**⊙**LERUPSSP® HLA-C\*04 Release Note Page 1 of 3

101.612-12 – including *Taq* polymerase 101.612-12u – without *Taq* polymerase

Lot No.: **67X** 

### Olerup SSP® HLA-C\*04

Product number: 101.612-12 – including *Taq* polymerase

101.612-12u – without *Taq* polymerase

Lot number: 67X

Expiry date: 2017-May-01

Number of tests: 12 Number of wells per test: 52+1

#### CHANGES COMPARED TO THE PREVIOUS HLA-C\*04 LOT (86S):

Well	5'-primer	3'-primer	rationale
2	Added	-	5'-primer added for the C*04:01:61 allele.
3	Added	-	5'-primer added for the C*04:01:61 allele.
10	-	Added	3'-primer added for the C*04:91allele.
13	-	Added	3'-primer added for the C*04:132 allele.
14	-	Added	5'-primers added for the C*04:163 allele.
20	-	Added	3'-primer added for the C*04:170N allele.
21	-	Added	3'-primer added for the C*04:121 allele.
25	-	Added	3'-primer added for the C*04:163 allele.
26	-	Added	3'-primer added for the C*04:86 allele.
29	-	Added	3'-primer added for the C*04:132 and
			C*04:170N alleles.
32	-	Added	3'-primer added for the C*04:121 allele.
35	-	Added	3'-primer added for the C*04:137 allele.
36	Added	-	5'-primer added for the C*04:117 allele.
37	Added	-	5'-primer added for the C*04:125 allele.
38	Added	-	5'-primer added for the C*04:117 allele.
39	-	Added	3'-primer added for the C*04:113 allele.
40	-	Added	3'-primer added for the C*04:86 allele.
41	Added	-	5'-primer added for the C*04:131 allele.
43	-	Added	3'-primer added for the C*04:137 allele, 3'-
			primer added for the allelic resolution of the
			C*04:88N allele.
44	Added	-	5'-primer added for the C*04:125 allele.
46	Added	-	5'-primer added for the C*04:131 allele.
47	-	Added	3'-primer added for the C*04:161 allele.
49	New	New	New primer pairs for the C*04:91 and
			C*04:173N alleles.
50	New	New	New primer pairs for the C*04:161 and
			C*04:162 alleles.
51	New	New	New primer pair for the C*04:165 allele.
52	New	New	New primer pairs for the C*04:150 and
			C*04:155 alleles.
53	-	-	Negative Control.

THE NUMBER OF WELLS is increased from 48 to 53 wells.



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#### **ALLELE COVERAGE:**

C\*04:01 to C\*04:177, i.e. all the currently recognized HLA-C\*04 alleles, will be amplified by the primers in the HLA-C\*04 kit <sup>1,2</sup>; <a href="www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a>, 2014-July-25, release 3.17.0.

The HLA-C\*04 kit enables separation of the confirmed HLA-C\*04 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.

The HLA-C\*04 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\*04 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
C*04:05, 04:112	6	C*04:61, 04:96	34
C*04:15:02, 04:44, 04:47	20	C*04:62, 04:76	35
C*04:23, 04:38, 04:39	21	C*04:65, 04:72	33
C*04:25, 04:40, 04:41	23	C*04:67, 04:93N	46
C*04:46, 04:50	27	C*04:79, 04:113	39
C*04:48, 04:75	28	C*04:81, 04:88N	43
C*04:54, 04:105N	41	C*04:114, 04:146	47
C*04:56, 04:64:01-04:64:02	40	C*04:150, 04:155	52
C*04:59Q, 04:78	32		

The HLA-C\*04 primer set cannot distinguish the following silent mutations: the C\*04:01:01-04:01:09, 04:01:11-04:01:22, 04:01:24-04:01:27, 04:01:29-04:01:33 and 04:01:35-04:01:62 alleles, the C\*04:01:10 and 04:01:23 alleles, the C\*04:03:01-04:03:02 alleles, the C\*04:04:01-04:04:02 alleles, the C\*04:15:01 and 04:15:03 alleles, the C\*04:42:01-04:42:02 alleles, the C\*04:64:01-04:64:02 and the C\*04:94:01-04:94:02 alleles.

The C\*04:115N and C\*04:137 alleles cannot be separated by this lot of HLA-C\*04 high resolution kit. The C\*04:106 and the C\*04:01:01-04:01:09, 04:01:11-04:01:22, 04:01:24-04:01:27, 04:01:29-04:01:33, 04:01:35-04:01:62, 04:85, 04:90, 04:92, 04:97-04:99, 04:101-04:102, 04:104, 04:106, 04:109, 04:118-04:119, 04:124, 04:126-04:129, 04:133-04:136, 04:138, 04:141-04:143, 04:145, 04:148-04:149, 04:151-04:152, 04:154, 04:156, 04:158, 04:164, 04:167-04:168 and 04:174-04:177 alleles cannot be separated by this lot of HLA-C\*04 high resolution kit.

## **RESOLUTION IN HLA-C\*04 HOMO- AND HETEROZYGOTES:** Good.

# INFLUENCE ON THE INTERPRETATION OF HLA-C\*04 SUBTYPINGS BY NON-HLA-C\*04 ALLELES:

None frequently occurring.

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<sup>&</sup>lt;sup>1</sup>Alleles 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 <a href="http://hla.alleles.org/alleles/deleted.html">http://hla.alleles.org/alleles/deleted.html</a>.

<sup>&</sup>lt;sup>2</sup>The HLA-C\*04 primer set cannot separate the C\*04:03:01-04:03:02 and 02:49 alleles or the C\*04:107 and the C\*02:12 and 02:55 alleles. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C\*02 high resolution kit.

**●LERUPSSP®** HLA-C\*04

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MODIFICATIONS MADE DUE TO COMMENTS FROM CUSTOMERS:

No comments received.



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