**⊙LERUPSSP®**HLA-A\*02 Release Note

101.412-24/04 – including *Taq* polymerase 101.412-24u/04u – without *Taq* polymerase

Lot No.: **08Y** 

## Olerup SSP® HLA-A\*02

Product number: 101.412-24/04 – including *Taq* pol.

101.412-24u/04u - without *Taq* pol.

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Lot number: 08Y

Expiry date: 2017-September-01

Number of tests: 24 tests – Product No. 101.412-24/24u

4 tests - Product No. 101.412-04/04u

Number of wells per test: 95+1

## CHANGES COMPARED TO THE PREVIOUS HLA-A\*02 LOT (10X):

Well	5'-primer	3'-primer	rationale
5	Added	-	5'-primer added for the A*02:01:109 allele.
7	Added	-	5'-primers added for the A*02:540N and 02:542 alleles.
25	-	Removed, added	3'-primer removed for improved HLA-specific amplification, 3'-primer added for increased yield of the A*02:384 allele.
38	Added	-	5'-primer added for the A*02:289:02 allele.
49	-	Removed	3'-primers removed for improved specificity.
52	Added	-	5'-primer added for the A*02:434 allele.
53	Added	-	5'-primer added for the A*02:516N allele.
55	-	Added	3'-primer added for the A*02:486 allele.
63	Added	-	5'-primer added for the A*02:540N allele.
65	-	Added	3'-primer added for the A*02:486 allele.
66	Added	-	5'-primer added for the A*02:434 allele.
68	-	Added	3'-primer added for the A*02:113:02N allele.
71	-	Added	3'-primer added for the A*02:553 allele.
73	-	Added	3'-primer added for the A*02:553 allele.
75	-	Added	3'-primer added for increased yield of the A*02:384 allele.
77	-	Added	3'-primer added for the A*02:525N allele.
78	-	Added	3'-primer added for the A*02:01:14Q allele.
79	-	Added	3'-primer added for the A*02:525N allele.
80	-	Added	3'-primer added for the A*02:01:14Q allele.
82	Added	-	5'-primer added for the A*02:514N allele.
84	-	Added	3'-primer added for the A*02:394 allele.
85	Added	-	5'-primer added for the A*02:542 allele.
87	-	Added	3'-primer added for the A*02:394 allele.
89	-	Added	3'-primer added for the A*02:468:02N allele.
96	-	-	Updated negative control.

THE NUMBER OF WELLS is unchanged.

## **ALLELE COVERAGE:**

A\*02:01 to A\*02:555, i.e. all the currently recognized HLA-A\*02 alleles, will be amplified by the primers in the HLA-A\*02 subtyping kit<sup>1</sup>; <a href="www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a>, 2015-January-19, release 3.19.0.



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The HLA-A\*02 kit enables separation of the confirmed HLA-A\*02 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-A\*02 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-A\*02 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
A*02:01:83, 02:01:105, 02:01:107, 02:343, 02:399	55	A*02:139, 02:235	88
A*02:28, 02:409	27	A*02:141, 02:275	90
A*02:60:01-02:60:02, 02:254, 02:501N	45	A*02:145, 02:221	64
A*02:97:01-02:97:02, 02:305N	59	A*02:150, 02:197, 02:325	94
A*02:107, 02:202, 02:251	65	A*02:159, 02:293Q, 02:364, 02:390	39
A*02:111, 02:350N	67	A*02:180, 02:358	29
A*02:116, 02:196	71	A*02:193, 02:213	78
A*02:119, 02:263	73	A*02:233, 02:459	24
A*02:120, 02:223N	74	A*02:269, 02:367	70
A*02:132, 02:215, 02:237, 02:467	83	A*02:301N, 02:524	63
A*02:134, 02:314N	85	A*02:419, 02:476N	79
A*02:138. 02:284N	87		

The HLA-A\*02 subtyping kit cannot distinguish the silent mutations in the A\*02:01:01.01, 02:01:01:03-02:01:02, 02:01:04-02:01:13, 02:01:15, 02:01:18-02:01:19, 02:01:21-02:01:51, 02:01:53-02:01:62, 02:01:64-02:01:73, 02:01:75-02:01:81, 02:01:84-02:01:86, 02:01:89-02:01:90, 02:01:92-02:01:100, 02:01:102-02:01:104, 02:01:108-02:01:112 and 02:01:114-02:01:115 alleles, the A\*02:01:03, 02:01:101 and 02:01:106 alleles, the A\*02:01:17, 02:01:52, 02:01:63, 02:01:74 and 02:01:113 alleles, the A\*02:01:83, 02:01:105 and 02:01:107 alleles, the A\*02:01:87 and 02:01:91 alleles, the A\*02:02:01-02:02:02 alleles, the A\*02:03:01 and 02:03:03-02:03:08 alleles, the A\*02:05:01-02:05:06 alleles, the A\*02:06:01-02:06:11 and 02:06:13-02:06:18 alleles, the A\*02:07:01-02:07:07 alleles, the A\*02:11:01, 02:11:03-02:11:07 alleles, the A\*02:17:01-02:17:03 alleles, the 02:20:01-02:20:02 alleles, the A\*02:22:01-02:22:02 alleles, the A\*02:24:01-02:24:02 alleles, the A\*02:40:01-02:40:02 alleles, the A\*02:60:01-02:60:02 alleles, the A\*02:74:01-02:74:02 alleles, the A\*02:76:01-02:76:02 alleles, the A\*02:79:01-02:79:02 alleles, the A\*02:97:01-02:97:02 alleles, the A\*02:101:01-02:101:02 alleles, the A\*02:113:01N-02:113:02N alleles, the A\*02:153:01-02:153:02 alleles, the A\*02:171:01-02:171:02 alleles, the A\*02:243:01-02:243:02 alleles and the A\*02:289:01-02:289:02 alleles...

**RESOLUTION IN HLA-A\*02 HOMO- AND HETEROZYGOTES:** Good.



<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>.

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INFLUENCE ON THE INTERPRETATION OF HLA-A\*02 SUBTYPINGS BY NON-HLA-A\*02 ALLELES:

A\*02:01,68:xx = A\*02:95,68:xx.

## MODIFICATIONS MADE DUE TO COMMENTS FROM CUSTOMERS:

In primer mixes 25 and 75, a 3'-primer was added for increased yield of the A\*02:384 allele.

