been added to HLA-C*07, well **94**.

¹As described in section Uniquely Identified Alleles.

The HLA-C*07 primer set, specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup SSP®* HLA-C*07 lot was made (**Lot No. 41Y**). The kit design is based on IMGT/HLA database 3.22.0.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

As of lot series V, the Specificity Table is included in the lot-specific Product Insert, and the Interpretation Table is included in the Worksheet.

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

Well	5'-primer	3'-primer	rationale
3	Added	-	5'-primer added for the C*07:01:46 allele.
14	-	Added	3'-primer added for increased yield of the C*07:25 allele.
25	Added	-	5'-primer added for the C*07:311 allele.
38	Exchanged	Exchanged	Primer pair exchanged for decreased tendency of primer oligomer formation.
40	-	Added	3'-primer added for the C*07:78:02 allele.
51	-	Added	3'-primer added for the C*07:409 allele.
54	-	Added	3'-primer added for the C*07:446 allele.
64	-	Added	3'-primer added for the C*07:409 allele.
65	-	Added	3'-primer added for the C*07:371 allele.
69	Exchanged	-	5'-primer exchanged for allelic resolution of the C*07:412 allele.
73	-	Added	3'-primer added for the C*07:458 allele.
76	Added	-	5'-primer added for the C*07:437N allele.
77	-	Added	3'-primers added for the C*07:419 and C*07:446 alleles.
83	-	Added	3'-primer added for the C*07:429 allele.
84	-	Added	3'-primer added for the C*07:311 allele.
85	Added	Added	Primer pair added for the C*07:458 allele.
88	-	Added	3'-primer added for the C*07:452N allele.
89	Added	-	5'-primer added for the C*07:374 allele.
93	Added	Added	Updated negative control moved to well 94, primer pair added for the C*07:453 allele.
94	-	-	Updated negative control added from well 93.

Changes in revision R01 compared to R00:

1. Primer mix 30 does not amplify the C*07:75 and 07:254 alleles. Thus, this lot of the C*07 kit cannot distinguish the C*07:75 and the C*07:02:01:01-07:02:69, 07:105, 07:114, 07:135, 07:144, 07:146, 07:157-07:160, 07:167, 07:169, 07:174-07:175, 07:178, 07:185, 07:187, 07:193, 07:195, 07:208-07:209, 07:211, 07:213, 07:217, 07:221, 07:226, 07:233, 07:239-07:240, 07:244, 07:251, 07:261-07:262, 07:270-07:271, 07:273-07:275, 07:283-07:284, 07:286-07:287, 07:290-07:291, 07:305-07:306, 07:309, 07:312, 07:318-07:322, 07:325-07:327, 07:333-07:334, 07:341, 07:344-07:346, 07:360, 07:363, 07:372, 07:376, 07:379, 07:382-07:384, 07:388-07:389, 07:391-07:392, 07:398-07:401, 07:405, 07:413-07:416, 07:425, 07:432-07:434, 07:436, 07:438-07:439, 07:449 and 07:456-07:457 alleles, nor the C*07:254 and the C*07:01:01:01-07:01:04, 07:01:06-07:01:12, 07:01:14-07:01:24, 07:01:26-07:01:35, 07:01:37-07:01:51, 07:103, 07:111, 07:113, 07:115, 07:156, 07:162-07:163, 07:182, 07:188, 07:190, 07:197, 07:200-07:201, 07:204, 07:206, 07:215, 07:219, 07:223, 07:225, 07:228, 07:236-07:237, 07:246, 07:249, 07:253, 07:255, 07:257:01-07:257:03, 07:266-07:269, 07:276-07:278, 07:280-07:282, 07:296-07:300, 07:303, 07:310, 07:313, 07:330-07:332, 07:362, 07:366, 07:369-07:370, 07:377, 07:380, 07:385, 07:408, 07:411, 07:417-07:418, 07:421-07:422, 07:424, 07:427, 07:430-07:431, 07:435, 07:440-07:445, 07:448 and 07:454-07:455 alleles. This has been corrected in the Specificity and Interpretation Tables.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: 4D7

Lot-specific Information

Change in revision R02 compared to R01:

1. Primer mix 80 does not amplify the C*07:316 and 07:359 and the C*05:108 and C*06:111 alleles. Thus, this lot of the C*07 subtyping kit cannot distinguish the C*07:359 and the C*07:02:01:01-07:02:69, 07:75, 07:105, 07:114, 07:135, 07:144, 07:146, 07:157-07:160, 07:167, 07:169, 07:174-07:175, 07:178, 07:185, 07:187, 07:193, 07:195, 07:208-07:209, 07:211, 07:213, 07:217, 07:221, 07:226, 07:233, 07:239-07:240, 07:244, 07:251, 07:261-07:262, 07:270-07:271, 07:273-07:275, 07:283-07:284, 07:286-07:287, 07:290-07:291, 07:305-07:306, 07:309, 07:312, 07:318-07:322, 07:325-07:327, 07:333-07:334, 07:341, 07:344-07:346, 07:360, 07:363, 07:372, 07:376, 07:379, 07:382-07:384, 07:388-07:389, 07:391-07:392, 07:398-07:401, 07:405, 07:413-07:416, 07:425, 07:432-07:434, 07:436, 07:438-07:439, 07:449, and 07:456-07:457 alleles. This has been corrected in the Specificity and Interpretation Tables.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Well **94** contains Negative Control primer pairs, that will amplify more than 95% of the *Olerup SSP®* HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene.

HLA-specific PCR product sizes range from 75 to 200 base pairs.
The PCR product generated by the positive control primer pair is 430 base pairs.

Length of PCR product	105	200	105	80	75	80	85
5'-primer¹	164	340	440	45	45	43	36
	5'-CAC ^{3'}	5'-Agg ^{3'}	5'-TTA ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-TAC ^{3'}
							36
							5'-TAT ^{3'}
3'-primer²	231	2nd I	507	59	58	57	47
	5'-TgC ^{3'}	5'-AAA ^{3'}	5'-TTg ^{3'}	5'-CTC ^{3'}	5'-ggC ^{3'}	5'-CTC ^{3'}	5'-ACA ^{3'}
							48
							5'-gCA ^{3'}
							48
							5'-gCC ^{3'}
							52
							5'-TgT ^{3'}
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

¹The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

²The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon or the 2nd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

PRODUCT DESCRIPTION

HLA-C*07 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the HLA-C*07:01 to HLA-C*07:459 alleles.

PLATE LAYOUT

Each test consists of 94 PCR reactions in a 96 well cut PCR plate. Wells 95 to 96 are empty.

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
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	NC	empty	empty

The 96 well cut PCR plate is marked with 'HLA-C*07' in silver/gray ink.

Well No. 1 is marked with the Lot No. '4D7'.

Wells 1 to 93 – HLA-C*07 high resolution primers.

Well 94 – Negative Control (NC).

A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays, and should be disregarded.

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

INTERPRETATION

Due to the sharing of sequence motifs between HLA-C alleles, non-HLA-C*07 alleles will be amplified by primer mixes 2, 3, 6, 8 to 14, 16 to 20, 22, 26, 27, 30, 32, 36, 37, 40, 42, 45, 49, 55, 57, 58, 60, 61, 64, 68, 71 to 73, 77, 78, 80, 81, 84, 89, 90 and 92. In addition, a few HLA-A and HLA-B alleles will be amplified by primer mixes 2, 4, 6 to 8, 10 to 12, 14, 16, 18, 20, 22, 24, 25, 27, 32, 37, 41, 42, 45, 53 to 56, 58 to 60, 62, 71 to 73, 77, 84, 90 and 92.

For further details see Specificity Table.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

UNIQUELY IDENTIFIED ALLELES

All the HLA-C*07 alleles, i.e. **C*07:01 to C*07:459**, recognized by the HLA Nomenclature Committee in October 2015^{1,2} will be amplified by the primers in the HLA-C*07 SSP kit.

The HLA-C*07 kit enables separation of the confirmed HLA-C*07 alleles as listed in the IMGT/HLA database. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA-C*07 alleles is listed below.

The HLA-C*07 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles.

The following HLA-C*07 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
C*07:29:01-07:29:02, 07:347N	71	C*07:118, 07:203	52
C*07:41, 07:447	1	C*07:125, 07:402	54
C*07:51, 07:314:01-07:314:02	19	C*07:132, 07:179	55
C*07:52, 07:337	18	C*07:133, 07:149, 07:381	68
C*07:61N, 07:194, 07:368	70	C*07:147, 07:241	60
C*07:74, 07:308	39	C*07:164N, 07:212	58
C*07:78:01-07:78:02, 07:235Q	40	C*07:165, 07:180	60
C*07:93, 07:207	42	C*07:166, 07:419	77
C*07:99, 07:183	43	C*07:186, 07:451N	58
C*07:100, 07:161	49	C*07:245, 07:342	45
C*07:104N, 07:119	92		
C*07:117, 07:126	51		

The HLA-C*07 subtyping kit cannot distinguish the following silent mutations: the C*07:01:01-07:01:04, 07:01:06-07:01:12, 07:01:14-07:01:24, 07:01:26-07:01:35 and 07:01:37-07:01:51 alleles, the C*07:01:05 and 07:01:36 alleles, the C*07:02:01:01-07:02:69 alleles, the C*07:04:01-07:04:10, the C*07:17:01-07:17:02, the C*07:27:01-07:27:02, the C*07:29:01-07:29:02, the C*07:31:01-07:31:02, the C*07:38:01-07:38:02, the C*07:56:01-07:56:02, the C*07:78:01-07:78:02, the C*07:96:01-07:96:02, the C*07:108:01-07:108:02, the C*07:131:01-07:131:02, the C*07:137:01-07:137:02, the C*07:141:01-07:141:02, the C*07:172:01-07:172:02, the C*07:199:01-07:199:02 or the C*07:314:01-07:314:02 alleles.

¹HLA-C alleles listed on the IMGT/HLA web page 2015-October-10, release 3.22.0, www.ebi.ac.uk/imgt/hla.

²Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page <http://hla.alleles.org/alleles/deleted.html>.

³This lot of the C*07 kit cannot distinguish the C*07:75 or the C*07:359 and the C*07:02:01:01-07:02:69, 07:105, 07:114, 07:135, 07:144, 07:146, 07:157-07:160, 07:167, 07:169, 07:174-07:175, 07:178, 07:185, 07:187, 07:193, 07:195, 07:208-07:209, 07:211, 07:213, 07:217, 07:221, 07:226, 07:233, 07:239-07:240, 07:244, 07:251, 07:261-07:262, 07:270-07:271, 07:273-07:275, 07:283-07:284, 07:286-07:287, 07:290-07:291, 07:305-07:306, 07:309, 07:312, 07:318-07:322, 07:325-

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: 4D7

Lot-specific Information

07:327, 07:333-07:334, 07:341, 07:344-07:346, 07:360, 07:363, 07:372, 07:376, 07:379, 07:382-07:384, 07:388-07:389, 07:391-07:392, 07:398-07:401, 07:405, 07:413-07:416, 07:425, 07:432-07:434, 07:436, 07:438-07:439, 07:449 and 07:456-07:457 alleles, nor the C*07:254 and the C*07:01:01:01-07:01:04, 07:01:06-07:01:12, 07:01:14-07:01:24, 07:01:26-07:01:35, 07:01:37-07:01:51, 07:103, 07:111, 07:113, 07:115, 07:156, 07:162-07:163, 07:182, 07:188, 07:190, 07:197, 07:200-07:201, 07:204, 07:206, 07:215, 07:219, 07:223, 07:225, 07:228, 07:236-07:237, 07:246, 07:249, 07:253, 07:255, 07:257:01-07:257:03, 07:266-07:269, 07:276-07:278, 07:280-07:282, 07:296-07:300, 07:303, 07:310, 07:313, 07:330-07:332, 07:362, 07:366, 07:369-07:370, 07:377, 07:380, 07:385, 07:408, 07:411, 07:417-07:418, 07:421-07:422, 07:424, 07:427, 07:430-07:431, 07:435, 07:440-07:445, 07:448 and 07:454-07:455 alleles.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
C*07:01:01:01	Confirmed	C*07:01:48	Unconfirmed	C*07:02:42	Unconfirmed	C*07:16	Confirmed
C*07:01:01:02	Unconfirmed	C*07:01:49	Unconfirmed	C*07:02:43	Unconfirmed	C*07:17:01	Confirmed
C*07:01:01:03	Unconfirmed	C*07:01:50	Unconfirmed	C*07:02:44	Confirmed	C*07:17:02	Unconfirmed
C*07:01:01:04	Unconfirmed	C*07:01:51	Unconfirmed	C*07:02:45	Unconfirmed	C*07:18	Confirmed
C*07:01:02	Confirmed	C*07:02:01:01	Confirmed	C*07:02:46	Confirmed	C*07:19	Confirmed
C*07:01:03	Unconfirmed	C*07:02:01:02	Unconfirmed	C*07:02:47	Unconfirmed	C*07:20	Confirmed
C*07:01:04	Unconfirmed	C*07:02:01:03	Confirmed	C*07:02:48	Unconfirmed	C*07:21	Unconfirmed
C*07:01:05	Confirmed	C*07:02:01:04	Unconfirmed	C*07:02:49	Confirmed	C*07:22	Confirmed
C*07:01:06	Unconfirmed	C*07:02:01:05	Unconfirmed	C*07:02:50	Unconfirmed	C*07:23	Unconfirmed
C*07:01:07	Confirmed	C*07:02:01:06	Unconfirmed	C*07:02:51	Unconfirmed	C*07:24	Unconfirmed
C*07:01:08	Confirmed	C*07:02:02	Unconfirmed	C*07:02:52	Confirmed	C*07:25	Unconfirmed
C*07:01:09	Confirmed	C*07:02:03	Unconfirmed	C*07:02:53	Unconfirmed	C*07:26	Confirmed
C*07:01:10	Confirmed	C*07:02:04	Confirmed	C*07:02:54	Unconfirmed	C*07:27:01	Unconfirmed
C*07:01:11	Unconfirmed	C*07:02:05	Unconfirmed	C*07:02:55	Unconfirmed	C*07:27:02	Confirmed
C*07:01:12	Unconfirmed	C*07:02:06	Confirmed	C*07:02:56	Unconfirmed	C*07:28	Confirmed
C*07:01:13	Unconfirmed	C*07:02:07	Confirmed	C*07:02:57	Unconfirmed	C*07:29:01	Unconfirmed
C*07:01:14	Unconfirmed	C*07:02:08	Confirmed	C*07:02:58	Unconfirmed	C*07:29:02	Unconfirmed
C*07:01:15	Confirmed	C*07:02:09	Unconfirmed	C*07:02:59	Unconfirmed	C*07:30	Unconfirmed
C*07:01:16	Unconfirmed	C*07:02:10	Confirmed	C*07:02:60	Unconfirmed	C*07:31:01	Confirmed
C*07:01:17	Unconfirmed	C*07:02:11	Confirmed	C*07:02:61	Unconfirmed	C*07:31:02	Unconfirmed
C*07:01:18	Confirmed	C*07:02:12	Unconfirmed	C*07:02:62	Confirmed	C*07:32N	Confirmed
C*07:01:19	Unconfirmed	C*07:02:13	Confirmed	C*07:02:63	Confirmed	C*07:33N	Confirmed
C*07:01:20	Unconfirmed	C*07:02:14	Unconfirmed	C*07:02:64	Unconfirmed	C*07:35	Confirmed
C*07:01:21	Unconfirmed	C*07:02:15	Unconfirmed	C*07:02:65	Unconfirmed	C*07:36	Confirmed
C*07:01:22	Unconfirmed	C*07:02:16	Confirmed	C*07:02:66	Unconfirmed	C*07:37	Unconfirmed
C*07:01:23	Confirmed	C*07:02:17	Confirmed	C*07:02:67	Unconfirmed	C*07:38:01	Unconfirmed
C*07:01:24	Unconfirmed	C*07:02:18	Confirmed	C*07:02:68	Unconfirmed	C*07:38:02	Unconfirmed
C*07:01:25	Unconfirmed	C*07:02:19	Unconfirmed	C*07:02:69	Unconfirmed	C*07:39	Confirmed
C*07:01:26	Unconfirmed	C*07:02:20	Confirmed	C*07:03	Unconfirmed	C*07:40	Confirmed
C*07:01:27	Unconfirmed	C*07:02:21	Unconfirmed	C*07:04:01	Confirmed	C*07:41	Unconfirmed
C*07:01:28	Unconfirmed	C*07:02:22	Unconfirmed	C*07:04:02	Confirmed	C*07:42	Unconfirmed
C*07:01:29	Confirmed	C*07:02:23	Unconfirmed	C*07:04:03	Unconfirmed	C*07:43	Confirmed
C*07:01:30	Confirmed	C*07:02:24	Confirmed	C*07:04:04	Unconfirmed	C*07:44	Unconfirmed
C*07:01:31	Confirmed	C*07:02:25	Unconfirmed	C*07:04:05	Unconfirmed	C*07:45	Confirmed
C*07:01:32	Unconfirmed	C*07:02:26	Unconfirmed	C*07:04:06	Confirmed	C*07:46	Confirmed
C*07:01:33	Unconfirmed	C*07:02:27	Unconfirmed	C*07:04:07	Unconfirmed	C*07:47	Unconfirmed
C*07:01:34	Unconfirmed	C*07:02:28	Confirmed	C*07:04:08	Unconfirmed	C*07:48	Confirmed
C*07:01:35	Unconfirmed	C*07:02:29	Unconfirmed	C*07:04:09	Unconfirmed	C*07:49	Confirmed
C*07:01:36	Confirmed	C*07:02:30	Unconfirmed	C*07:04:10	Unconfirmed	C*07:50	Unconfirmed
C*07:01:37	Unconfirmed	C*07:02:31	Unconfirmed	C*07:05	Confirmed	C*07:51	Confirmed
C*07:01:38	Unconfirmed	C*07:02:32	Confirmed	C*07:06	Confirmed	C*07:52	Unconfirmed
C*07:01:39	Unconfirmed	C*07:02:33	Unconfirmed	C*07:07	Confirmed	C*07:53	Unconfirmed
C*07:01:40	Unconfirmed	C*07:02:34	Unconfirmed	C*07:08	Unconfirmed	C*07:54	Confirmed
C*07:01:41	Unconfirmed	C*07:02:35	Unconfirmed	C*07:09	Unconfirmed	C*07:55N	Confirmed
C*07:01:42	Unconfirmed	C*07:02:36	Unconfirmed	C*07:10	Confirmed	C*07:56:01	Unconfirmed
C*07:01:43	Unconfirmed	C*07:02:37	Unconfirmed	C*07:11	Unconfirmed	C*07:56:02	Confirmed
C*07:01:44	Confirmed	C*07:02:38	Unconfirmed	C*07:12	Confirmed	C*07:57	Unconfirmed
C*07:01:45	Unconfirmed	C*07:02:39	Confirmed	C*07:13	Confirmed	C*07:58	Unconfirmed
C*07:01:46	Unconfirmed	C*07:02:40	Unconfirmed	C*07:14	Unconfirmed	C*07:59	Confirmed
C*07:01:47	Unconfirmed	C*07:02:41	Unconfirmed	C*07:15	Confirmed	C*07:60	Confirmed

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
C*07:61N	Confirmed	C*07:108:01	Confirmed	C*07:154	Confirmed	C*07:202	Confirmed
C*07:62	Unconfirmed	C*07:108:02	Confirmed	C*07:155	Confirmed	C*07:203	Confirmed
C*07:63	Unconfirmed	C*07:109	Confirmed	C*07:156	Unconfirmed	C*07:204	Unconfirmed
C*07:64	Unconfirmed	C*07:110	Unconfirmed	C*07:157	Unconfirmed	C*07:205	Confirmed
C*07:65	Confirmed	C*07:111	Unconfirmed	C*07:158	Unconfirmed	C*07:206	Unconfirmed
C*07:66	Confirmed	C*07:112	Confirmed	C*07:159	Unconfirmed	C*07:207	Confirmed
C*07:67	Confirmed	C*07:113	Unconfirmed	C*07:160	Unconfirmed	C*07:208	Unconfirmed
C*07:68	Confirmed	C*07:114	Unconfirmed	C*07:161	Unconfirmed	C*07:209	Unconfirmed
C*07:69	Confirmed	C*07:115	Unconfirmed	C*07:162	Unconfirmed	C*07:210	Unconfirmed
C*07:70	Confirmed	C*07:116	Confirmed	C*07:163	Unconfirmed	C*07:211	Unconfirmed
C*07:71	Unconfirmed	C*07:117	Confirmed	C*07:164N	Unconfirmed	C*07:212	Confirmed
C*07:72	Confirmed	C*07:118	Confirmed	C*07:165	Confirmed	C*07:213	Unconfirmed
C*07:73	Confirmed	C*07:119	Confirmed	C*07:166	Unconfirmed	C*07:214	Unconfirmed
C*07:74	Unconfirmed	C*07:120	Confirmed	C*07:167	Unconfirmed	C*07:215	Unconfirmed
C*07:75	Confirmed	C*07:121Q	Confirmed	C*07:168	Unconfirmed	C*07:216	Confirmed
C*07:76:01	Confirmed	C*07:122	Confirmed	C*07:169	Unconfirmed	C*07:217	Unconfirmed
C*07:76:02	Confirmed	C*07:123	Confirmed	C*07:170	Unconfirmed	C*07:218	Confirmed
C*07:77	Unconfirmed	C*07:124	Confirmed	C*07:171	Confirmed	C*07:219	Unconfirmed
C*07:78:01	Unconfirmed	C*07:125	Confirmed	C*07:172:01	Confirmed	C*07:220	Unconfirmed
C*07:78:02	Unconfirmed	C*07:126	Confirmed	C*07:172:02	Confirmed	C*07:221	Unconfirmed
C*07:79	Confirmed	C*07:127	Confirmed	C*07:173	Confirmed	C*07:222	Confirmed
C*07:80	Confirmed	C*07:128	Unconfirmed	C*07:174	Unconfirmed	C*07:223	Unconfirmed
C*07:81	Unconfirmed	C*07:129	Confirmed	C*07:175	Unconfirmed	C*07:224	Confirmed
C*07:82	Unconfirmed	C*07:130	Confirmed	C*07:176	Confirmed	C*07:225	Unconfirmed
C*07:83	Confirmed	C*07:131:01	Confirmed	C*07:177	Unconfirmed	C*07:226	Unconfirmed
C*07:84	Unconfirmed	C*07:131:02	Unconfirmed	C*07:178	Unconfirmed	C*07:227N	Unconfirmed
C*07:85	Confirmed	C*07:132	Confirmed	C*07:179	Confirmed	C*07:228	Unconfirmed
C*07:86	Unconfirmed	C*07:133	Unconfirmed	C*07:180	Confirmed	C*07:229	Confirmed
C*07:87	Unconfirmed	C*07:134	Confirmed	C*07:181	Unconfirmed	C*07:230	Unconfirmed
C*07:88	Confirmed	C*07:135	Unconfirmed	C*07:182	Unconfirmed	C*07:231	Confirmed
C*07:89	Confirmed	C*07:136	Confirmed	C*07:183	Unconfirmed	C*07:232	Confirmed
C*07:90	Confirmed	C*07:137:01	Unconfirmed	C*07:184	Confirmed	C*07:233	Unconfirmed
C*07:91	Confirmed	C*07:137:02	Confirmed	C*07:185	Unconfirmed	C*07:234	Confirmed
C*07:92	Unconfirmed	C*07:138	Unconfirmed	C*07:186	Confirmed	C*07:235Q	Unconfirmed
C*07:93	Confirmed	C*07:139	Unconfirmed	C*07:187	Unconfirmed	C*07:236	Unconfirmed
C*07:94	Unconfirmed	C*07:140	Confirmed	C*07:188	Unconfirmed	C*07:237	Unconfirmed
C*07:95	Confirmed	C*07:141:01	Confirmed	C*07:189	Confirmed	C*07:238	Confirmed
C*07:96:01	Confirmed	C*07:141:02	Confirmed	C*07:190	Unconfirmed	C*07:239	Unconfirmed
C*07:96:02	Unconfirmed	C*07:142	Unconfirmed	C*07:191N	Confirmed	C*07:240	Unconfirmed
C*07:97	Confirmed	C*07:143	Confirmed	C*07:192	Confirmed	C*07:241	Confirmed
C*07:98N	Unconfirmed	C*07:144	Unconfirmed	C*07:193	Unconfirmed	C*07:242	Confirmed
C*07:99	Unconfirmed	C*07:145	Confirmed	C*07:194	Confirmed	C*07:243	Confirmed
C*07:100	Confirmed	C*07:146	Unconfirmed	C*07:195	Unconfirmed	C*07:244	Unconfirmed
C*07:101	Confirmed	C*07:147	Confirmed	C*07:196	Confirmed	C*07:245	Unconfirmed
C*07:102	Confirmed	C*07:148	Confirmed	C*07:197	Unconfirmed	C*07:246	Unconfirmed
C*07:103	Unconfirmed	C*07:149	Confirmed	C*07:198N	Confirmed	C*07:247	Unconfirmed
C*07:104N	Confirmed	C*07:150Q	Unconfirmed	C*07:199:01	Unconfirmed	C*07:248	Confirmed
C*07:105	Unconfirmed	C*07:151	Confirmed	C*07:199:02	Confirmed	C*07:249	Unconfirmed
C*07:106	Confirmed	C*07:152N	Unconfirmed	C*07:200	Unconfirmed	C*07:250	Confirmed
C*07:107	Unconfirmed	C*07:153	Confirmed	C*07:201	Unconfirmed	C*07:251	Unconfirmed

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
C*07:252	Confirmed	C*07:301	Confirmed	C*07:350N	Unconfirmed	C*07:400	Unconfirmed
C*07:253	Unconfirmed	C*07:302	Unconfirmed	C*07:351	Confirmed	C*07:401	Unconfirmed
C*07:254	Confirmed	C*07:303	Unconfirmed	C*07:352	Unconfirmed	C*07:402	Unconfirmed
C*07:255	Unconfirmed	C*07:304	Unconfirmed	C*07:353	Unconfirmed	C*07:403	Unconfirmed
C*07:256	Confirmed	C*07:305	Unconfirmed	C*07:354	Unconfirmed	C*07:404	Unconfirmed
C*07:257:01	Unconfirmed	C*07:306	Unconfirmed	C*07:355	Confirmed	C*07:405	Unconfirmed
C*07:257:02	Unconfirmed	C*07:307	Confirmed	C*07:356	Unconfirmed	C*07:406	Unconfirmed
C*07:257:03	Unconfirmed	C*07:308	Unconfirmed	C*07:357	Unconfirmed	C*07:407	Confirmed
C*07:258	Unconfirmed	C*07:309	Unconfirmed	C*07:358	Unconfirmed	C*07:408	Unconfirmed
C*07:259	Confirmed	C*07:310	Unconfirmed	C*07:359	Confirmed	C*07:409	Confirmed
C*07:260	Unconfirmed	C*07:311	Confirmed	C*07:360	Unconfirmed	C*07:410	Unconfirmed
C*07:261	Unconfirmed	C*07:312	Unconfirmed	C*07:361	Confirmed	C*07:411	Unconfirmed
C*07:262	Unconfirmed	C*07:313	Unconfirmed	C*07:362	Unconfirmed	C*07:412	Confirmed
C*07:263	Unconfirmed	C*07:314:01	Confirmed	C*07:363	Unconfirmed	C*07:413	Unconfirmed
C*07:264N	Confirmed	C*07:314:02	Unconfirmed	C*07:364	Unconfirmed	C*07:414	Unconfirmed
C*07:265	Unconfirmed	C*07:315	Unconfirmed	C*07:365	Unconfirmed	C*07:415	Unconfirmed
C*07:266	Unconfirmed	C*07:316	Unconfirmed	C*07:366	Unconfirmed	C*07:416	Unconfirmed
C*07:267	Unconfirmed	C*07:317	Unconfirmed	C*07:367	Unconfirmed	C*07:417	Unconfirmed
C*07:268	Unconfirmed	C*07:318	Unconfirmed	C*07:368	Unconfirmed	C*07:418	Unconfirmed
C*07:269	Unconfirmed	C*07:319	Unconfirmed	C*07:369	Unconfirmed	C*07:419	Unconfirmed
C*07:270	Unconfirmed	C*07:320	Unconfirmed	C*07:370	Unconfirmed	C*07:420	Unconfirmed
C*07:271	Unconfirmed	C*07:321	Unconfirmed	C*07:371	Confirmed	C*07:421	Unconfirmed
C*07:272	Unconfirmed	C*07:322	Unconfirmed	C*07:372	Unconfirmed	C*07:422	Unconfirmed
C*07:273	Unconfirmed	C*07:323	Unconfirmed	C*07:373	Unconfirmed	C*07:423	Unconfirmed
C*07:274	Unconfirmed	C*07:324	Unconfirmed	C*07:374	Confirmed	C*07:424	Unconfirmed
C*07:275	Unconfirmed	C*07:325	Unconfirmed	C*07:375	Unconfirmed	C*07:425	Unconfirmed
C*07:276	Unconfirmed	C*07:326	Unconfirmed	C*07:376	Unconfirmed	C*07:426	Unconfirmed
C*07:277	Unconfirmed	C*07:327	Unconfirmed	C*07:377	Unconfirmed	C*07:427	Unconfirmed
C*07:278	Unconfirmed	C*07:328	Unconfirmed	C*07:378	Unconfirmed	C*07:428	Unconfirmed
C*07:279	Confirmed	C*07:329N	Unconfirmed	C*07:379	Unconfirmed	C*07:429	Confirmed
C*07:280	Unconfirmed	C*07:330	Unconfirmed	C*07:380	Unconfirmed	C*07:430	Unconfirmed
C*07:281	Unconfirmed	C*07:331	Unconfirmed	C*07:381	Confirmed	C*07:431	Unconfirmed
C*07:282	Unconfirmed	C*07:332	Unconfirmed	C*07:382	Unconfirmed	C*07:432	Unconfirmed
C*07:283	Unconfirmed	C*07:333	Unconfirmed	C*07:383	Unconfirmed	C*07:433	Unconfirmed
C*07:284	Unconfirmed	C*07:334	Unconfirmed	C*07:384	Unconfirmed	C*07:434	Unconfirmed
C*07:285	Confirmed	C*07:335	Unconfirmed	C*07:385	Unconfirmed	C*07:435	Unconfirmed
C*07:286	Unconfirmed	C*07:336	Unconfirmed	C*07:386	Confirmed	C*07:436	Unconfirmed
C*07:287	Unconfirmed	C*07:337	Unconfirmed	C*07:387	Unconfirmed	C*07:437N	Unconfirmed
C*07:288	Confirmed	C*07:338	Unconfirmed	C*07:388	Unconfirmed	C*07:438	Unconfirmed
C*07:289	Unconfirmed	C*07:339	Confirmed	C*07:389	Unconfirmed	C*07:439	Unconfirmed
C*07:290	Unconfirmed	C*07:340	Confirmed	C*07:390	Unconfirmed	C*07:440	Unconfirmed
C*07:291	Unconfirmed	C*07:341	Unconfirmed	C*07:391	Unconfirmed	C*07:441	Unconfirmed
C*07:292	Unconfirmed	C*07:342	Confirmed	C*07:392	Unconfirmed	C*07:442	Unconfirmed
C*07:293	Confirmed	C*07:343	Unconfirmed	C*07:393N	Unconfirmed	C*07:443	Unconfirmed
C*07:294	Unconfirmed	C*07:344	Unconfirmed	C*07:394	Unconfirmed	C*07:444	Unconfirmed
C*07:296	Unconfirmed	C*07:345	Unconfirmed	C*07:395	Unconfirmed	C*07:445	Unconfirmed
C*07:297	Unconfirmed	C*07:346	Unconfirmed	C*07:396	Unconfirmed	C*07:446	Unconfirmed
C*07:298	Unconfirmed	C*07:347N	Unconfirmed	C*07:397	Confirmed	C*07:447	Unconfirmed
C*07:299	Unconfirmed	C*07:348	Unconfirmed	C*07:398	Unconfirmed	C*07:448	Unconfirmed
C*07:300	Unconfirmed	C*07:349	Unconfirmed	C*07:399	Unconfirmed	C*07:449	Unconfirmed

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Allele	Status ¹
C*07:450	Unconfirmed
C*07:451N	Unconfirmed
C*07:452N	Unconfirmed
C*07:453	Unconfirmed
C*07:454	Unconfirmed
C*07:455	Unconfirmed
C*07:456	Unconfirmed
C*07:457	Unconfirmed
C*07:458	Unconfirmed
C*07:459	Unconfirmed

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2015-October-10, release 3.22.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in HLA-C*07 homo- and heterozygotes is available upon request.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

SPECIFICITY TABLE

HLA-C*07 SSP subtyping

Specificities and sizes of the PCR products of the 93+1 primer mixes used for HLA-C*07 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-C*07 alleles ³	Other amplified HLA-Class I alleles ⁴
1	245 bp 425 bp	800 bp	*07:01:01:01-07:02:20, 07:02:22-07:33N, 07:35-07:40, 07:42-07:165, 07:167-07:294, 07:296-07:347N, 07:349-07:459 *07:01:01:01-07:01:40, 07:01:42-07:02:40, 07:02:42-07:06, 07:08, 07:10-07:33N, 07:35-07:48, 07:50-07:75, 07:77-07:78:01, 07:79-07:114, 07:116-07:209, 07:211-07:222, 07:224-07:237, 07:239-07:246, 07:248-07:294, 07:296-07:314:02, 07:316-07:327, 07:329N-07:356, 07:358-07:360, 07:362-07:376, 07:378-07:402, 07:404-07:405, 07:407-07:414, 07:416-07:459	
2	290 bp	800 bp	*07:01:01:01-07:01:04, 07:01:06-07:01:35, 07:01:37-07:01:51, 07:05-07:07, 07:09, 07:14, 07:16, 07:18, 07:20-07:22, 07:24, 07:26-07:28, 07:30-07:31:02, 07:35-07:36, 07:40, 07:43-07:44, 07:52-07:53, 07:55N, 07:58-07:60, 07:65, 07:69-07:71, 07:73, 07:77-07:78:02, 07:81-07:83, 07:85-07:86, 07:89, 07:91-07:96:02, 07:98N, 07:103-07:104N, 07:106, 07:109, 07:111, 07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131:01-07:132, 07:134, 07:140-07:141:02, 07:148, 07:150Q-07:151, 07:153, 07:156, 07:162-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:184, 07:188-07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219, 07:222-07:225, 07:227N-07:228, 07:231, 07:235Q-07:237, 07:246-07:249, 07:253-07:257:03, 07:263, 07:266-07:269, 07:276-07:282, 07:292-07:293, 07:296-07:301, 07:303-07:304, 07:310-07:311, 07:313, 07:315, 07:330-07:332, 07:337, 07:343, 07:362, 07:366, 07:369-07:371, 07:377, 07:380, 07:385-07:387, 07:404, 07:407-07:408, 07:410-07:412, 07:417-07:419, 07:421-07:422, 07:424, 07:427, 07:430-07:431, 07:435, 07:437N, 07:440-07:445, 07:448, 07:450, 07:453-07:455, 07:458	*02:02:28, 03:03:29, 03:04:19, 03:113, 05:01:17, 05:09:02, 05:17, 06:02:23, 08:15:02, 08:72:02, 12:03:10, 15:65, 16:02:11, A*25:27:02, B*15:17:04, B*35:01:38, B*35:03:15, B*35:08:04, B*35:15:02, B*58:01:17

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

3⁵	110 bp	800 bp	*07:01:01:01-07:01:24, 07:01:26-07:01:51, 07:06, 07:09, 07:18-07:22, 07:24, 07:26, 07:28, 07:30, 07:35-07:36, 07:40, 07:44, 07:52-07:53, 07:55N, 07:57-07:59, 07:65, 07:69-07:71, 07:73, 07:77-07:78:02, 07:81- 07:83, 07:85-07:86, 07:89, 07:91-07:96:02, 07:98N, 07:103-07:104N, 07:106, 07:108:01- 07:108:02, 07:110-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128- 07:129, 07:131:01-07:132, 07:134, 07:140- 07:141:02, 07:148, 07:150Q-07:151, 07:153, 07:156, 07:162-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188- 07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214- 07:215, 07:219, 07:222-07:225, 07:227N- 07:228, 07:230-07:231, 07:235Q-07:237, 07:246-07:250, 07:253-07:257:03, 07:263, 07:266-07:269, 07:276-07:282, 07:293, 07:296-07:301, 07:303-07:304, 07:310-07:311, 07:313, 07:317, 07:330-07:332, 07:337, 07:343, 07:353, 07:362, 07:366, 07:369- 07:371, 07:377, 07:380, 07:385-07:387, 07:404, 07:407-07:408, 07:410-07:412, 07:417-07:419, 07:421-07:422, 07:424, 07:427, 07:430-07:431, 07:435, 07:440- 07:445, 07:448, 07:450, 07:453-07:455, 07:458	*04:112, 06:02:13, 06:44, 15:62, 16:64, 18:05
4	185 bp	1070 bp	*07:02:01:01-07:02:69, 07:10, 07:13, 07:15, 07:19, 07:23, 07:25, 07:29:01-07:29:02, 07:32N-07:33N, 07:37-07:39, 07:42, 07:46- 07:51, 07:54, 07:56:01-07:56:02, 07:61N- 07:62, 07:64, 07:66-07:68, 07:72, 07:74- 07:76:02, 07:79-07:80, 07:84, 07:87-07:88, 07:90, 07:97, 07:99-07:100, 07:102, 07:105, 07:107, 07:114, 07:117, 07:121Q, 07:123, 07:125-07:127, 07:130, 07:133, 07:135- 07:138, 07:143-07:147, 07:149, 07:152N, 07:154-07:155, 07:157-07:161, 07:167-07:169, 07:172:01-07:172:02, 07:174-07:175, 07:178, 07:183, 07:185-07:187, 07:192-07:195, 07:198N, 07:202, 07:208-07:209, 07:211, 07:213, 07:216-07:218, 07:220-07:221, 07:226, 07:229, 07:232-07:234, 07:238- 07:241, 07:243-07:245, 07:251-07:252, 07:259-07:262, 07:264N-07:265, 07:270- 07:271, 07:273-07:275, 07:283-07:291, 07:302, 07:305-07:306, 07:308-07:309, 07:312, 07:314:01-07:314:02, 07:316-07:322, 07:325-07:327, 07:333-07:335, 07:339-07:342, 07:344-07:352, 07:356, 07:359-07:360, 07:363, 07:367-07:368, 07:372-07:376, 07:379, 07:381-07:384, 07:388-07:393N, 07:397-07:402, 07:405, 07:409, 07:413- 07:416, 07:423, 07:425, 07:429, 07:432- 07:434, 07:436, 07:438-07:439, 07:446, 07:449, 07:451N-07:452N, 07:456-07:457	B*40:60, B*40:245

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

5⁵	70 bp 145 bp 245 bp	800 bp	*07:53, 07:216 *07:57 *07:03	
6⁵	100 bp	1070 bp	*07:04:01-07:04:10, 07:11-07:12, 07:63, 07:68, 07:101, 07:139, 07:142, 07:181, 07:199:01- 07:199:02, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354- 07:355, 07:357, 07:361, 07:364-07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:459	*05:62, B*44:148
7	190 bp	1070 bp	*07:05	B*27:36, B*48:21, B*48:26
8	285 bp 505 bp	1070 bp	*07:45 *07:06, 07:343	*02:57, 04:40, 06:123, B*38:23, B*39:73
9	215 bp 425 bp	800 bp	*07:33N *07:07, 07:09, 07:49, 07:76:01-07:76:02, 07:210, 07:238, 07:247, 07:315, 07:328, 07:403, 07:406	*06:17, 18:01-18:09
10	185 bp	1070 bp	*07:08, 07:108:01-07:108:02	*04:58, 04:160, B*40:100
11	285 bp 305 bp	800 bp	*07:24, 07:112, 07:218, 07:396 *07:10, 07:43, 07:184, 07:196, 07:367	*03:03:29, 03:04:19, 03:113, B*35:01:38, B*35:03:15, B*35:08:04, B*35:15:02, B*37:04:02, B*57:01:18, B*58:01:17
12	130 bp	1070 bp	*07:12, 07:41, 07:447	*03:251, 04:120, 05:01:01-05:01:26, 05:01:28-05:01:31, 05:03- 05:08, 05:10-05:16, 05:18:01-05:22:02, 05:24- 05:48N, 05:50-05:51Q, 05:53-05:61, 05:63-05:94, 05:96-05:109, 05:111- 05:124, 06:129, 08:01:01- 08:06, 08:08:01-08:14, 08:16:01-08:46, 08:48- 08:50, 08:52N-08:63, 08:65-08:71, 08:73-08:75, 08:77-08:83, 08:85- 08:103, 08:105-08:123, 08:125, A*29:10, B*14:32, B*15:337, B*18:83, B*44:148
13^{5,7}	85 bp	1070 bp	*07:11, 07:56:01-07:56:02, 07:60, 07:79, 07:109	*03:69, 03:274, 04:27, 04:52, 06:53:01-06:53:02, 12:58, 17:26
14	535 bp	1070 bp	*07:02:01-07:02:69, 07:04:01-07:05, 07:08, 07:10-07:11, 07:13-07:15, 07:23, 07:25, 07:27:01-07:27:02, 07:29:01-07:29:02, 07:31:01-07:33N, 07:37-07:39, 07:42-07:43, 07:45-07:51, 07:54, 07:56:01-07:56:02, 07:61N-07:64, 07:66-07:68, 07:72, 07:74- 07:76:02, 07:79-07:80, 07:84, 07:87-07:88, 07:90, 07:97, 07:99-07:102, 07:105, 07:107,	*01:60, 03:14, 03:121N, 03:162, 03:220, 03:261, 04:58, 04:160, 04:203N, 05:23, 05:62, 06:118, 08:07, 08:47, 08:104, 12:14:01-12:14:02, 14:17, 17:01:01-17:24, 17:26- 17:30, B*46:06, B*46:43

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

			07:114, 07:117, 07:121Q, 07:123, 07:125-07:127, 07:130, 07:133, 07:135-07:139, 07:142-07:147, 07:149, 07:152N, 07:154-07:155, 07:157-07:161, 07:167-07:169, 07:172:01-07:172:02, 07:174-07:175, 07:177-07:178, 07:181, 07:183-07:187, 07:192-07:195, 07:198N-07:199:02, 07:202, 07:208-07:209, 07:211, 07:213, 07:216-07:218, 07:220-07:221, 07:226, 07:229, 07:232-07:234, 07:238-07:241, 07:243-07:245, 07:251-07:252, 07:258-07:262, 07:264N-07:265, 07:270-07:275, 07:283-07:291, 07:294, 07:302, 07:305-07:306, 07:308-07:309, 07:312, 07:314:01-07:316, 07:318-07:329N, 07:333-07:336, 07:338-07:342, 07:344-07:352, 07:354-07:361, 07:363-07:365, 07:367-07:368, 07:372-07:376, 07:378-07:379, 07:381-07:384, 07:388-07:403, 07:405-07:406, 07:409, 07:413-07:416, 07:420, 07:425-07:426, 07:428-07:429, 07:432-07:434, 07:436, 07:438-07:439, 07:446, 07:449, 07:451N-07:452N, 07:456-07:457, 07:459	
15^{5,7,8}	80 bp 290 bp 460 bp	1070 bp	*07:50 *07:14 *07:89	
16⁸	240 bp	800 bp	*07:13, 07:28, 07:289	*04:01:43, 05:01:17, 05:09:02, 05:17, 08:15:02, 08:72:02, B*35:03:15, B*37:04:02
17⁷	130 bp	1070 bp	*07:04:01-07:04:10, 07:11, 07:63, 07:68, 07:101, 07:139, 07:142, 07:181, 07:199:01-07:199:02, 07:260, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354-07:355, 07:357-07:358, 07:361, 07:364-07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:459	*05:23, 05:62, 08:07, 08:47, 08:104
18⁵	120 bp 230 bp	800 bp	*07:52, 07:243 *07:15, 07:337	*05:03 *02:77, B*07:77, B*07:193, B*40:60, B*40:245
19⁶	220 bp 465 bp	800 bp	*07:26, 07:92, 07:96:01-07:96:02, 07:314:01-07:314:02, 07:317, 07:351 *07:07, 07:16, 07:51, 07:177, 07:181, 07:328, 07:367	*18:09
20⁷	145 bp	1070 bp	*07:03, 07:17:01-07:17:02, 07:140-07:141:02, 07:304, 07:307	*02:02:28, 03:03:29, 03:04:19, 03:113, 04:01:43, 05:01:17, 05:09:02, 05:17, 06:02:23, 08:15:02, 08:72:02, 12:03:10, 16:02:11, A*25:27:02, A*30:01:03, A*33:03:09, B*07:02:43, B*07:33:03, B*08:01:25, B*15:17:04, B*35:01:38, B*35:03:15, B*35:08:04,

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

	170 bp 190 bp		*07:44, 07:48 *07:81, 07:168, 07:450	B*35:15:02, B*37:04:02, B*39:09:03, B*57:01:18, B*58:01:17 B*15:17:04, B*35:01:38, B*35:03:15, B*35:08:04, B*35:15:02, B*37:04:02, B*39:09:03, B*57:01:18, B*58:01:17
21 ⁵	100 bp 225 bp	800 bp	*07:54 *07:06, 07:18-07:19	
22	205 bp 250 bp	800 bp	*07:84 *07:20, 07:96:01-07:96:02, 07:127, 07:263, 07:390	*02:49, 02:75, 03:15, 03:32, 03:45, 03:60, 03:136, 03:297, 04:03:01- 04:03:02, 04:06, 04:16, 04:80, 04:147, 04:160, 04:171, 04:190, 06:70:01- 06:70:02, 06:132:01- 06:132:02, 15:25, 15:62, A*01:110, A*11:135
23 ⁷	155 bp 185 bp	1070 bp	*07:23 *07:21	
24 ⁷	135 bp	1070 bp	*07:25, 07:404	A*03:01:46, A*11:32:02, A*24:02:62, A*25:27:02, A*68:01:12
25 ⁵	105 bp 150 bp 235 bp	1070 bp	*07:46, 07:356 *07:30 *07:311	B*56:08 ^w , B*56:14
26 ⁵	100 bp 250 bp 300 bp	1070 bp	*07:32N *07:55N *07:31:01-07:31:02, 07:177	*06:02:23, 12:03:10, 16:02:11
27	130 bp	1070 bp	*07:37, 07:69, 07:176, 07:307	*04:01:43, 05:01:17, 05:09:02, 08:15:02, B*07:02:43, B*07:33:03, B*35:08:04
28	175 bp 260 bp	800 bp	*07:44 *07:35, 07:47, 07:352	
29	255 bp	1070 bp	*07:36, 07:42, 07:355	
30 ^{5,7}	60 bp 260 bp	1070 bp	*07:227N	*04:66
31	415 bp	1070 bp	*07:39-07:40, 07:177, 07:210 ^w 07:238 ^w , 07:328 ^w , 07:335	
32 ⁵	115 bp 155 bp 245 bp	1070 bp	*07:134 *07:189 *07:07, 07:09, 07:49, 07:76:01-07:76:02, 07:210, 07:238, 07:247, 07:315, 07:328, 07:403, 07:406	*06:29 *02:14:01-02:14:02, 02:107, 04:42:01- 04:42:02, 05:43, 06:02:01:01-06:02:01:03, 06:02:03-06:02:05, 06:02:07-06:02:11, 06:02:13-06:02:31, 06:02:33-06:02:44, 06:04:01-06:10, 06:12-

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

				06:51, 06:53:01-06:75, 06:78-06:121, 06:123, 06:125-06:131, 06:133- 06:146, 06:148-06:166, 15:23, 15:63, 17:20, 18:01-18:08, B*08:17 , B*08:47 *03:39, 03:67, B*08:39
	285 bp		*07:60, 07:79	
33	205 bp 230 bp	1070 bp	*07:66 *07:82	
34^{5,7}	105 bp 270 bp	1070 bp	*07:67 *07:70	
35⁶	320 bp 360 bp	1070 bp	*07:72 *07:71	
36⁶	265 bp	800 bp	*07:20, 07:64, 07:73, 07:92, 07:96:01- 07:96:02, 07:172:01-07:172:02, 07:390	*18:04
37⁷	225 bp 265 bp	1070 bp	*07:121Q *07:38:01-07:38:02, 07:63, 07:68, 07:260, 07:302	*05:111, 08:38, B*07:77 , B*07:193 , B*40:60 , B*40:245
38⁶	140 bp	1070 bp	*07:65	
39⁵	100 bp 195 bp 255 bp	800 bp	*07:74 *07:308 *07:59	
40^{5,7}	120 bp 205 bp 440 bp	1070 bp	*07:235Q *07:62 *07:07, 07:09, 07:76:01-07:76:02, 07:78:01- 07:78:02, 07:315, 07:328, 07:406	*06:17, 18:01-18:09
41	140 bp 170 bp 255 bp	1070 bp	*07:91 *07:234 *07:88	A*25:32
42⁵	100 bp 205 bp 250 bp	1070 bp	*07:15, 07:207 *07:77, 07:93 *07:123, 07:173, 07:294	*02:02:28, B*07:02:43 , B*07:33:03 , B*35:15:02 B*07:02:43 , B*07:33:03 , B*08:01:25 , B*35:01:38 , B*35:03:15 , B*35:08:04 , B*35:15:02 , B*39:09:03 , B*57:01:18 , B*58:01:17
43^{5,6}	105 bp 140 bp 165 bp	800 bp	*07:94, 07:183 *07:99 *07:80, 07:189, 07:339, 07:410	
44⁶	165 bp 195 bp	1070 bp	*07:98N *07:65, 07:77	
45⁷	240 bp 475 bp	1070 bp	*07:245 *07:95, 07:342	*04:34, 04:122, 04:212, 06:153, A*26:112 , B*18:115 , B*35:178 , B*35:282 , B*73:01-73:02
46⁶	315 bp 350 bp 420 bp	1070 bp	*07:202 *07:90 *07:152N	
47⁶	200 bp 255 bp	1070 bp	*07:86 *07:222, 07:375	

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

48	420 bp		*07:152N	
	455 bp		*07:97	
	155 bp	1070 bp	*07:122, 07:373	
	220 bp		*07:87	
	255 bp		*07:222, 07:375	
	400 bp		*07:85	
49⁹	155 bp	800 bp	*07:101, 07:148, 07:161	*04:129, 05:42, 05:46, 06:67, 08:05, 08:21, 12:127, 17:05
	230 bp		*07:100, 07:259, 07:316, 07:338	*01:17, 01:21, 01:23
50⁵	425 bp	800 bp	*07:124, 07:155	
51⁵	65 bp	1070 bp	*07:126	
	235 bp		*07:121Q, 07:409	
	285 bp		*07:117	
52⁵	65 bp	1070 bp	*07:203, 07:426	
	205 bp		*07:118	
	280 bp		*07:106	
53⁵	110 bp	1070 bp	*07:140, 07:151, 07:154	B*08:01:25, B*37:04:02
	155 bp		*07:122, 07:373	
54⁵	120 bp	1070 bp	*07:153, 07:324	B*51:142
	200 bp		*07:446	B*08:109
	235 bp		*07:64, 07:374, 07:402	
	340 bp		*07:125, 07:356	
	370 bp		*07:129	
55	160 bp	1070 bp	*07:179, 07:234	*06:07
	210 bp		*07:252	A*11:179
	290 bp		*07:132	
	530 bp		*07:343	
56	210 bp	1070 bp	*07:150Q	
	255 bp		*07:123, 07:143, 07:173, 07:294	B*07:02:43, B*07:33:03, B*08:01:25, B*35:01:38, B*35:03:15, B*35:08:04, B*35:15:02, B*39:09:03, B*57:01:18, B*58:01:17
57⁵	70 bp	800 bp	*07:01:25	
	175 bp		*07:130	*05:01:17, 05:09:02, 05:17, 08:15:02
58⁵	230 bp		*07:259	
	80 bp	1070 bp	*07:137:01-07:137:02, 07:186, 07:212, 07:265	*03:162, 03:220, B*38:43, B*49:29, B*51:181
59⁶	450 bp		*07:164N, 07:451N	
	200 bp	1070 bp	*07:81, 07:145, 07:168, 07:191N, 07:450	B*15:17:04, B*35:01:38, B*35:03:15, B*35:08:04, B*35:15:02, B*37:04:02, B*39:09:03, B*57:01:18, B*58:01:17
60	130 bp	1070 bp	*07:165, 07:241, 07:265, 07:304, 07:307	*02:02:28, 03:03:29, 03:04:19, 03:113, 04:01:43, 05:01:17, 05:09:02, 06:02:23, 08:15:02, 12:03:10, B*07:02:43, B*07:33:03, B*15:17:04
	305 bp		*07:147	

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

	370 bp		*07:180	
61	245 bp 405 bp	1070 bp	*07:120	
62	200 bp 280 bp	1070 bp	*07:84, 07:205 *07:106	*14:65 A*26:101
63	270 bp 320 bp	800 bp	*07:24, 07:218, 07:301 *07:198N, 07:202	
64	135 bp 230 bp	1070 bp	*07:69 *07:192, 07:316, 07:338, 07:409	*01:17, 01:21, 01:23
65⁷	150 bp 185 bp	1070 bp	*07:136, 07:264N *07:371	
66⁷	150 bp 180 bp 225 bp	1070 bp	*07:136 *07:128, 07:232 *07:279	
67	180 bp 215 bp	1070 bp	*07:285 *07:393N	
68^{5,6}	75 bp 230 bp 260 bp	1070 bp	*07:381 *07:149 *07:133, 07:242	*03:178, 03:300
69	130 bp	1070 bp	*07:170-07:171, 07:397, 07:412	
70⁷	220 bp 405 bp	1070 bp	*07:131:01-07:131:02, 07:194, 07:368 *07:61N	
71⁵	120 bp 240 bp	1070 bp	*07:347N *07:29:01-07:29:02, 07:177, 07:184, 07:248	*03:03:29, 03:04:19, 03:113, B*07:02:43, B*07:33:03
72⁵	120 bp	1070 bp	*07:22, 07:137:01-07:137:02, 07:138	*02:02:28, 06:02:23, 12:03:10, A*33:03:09, A*68:01:12, B*39:09:03
	290 bp		*07:250	
73	195 bp	1070 bp	*07:107, 07:224, 07:349, 07:458	*06:22, 16:31, B*15:193, B*35:283
74⁷	210 bp 355 bp	1070 bp	*07:33N, 07:293 *07:80	
75	140 bp	1070 bp	*07:116, 07:329N	
76⁵	115 bp 280 bp	1070 bp	*07:437N *07:102	
77⁷	200 bp 240 bp	1070 bp	*07:446 *07:166, 07:220, 07:348	B*08:109 *03:211:02, B*73:01- 73:02
78	485 bp 435 bp	1070 bp	*07:419 *07:01:13, 07:68, 07:76:02, 07:199:01- 07:199:02	*02:02:13, 02:02:29, 06:101 ^w , 06:127:01- 06:127:02, 06:136, 06:144, 12:02:11, 18:01 ^w - 18:04 ^w , 18:06 ^w -18:09 ^w
79	375 bp	1070 bp	*07:256	
80	155 bp 315 bp	1070 bp	*07:350N	
81	150 bp	1070 bp	*07:231	*16:10
82⁶	170 bp 215 bp	1070 bp	*07:288 *07:393N	

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

83⁷	170 bp 250 bp	1070 bp	*07:214, 07:429 *07:361	
84	130 bp 185 bp	1070 bp	*07:386 *07:107, 07:224	*06:22, 16:31, B*15:193 , B*35:283
	235 bp		*07:311	
85	200 bp	1070 bp	*07:83, 07:458	
86	135 bp	1070 bp	*07:58	
87	175 bp 275 bp	1070 bp	*07:339, 07:410 *07:340	
88	150 bp 285 bp	1070 bp	*07:452N *07:407	
89⁵	75 bp 220 bp	1070 bp	*07:229, 07:387 *07:374	*12:131 *06:120 ^w
90	140 bp	1070 bp	*07:102, 07:351	*03:137, 03:182, B*07:13 , B*07:247 , B*54:02
91⁷	160 bp	1070 bp	*07:153, 07:324	
92⁵	105 bp 170 bp	1070 bp	*07:104N *07:119	B*15:272N , B*40:286N *02:99, B*07:87 , B*27:55
93	200 bp	1070 bp	*07:453	
94¹⁰	-	-	Negative Control	

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-C*07 SSP typings.

When the primers in a primer mix can give rise to HLA-specific PCR products of more than one length this is indicated if the size difference is more than 20 base pairs. Size differences of 20 base pairs or less are not given. For high resolution SSP kits, the alleles listed are specified according to amplicon length.

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 internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

³For several HLA Class I alleles 1st and/or 4th exon(s) and beyond, as well as intron 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. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-C alleles, non-HLA-C*07 alleles will be amplified by primer mixes 2, 3, 6, 8 to 14, 16 to 20, 22, 26, 27, 30, 32, 36, 37, 40, 42, 45, 49, 55, 57, 58, 60, 61, 64, 68, 71 to 73, 77, 78, 80, 81, 84, 89, 90 and 92. In addition, a few HLA-A and HLA-B alleles will be amplified by primer mixes 2, 4, 6 to 8, 10 to 12, 14, 16, 18, 20, 22, 24, 25, 27, 32, 37, 41, 42, 45, 53 to 56, 58 to 60, 62, 71 to 73, 77, 84, 90 and 92.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: 4D7

Lot-specific Information

⁵HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

⁶Primer mixes 19, 35, 36, 38, 43, 44, 46, 47, 59, 68 and 82 have a tendency to giving rise to primer oligomer formation.

⁷Primer mixes 13, 15, 17, 20, 23, 24, 30, 34, 37, 40, 45, 65, 66, 70, 74, 77, 83 and 91 may have tendencies of unspecific amplifications.

⁸Primer mixes 15 and 16 may give rise to a lower yield of HLA-specific PCR product than the other C*07 primer mixes.

⁹In primer mix 49 the positive control band may be weaker than for other HLA-C*07 primer mixes.

¹⁰Primer mix 94 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.

‘w’, might be weakly amplified.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec. PCR product	245 425	290	110	185	70 145 245	100	190	285 505	215 425	185	285 305	130
Length of int. pos. control ¹	800	800	800	1070	800	1070	1070	1070	800	1070	800	1070
5'-primer(s) ²	47 5'-Agg 3' 648 5'-CAC 3'	368 5'-gTA 3'	267 5'-CAA 3' 270 5'-AAC 3'	368 5'-gTC 3' 368 5'-gTC 3'	47 5'-Agg 3' 512 5'-gTT 3'	540 5'-gAC 3'	363 5'-AAT 3'	355 5'-CCT 3' 992 5'-TAA 3'	47 5'-Agg 3'	368 5'-gTT 3'	355 5'-TCA 3' 365 5'-gAC 3' 385 5'-ggT 3'	512 5'-gTg 3'
3'-primer(s) ³	302 5'-ggC 3' 853 5'-CAT 3'	618 5'-CT 3'	341 5'-CgT 3'	512 5'-CCA 3' 513 5'-TCT 3'	121 5'-ggC 3' 539 5'-TCT 3' 616 5'-CgT 3'	601 5'-CTT 3'	512 5'-CCA 3'	601 5'-CTC 3' 1016 5'-CAC 3'	90 5'-Ag 3'	512 5'-CCA 3'	618 5'-CT 3'	601 5'-CTT 3'
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec. PCR product	85	535	80	240	130	120	220	145	100	205	155	135
			290			230	465	170	225	250	185	
			460					190				
Length of int. pos. control ¹	1070	1070	1070	800	1070	800	800	1070	800	800	1070	1070
5'-primer(s) ²	289 5'-Agg 3' 1049 5'-g 3'	270 5'-AAg 3'	47 5'-Agg 3' 369 5'-TAC 3' 1049 5'-C 3'	419 5'-gTT 3'	512 5'-gTT 3'	368 5'-gTC 3' 3 rd I 5'-Cgg 3'	47 5'-Agg 3'	463 5'-TgA 3' 486 5'-TAC 3' 490 5'-CgA 3' 512 5'-gTg 3'	368 5'-gTC 3' 5 th I 5'-gTC 3'	134 5'-CCA 3' 176 5'-gCC 3'	199 5'-gTT 3' 504 5'-CAC 3'	524 5'-CCA 3'
3'-primer(s) ³	343 5'-T 3' 343 5'-g 3' 1087 5'-AgC 3'	512 5'-CCA 3' 512 5'-CCA 3' 513 5'-TCT 3'	337 5'-CTT 3' 616 5'-TgT 3' 1087 5'-AgT 3'	618 5'-CT 3'	601 5'-CTT 3'	445 5'-ggA 3' 559 5'-CTC 3' 668 5'-TgA 3' 779 5'-CTA 3'	97 5'-gTA 3'	618 5'-CT 3'	427 5'-gTg 3'	341 5'-CgT 3'	341 5'-CgT 3'	618 5'-CT 3'
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec. PCR product	105	100	130	175	255	60	415	115	205	105	320	265
	150	250		260		260		155	230	270	360	
	235	300						245				
								285				
Length of int. pos. control ¹	1070	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	800
5'-primer(s) ²	206	361	193	390	122	124	47	97	431	388	47	47
	5'-AgA 3'	5'-AgT 3'	5'-CCA 3'	5'-gAA 3'	5'-CCA 3'	5'-gCT 3'	5'-Agg 3'	5'-TCg 3'	5'-CgT 3'	5'-CCA 3'	5'-Agg 3'	5'-Agg 3'
	419	411	539	410	410	322			688	554		
	5'-gTC 3'	5'-TAg 3'	5'-gCg 3'	5'-gTg 3'	5'-gTT 3'	5'-gCC 3'			5'-CCA 3'	5'-ggT 3'		
		560		486								
		5'-CAC 3'		5'-TAC 3'								
3'-primer(s) ³	270	618	289	618	341	341	289	172	618	618	197	142
	5'-TAC 3'	5'-CT 3'	5'-AgC 3'	5'-CT 3'	5'-CgT 3'	5'-CgT 3'	5'-AgT 3'	5'-CAT 3'	5'-CT 3'	5'-CT 3'	5'-gAT 3'	5'-TgC 3'
	527		618		618			212	853		235	
	5'-CCC 3'		5'-CT 3'		5'-CT 3'			5'-gCC 3'	5'-CAT 3'		5'-CTg 3'	
	614							302				
	5'-CgA 3'							5'-ggT 3'				
								341				
								5'-Tgg 3'				
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47	48
Length of spec. PCR product	225	140	100	120	140	100	105	165	240	315	200	155
	265		195	205	170	205	140	195	475	350	255	220
			255	440	255	250	165			420	420	255
											455	400
Length of int. pos. control ¹	1070	1070	800	1070	1070	1070	800	1070	1070	1070	1070	1070
5'-primer(s) ²	368	363	125	47	125	409	97	463	341	47	47	47
	5'-gTC 3'	5'-Agg 3'	5'-CgT 3'	5'-Agg 3'	5'-CgA 3'	5'-ggC 3'	5'-TCg 3'	5'-TgT 3'	5'-ggA 3'	5'-Agg 3'	5'-Agg 3'	5'-Agg 3'
	388		697	486	211	445	512	464	652		457	439
	5'-CCT 3'		5'-TCg 3'	5'-ACC 3'	5'-Agg 3'	5'-TCA 3'	5'-gTT 3'	5'-gCT 3'	5'-CCA 3'		5'-AgC 3'	5'-ATC 3'
			794		520	463		493				503
			5'-CTC 3'		5'-CgA 3'	5'-TgT 3'		5'-CTT 3'				5'-CCg 3'
						560						
						5'-CgA 3'						
3'-primer(s) ³	563	464	341	79	341	618	212	618	527	190	131	131
	5'-CgA 3'	5'-AgA 3'	5'-CgT 3'	5'-gTA 3'	5'-CgT 3'	5'-CT 3'	5'-gCC 3'	5'-CT 3'	5'-CCA 3'	5'-ggT 3'	5'-ggT 3'	5'-ggT 3'
	601		853	312	618		231		853	226	295	275
	5'-CTT 3'		5'-CAT 3'	5'-AgT 3'	5'-CT 3'		5'-Tgg 3'		5'-CAT 3'	5'-CAA 3'	5'-TCA 3'	5'-gCC 3'
	603			317			233			295	330	618
	5'-TTg 3'			5'-CgA 3'			5'-CCC 3'			5'-TCA 3'	5'-TgT 3'	5'-CT 3'
				317			578				618	
				5'-CAA 3'			5'-TgT 3'				5'-CT 3'	
				563			613					
				5'-Cgg 3'			5'-gCC 3'					
Well No.	37	38	39	40	41	42	43	44	45	46	47	48

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Well No.	49	50	51	52	53	54	55	56	57	58	59	60
Length of spec.	155	425	65	65	110	120	160	210	70	80	200	130
PCR product	230		235	205	155	200	210	255	175	450		305
			285	280		235	290		230			370
						340	530					
						370						
Length of int. pos. control ¹	800	800	1070	1070	1070	1070	1070	1070	800	1070	1070	1070
5'-primer(s) ²	89	47	368	179	503	47	91	397	270	47	454	47
	5'-gAA 3'	5'-Agg 3'	5'-gTC 3'	5'-gTC 3'	5'-CCg 3'	5'-Agg 3'	5'-ggg 3'	5'-gCg 3'	5'-AAT 3'	5'-Agg 3'	5'-ACT 3'	5'-Agg 3'
	176			317	540	648	173	409	429	512	463	527
	5'-gCA 3'			5'-gCA 3'	5'-gAC 3'	5'-CAC 3'	5'-Cgg 3'	5'-ggC 3'	5'-gAA 3'	5'-gTT 3'	5'-TgA 3'	5'-TgA 3'
	429			458	553		211	450	485		464	
	5'-gAA 3'			5'-ggT 3'	5'-TgC 3'		5'-Agg 3'	5'-CTg 3'	5'-CAA 3'		5'-gCA 3'	
	440						232					
	5'-TTT 3'						5'-AgA 3'					
							992					
							5'-TAA 3'					
3'-primer(s) ³	289	299	394	341	618	112	341	618	299	327	618	180
	5'-AgC 3'	5'-TCT 3'	5'-gCT 3'	5'-CgT 3'	5'-CT 3'	5'-CCA 3'	5'-CgT 3'	5'-CT 3'	5'-TCA 3'	5'-TTT 3'	5'-CT 3'	5'-TCC 3'
	289		563	3 rd I		218	1043		618	544		246
	5'-AgC 3'		5'-CgA 3'	5'-CTC 3'		5'-gCT 3'	5'-CAg 3'		5'-CT 3'	5'-ggT 3'		5'-TAA 3'
	618		569			244			559			618
	5'-CT 3'		5'-ACC 3'			5'-CTg 3'			5'-CAg 3'			5'-CT 3'
			614			727						
			5'-CAg 3'			5'-CCA 3'						
						809						
						5'-CAA 3'						
Well No.	49	50	51	52	53	54	55	56	57	58	59	60

Well No.	61	62	63	64	65	66	67	68	69	70	71	72
Length of spec.	245	200	270	135	150	150	180	75	130	220	120	120
PCR product	405	280	320	230	185	180	215	230		405	240	290
						225		260				
Length of int. pos. control ¹	1070	1070	800	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	270	176	47	89	419	419	368	368	419	47	419	368
	5'-AAg 3'	5'-gCC 3'	5'-Agg 3'	5'-gAA 3'	5'-gTC 3'	5'-gTC 3'	5'-gTC 3'	5'-gTC 3'	5'-gTC 3'	5'-Agg 3'	5'-gTA 3'	5'-gTg 3'
	355	185	385	193							538	538
	5'-CCC 3'	5'-CAA 3'	5'-ggT 3'	5'-CCA 3'							5'-AC 3'	5'-AgT 3'
		458		368								544
		5'-ggT 3'		5'-gTC 3'								5'-gAA 3'
3'-primer(s) ³	385	341	146	289	530	530	505	403	506	85	618	618
	5'-ggA 3'	5'-CgT 3'	5'-CCg 3'	5'-AgC 3'	5'-CCA 3'	5'-CCA 3'	5'-gCT 3'	5'-gCC 3'	5'-Tgg 3'	5'-CAg 3'	5'-CT 3'	5'-CT 3'
	559	3 rd I	190	550	535	556	544	557	512	85		
	5'-Cgg 3'	5'-CTC 3'	5'-ggT 3'	5'-CAT 3'	5'-CTA 3'	5'-gCT 3'	5'-gC 3'	5'-TgT 3'	5'-CAT 3'	5'-CAA 3'		
			202	569	565	604		589		100		
			5'-TCA 3'	5'-ACC 3'	5'-CAA 3'	5'-CgC 3'		5'-CTT 3'		5'-ggg 3'		
			618							280		
			5'-CT 3'							5'-CTA 3'		
Well No.	61	62	63	64	65	66	67	68	69	70	71	72

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

Well No.	73	74	75	76	77	78	79	80	81	82	83	84
Length of spec. PCR product	195	210	140	115	200	435	375	155	150	170	170	130
		355		280	240			315		215	250	185
					485							235
Length of int. pos. control ¹	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	419	47	512	103	648	213	341	3 rd I	418	368	97	419
	5'-gTC 3'	5'-Agg 3'	5'-gTT 3'	5'-CCT 3'	5'-CAC 3'	5'-CCC 3'	5'-ggA 3'	5'-Cgg 3'	5'-Agg 3'	5'-gTC 3'	5'-TCg 3'	5'-gTC 3'
	1018			268								
	5'-gTg 3'			5'-gA 3'								
3'-primer(s) ³	565	85	610	341	809	355	425	704	527	496	226	506
	5'-CAT 3'	5'-CAC 3'	5'-CTA 3'	5'-CgT 3'	5'-CAA 3'	5'-gAg 3'	5'-CgC 3'	5'-CCg 3'	5'-CCg 3'	5'-gAg 3'	5'-CAT 3'	5'-TgT 3'
	1055	90	614		846			862		544	308	565
	5'-TgC 3'	5'-Ag 3'	5'-CgT 3'		5'-CAC 3'			5'-CTT 3'		5'-gC 3'	5'-gCg 3'	5'-CAT 3'
	1076	233			967							614
	5'-ACA 3'	5'-CCC 3'			5'-gAT 3'							5'-CgA 3'
Well No.	73	74	75	76	77	78	79	80	81	82	83	84

Well No.	85	86	87	88	89	90	91	92	93
Length of spec. PCR product	200	135	175	150	75	140	160	105	200
			275	285	220			170	
Length of int. pos. control ¹	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s) ²	458	524	97	97	112	103	732	361	47
	5'-ggg 3'	5'-CCC 3'	5'-TCg 3'	5'-TCg 3'	5'-CCT 3'	5'-CCT 3'	5'-gAT 3'	5'-AgA 3'	5'-Agg 3'
	1018				257				
	5'-gTg 3'				5'-CCA 3'				
3'-primer(s) ³	618	618	231	208	289	201	853	426	74
	5'-CT 3'	5'-CT 3'	5'-Tgg 3'	5'-CTA 3'	5'-AgC 3'	5'-CTC 3'	5'-CAT 3'	5'-TCC 3'	5'-AgT 3'
	1076		332	340				488	
	5'-ACA 3'		5'-TCC 3'	5'-gTT 3'				5'-CCA 3'	
Well No.	85	86	87	88	89	90	91	92	93

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

²The nucleotide position 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 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.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

CELL LINE VALIDATION SHEET					HLA-C*07 SSP subtyping kit ²															
					Well															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					201438101	201438102	201662403	201662404	201438105	201438106	201438107	201438108	201438109	201438110	201438111	201438112	201438113	201662414	201438115	201438114
					Prod. No.:															
IHC cell line ¹					C*															
1	9001	SA	*07:02		+	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-
2	9280	LK707	*07:01	*15:05	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	+	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	+	+	+	-	-	-	+	-	-	-	-	-	-	+	-	-
19	9038	BM16	*07:01		+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
26	9285	WT49	*07:01		+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:05	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-
28	9320	BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
29	9050	MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
32	9297	HAG	*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		+	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
46	9013	SCHU	*07:02		+	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-
47	9045	TUBO	*07:04	*15:02	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

CELL LINE VALIDATION SHEET																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
HLA-C*07 SSP subtyping kit ²																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
					Well																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

CELL LINE VALIDATION SHEET																				
HLA-C*07 SSP subtyping kit ²																				
					Well															
					33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
				Prod. No.:	201438133	201438134	201662435	201438136	201438137	201662438	201438139	201662440	201438141	201438142	201552243	201438144	201438145	201662446	201438147	201438148
	IHC cell line ¹		C*																	
1	9001	SA	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

CELL LINE VALIDATION SHEET					HLA-C*07 SSP subtyping kit ²															
					Well															
					49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
					201438149	201662450	201662451	201438152	201438153	201662454	201438155	201438156	201438157	201438158	201438159	201438160	201662461	201438162	201552263	201662464
					Prod. No.:															
IHC cell line ¹					C*															
1	9001	SA	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*05:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:01	*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Lot-specific Information

CELL LINE VALIDATION SHEET																							
HLA-C*07 SSP subtyping kit ²																							
						Well																	
						65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80		
					Prod. No.:	201662465	201438166	201552267	201552268	201662469	201552270	201438171	201438172	201662473	201438174	201438175	201662476	201662477	201662478	201438179	201438180		
	IHCW cell line ¹		C*																				
1	9001	SA	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	9280	LK707	*07:01	*15:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	9011	E4181324	*12:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	9275	GU373	*03:04	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	9009	KAS011	*06:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6	9353	SM	*03:04	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	9020	QBL	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	9025	DEU	*04:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	9026	YAR	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	9107	LKT3	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11	9051	PITOUT	*16:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
12	9052	DBB	*06:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	9004	JESTHOM	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
14	9071	OLGA	*01:02	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
15	9075	DKB	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	9037	SWEIG007	*02:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
17	9282	CTM3953540	*03:03	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
18	9257	32367	*01:02	*07:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
19	9038	BM16	*07:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
20	9059	SLE005	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
21	9064	AMALA	*03:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
22	9056	KOSE	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
23	9124	IHL	*01:02	*15:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
24	9035	JBUSH	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
25	9049	IBW9	*08:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
26	9285	WT49	*07:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
27	9191	CH1007	*07:04	*15:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
28	9320	BEL5GB	*05:01	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
29	9050	MOU	*16:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
30	9021	RSH	*17:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
31	9019	DUCAF	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
32	9297	HAG	*17:01	*17:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
33	9098	MT14B	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
34	9104	DHIF	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
35	9302	SSTO	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
36	9024	KT17	*03:03	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
38	9099	LZL	*03:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
39	9315	CML	*02:02	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
40	9134	WHONP199	*01:02	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
41	9055	H0301	*08:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
42	9066	TAB089	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
43	9076	T7526	*01:02	*08:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
44	9057	TEM	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
45	9239	SHJO	*06:02	*17:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
47	9045	TUBO	*07:04	*15:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
48	9303	TER-ND	*04:01	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

CELL LINE VALIDATION SHEET																		
HLA-C*07 SSP subtyping kit ²																		
						Well												
						81	82	83	84	85	86	87	88	89	90	91	92	93
					Prod. No.:	201438181	201552282	201662483	201662484	201662485	201552286	201662487	201662488	201662489	201662490	201662491	201662492	201662493
	IHCW cell line ¹		C*															
1	9001	SA	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01		*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*12:02			-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04		*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02			-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04		*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01			-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01			-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02			-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02		*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02			-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03		*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02		*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01			-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03			-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02		*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02			-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*07:01			-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04		*15:05	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*05:01		*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*16:01			-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01			-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:01		*17:03	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04			-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01			-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03		*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03			-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02		*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02		*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02			-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*01:02			-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02		*08:01	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*12:03			-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02		*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04		*15:02	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*04:01		*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

¹The provided cell line HLA specificities are retrieved from the <http://www.ihwg.org/hla> web site. The specificity of an individual cell line may thus be subject to change.

²The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 5, 10, 11, 13, 15, 16, 18, 19, 23 to 31, 34 to 36, 38, 39, 41 to 44, 46 to 76 and 78 to 93 were available.

The specificities of the primers in primer solutions 5, 10, 11, 13, 15, 16, 18, 19, 24 to 27, 31, 36, 42 to 44, 47 to 50, 53 to 60, 63, 64, 68, 71, 72, 74, 78, 79, 81, 85, and 89 to 91 were tested by separately adding one 5'-primer, respectively one 3'-primer.

In primer solutions 35, 38, 46, 51, 61, 65 to 67, 69, 70, 73, 75, 80, 82 to 84, 87, 88, 92 and 93 it was only possible to test the 5'-primer, the 3'-primer were not possible to test.

In primer solutions 23, 28 to 30, 34, 39, 41, 52, 62, 76 and 86 it was only possible to test the 3'-primers, the 5'-primers were not possible to test.

In primer solutions 3, 8, 11, 20, 22, 26, 33, 42, 44, 47 to 49, 53, 55 to 57, 59, 63, 71, 85 and 89 one or two 5'-primers were not possible to test, and in primer solutions 4, 5, 9, 13 to 15, 18, 21, 25, 32, 37, 40, 43, 47, 48, 54, 58, 60, 63, 64, 68, 74, 77 and 85 one or two 3'-primers were not possible to test.

Additional primers in primer solutions 2, 8, 20, 21, 33, 37, 40 and 45 were tested by separately adding either one 5'-primer, one or two 3'-primers.

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

101.615-24/04 – including *Taq* pol., IFU-01
101.615-24u/04u – without *Taq* pol., IFU-02

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

Lot No.: **4D7**

Lot-specific Information

ADDRESSES:

Manufacturer:

Olerup SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Tel: +46-8-717 88 27

Fax: +46-8-717 88 18

E-mail: info-ssp@olerup.com

Web page: <http://www.olerup-ssp.com>

Distributed by:

Olerup GmbH, Löwengasse 47 / 6, AT-1030 Vienna, Austria.

Tel: +43-1-710 15 00

Fax: +43-1-710 15 00 10

E-mail: support-at@olerup.com

Web page: <http://www.olerup.com>

Olerup Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

Tel: 1-877-OLERUP1

Fax: 610-344-7989

E-mail: info.us@olerup.com

Web page: <http://www.olerup.com>

For information on *Olerup* SSP distributors worldwide, contact **Olerup GmbH**.