■LERUP SSP^{*}

HLA-A*02

Release Note

101.412-24/04 – including *Taq* polymerase 101.412-24u/04u – without *Taq* polymerase Lot No.: **8F9**

Olerup SSP® HLA-A*02

Product number:	101.412-24/04 – including <i>Taq</i> pol.		
	101.412-24u/04u – without <i>Tag</i> pol.		
Lot number:	8F9		
Expiry date:	2020-05-01		
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 (7D9):

Well	5'-primer	3'-primer	rationale		
2	-	Modified	3'-primer modified for improved HLA-specific amplification of the A*02:394 allele.		
10	Added	-	5'-primer added for increased yield.		
19	Exchanged	Moved	5'-primer exchanged for improved allelic resolution, 3'-primer moved to well 49 for decreased tendency of primer oligomer formation.		
21	-	Added	3'-primer added for improved allelic resolution.		
26	-	Added	3'-primer added for increased yield.		
27	Modified	-	5'-primers modified for improved HLA-specific amplification.		
30	Added	-	5'-primer added for the A*02:618Q allele.		
33	Modified	-	5'-primer modified for decreased tendency of primer oligomer formation.		
38	Modified	-	5'-primer modified for improved HLA-specific amplification and decreased tendency of primer oligomer formation.		
44	Added	-	5'-primer added for the A*02:564 allele.		
45	-	Added	3'-primer added for improved HLA-specific amplification.		
49	-	Added	3'-primer added from well 19 for decreased tendency of primer oligomer formation.		
55	Modified	-	5'-primer modified for increased yield of the A*02:13 allele.		
56	-	Added	3'-primer added from well 92 for the A*02:173 allele.		
64	Added	-	5'-primer added for the A*02:564 allele.		
73	-	Added	3'-primer added from well 92 for the A*02:146 allele.		
74	Added	-	5'-primer added for the A*02:549 allele.		
75	-	Added	3'-primer added for the A*02:562 allele.		
77	-	Added	3'-primer added from well 92 for the A*02:366N allele.		

HLA-A*02

101.412-24/04 – including *Taq* polymerase 101.412-24u/04u – without *Taq* polymerase Lot No.: **8F9**

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79	-	Added	3'-primer added for the A*02:581 allele, 3'- primer added from well 92 for the A*02:146 allele.	
84	Added	Added	5'-primer added for the A*02:618Q allele, 3'- primer added from well 92 for the A*02:173 allele.	
85	Added	-	5'-primer added for the A*02:622N allele.	
87	-	Added	3'-primer added for the A*02:498 allele.	
88	-	Added	3'-primer added for the A*02:498 allele.	
89	-	Added	3'-primer added for the A*02:562 allele.	
92	Added	Moved, added	3'-primers moved to wells 56, 73, 79 and 84, primer pair added for improved allelic resolution.	

THE NUMBER OF WELLS is unchanged.

ALLELE COVERAGE:

A*02:01 to A*02:634, i.e. all the currently recognized HLA-A*02 alleles, will be amplified by the primers in the HLA-A*02 subtyping kit¹, <u>www.ebi.ac.uk/imgt/hla</u>, 2016-July-14, release 3.25.0.

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*02:140, 02:468:02N	89
A*02:60:01-02:60:02, 02:254, 02:501N	45	A*02:141, 02:275	90
A*02:96, 02:587	15	A*02:150, 02:197, 02:325	94
A*02:97:01-02:97:02, 02:305N	59	A*02:159, 02:293Q, 02:364, 02:390	39
A*02:107, 02:202, 02:251	65	A*02:180, 02:358	29
A*02:111, 02:350N	67	A*02:193, 02:213	78
A*02:116, 02:196	71	A*02:233, 02:459	24
A*02:119, 02:263	73	A*02:269, 02:367	70
A*02:120, 02:223N	74	A*02:301N, 02:524:01- 02:524:02	63
A*02:132, 02:215, 02:237, 02:467	83	A*02:419, 02:476N	79
A*02:134, 02:314N	85		

HLA-A*02

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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 <u>http://hla.alleles.org/alleles/deleted.html</u>.

RESOLUTION IN HLA-A*02 HOMO- AND HETEROZYGOTES:

Good.

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 mix 2, one 3'-primer was modified for improved HLA-specific amplification of the A*02:394 allele.

