•LERUP SSP

HLA-C*04 Release Note Page 1 of 3

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

Lot No.: **0F2**

Olerup SSP® HLA-C*04

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

101.612-12u – without *Taq* polymerase

Lot number: 0F2

Expiry date: 2021-05-01

Number of tests: 12 Number of wells per test: 63+1

CHANGES COMPARED TO THE PREVIOUS HLA-C*04 LOT (5D7):

| Well | 5'-primer | 3'-primer | rationale | |
|------|-----------|--|--|--|
| 1 | - ' | Modified | 3'-primer modified for improved HLA-specific amplification. | |
| 4 | Modified | - | 5'-primer modified for improved HLA-specific amplification. | |
| 11 | Added | - | 5'-primer added for the C*04:01:74 allele. | |
| 13 | - | Added | 3'-primer added for the C*04:255N allele. | |
| 14 | - | Added | 3'-primer added for the C*04:223:01 allele. | |
| 17 | Added | - | 5'-primer added for the C*04:234N allele. | |
| 19 | Added | - | 5'-primer added for the C*04:238 allele, 5'-primer added from well 23. | |
| 20 | - | Added | 3'-primer added for the C*04:209 allele. | |
| 21 | - | Added | 3'-primer added for the C*04:218 allele. Exchanged of positive control primer pairs. | |
| 22 | Added | - | 5'-primer added for the C*04:226 allele. | |
| 23 | Moved | - | 5'-primers moved to wells 19 and 44 for improved HLA-specific amplification. | |
| 24 | Added | - | 5'-primer added for increased allelic resolution of the C*04:24 allele. | |
| 26 | - | Added | 3'-primer added for the C*04:250 allele. | |
| 27 | - | Added | 3'-primer added for the C*04:204 allele. | |
| 28 | - | Added | 3'-primers added for the C*04:204 and C*04:223:01 alleles. | |
| 29 | - | Added | 3'-primer added for the C*04:249 allele. | |
| 30 | Added | - | 5'-primer added for the C*04:234N allele. | |
| 31 | Added | - | 5'-primer added for the C*04:226 allele. | |
| 32 | - | Added | 3'-primer added for the C*04:141 allele. | |
| 33 | - | Modified, added | 3'-primers modified for improved HLA- specific amplification, 3'-primer added for the C*04:218 allele. | |
| 34 | - | Added | 3'-primers added for the C*04:201 and C*04:253N alleles | |
| 35 | - | Added | 3'-primers added for the C*04:255N allele. | |
| 36 | - | - Exchanged positive control primer pairs formation. | | |



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| 38 | - | - | Exchanged positive control primer pairs for improved HLA-specific amplification. |
|----|-------|-----------|--|
| 40 | - | Added | 3'-primer added for the C*04:201 allele. |
| 43 | - | Added | 3'-primer added for the C*04:209 allele. |
| 44 | Added | - | 5-primer added for the C*04:254 allele, 5'-primer added from well 23. |
| 45 | Added | - | 5'-primer added for the C*04:233N allele. |
| 46 | Added | - | 5'-primers added for the C*04:187 and C*04:254 alleles. |
| 48 | - | Exchanged | 3'-primer exchanged for improved HLA- specific amplification. |
| 49 | - | Added | 3'-primer added for the C*04:225N allele. |
| 51 | Added | - | 5'-primer added from well 56. |
| 53 | - | Exchanged | 3'-primer and positive control primer pairs exchanged for decreased tendency of primer oligomer formation. |
| 54 | - | Added | 3'-primers added for the C*04:219 and C*04:249 alleles. |
| 55 | - | Added | 3'-primers added for the C*04:225N and C*04:250 alleles. |
| 56 | Moved | Exchanged | 5'-primer moved to well 51 and 3'-primer exchanged for improved HLA-specific amplification. |
| 57 | Added | - | 5'-primer added for the C*04:233N allele. |
| 59 | - | - | Exchanged positive control primer pairs for improved HLA-specific amplification. |
| 60 | Added | Added | Negative Control moved to well 64, primer pair added for improved allelic resolution. |
| 61 | New | New | New primer pairs added for the C*04:206 and C*04:236N alleles. |
| 62 | New | New | New primer pairs added for the C*04:141 and C*04:253N alleles. |
| 63 | New | New | New primer pair added for the C*04:180:01-04:180:02 alleles. |
| 64 | - | - | Negative control added from well 60. |

THE NUMBER OF WELLS is increased from 60 to 64 wells.

ALLELE COVERAGE:

C*04:01 to C*04:257, i.e. all the currently recognized HLA-C*04 alleles, will be amplified by the primers in the HLA-C*04 kit ^{1,2}; www.ebi.ac.uk/imgt/hla, 2016-October-14, release 3.26.0.

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.



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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*04:20, 04:238 | 19 | C*04:62, 04:76 | 35 |
| C*04:23, 04:38, 04:39 | 21 | C*04:65, 04:72 | 33 |
| C*04:25, 04:41 | 23 | C*04:67, 04:93N, 04:187 | 46 |
| C*04:44, 04:47 | 20 | C*04:79, 04:113 | 39 |
| C*04:46, 04:50 | 27 | 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*04:139, 04:226 | 22 |
| C*04:59Q, 04:78 | 32 | C*04:150, 04:155 | 52 |

¹Alleles 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.

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.

MODIFICATIONS MADE DUE TO COMMENTS FROM CUSTOMERS:

No comments received.

Change in revision R01 compared to R00:

1. The expiration date has been altered due to extension of shelf-life.

