

## Olerup SSP® DQB1 high resolution for frequent alleles

**Product number:** 101.221-12 – including *Taq* polymerase  
101.221-12u – without *Taq* polymerase

**Lot number:** 2F4

**Expiry date:** 2020-01-01

**Number of tests:** 12 tests

**Number of wells per test:** 95+ 1

### CHANGES COMPARED TO THE PREVIOUS DQB1 HIGH RESOLUTION LOT (9D8):

Well	5'-primer	3'-primer	rationale
5	Added	-	5'-primer added for the DQB1*05:106 allele.
10	Modified	Modified	5'-and 3'-primers modified for the increased yield and improved HLA-specific amplification.
12	Added	Added	5'-primer added for the DQB1*06:210 allele, 3'-primer added for the DQB1*03:239 allele.
13	Added	-	5'-primer added for the DQB1*02:62 allele.
15	-	Added	3'-primer added for the DQB1*02:78 allele.
17	-	Added	3'-primers added for the DQB1*03:232 and DQB1*04:32 alleles.
18	Added	-	5'-primer added for the DQB1*03:237N allele.
25	-	Removed, added	3'-primer removed for decreased tendency of primer oligomer formation, 3'-primers added for the DQB1*05:03:14 and DQB1*05:128N allele.
30	-	Added	3'-primer added for the DQB1*02:67N allele.
33	Added	-	5'-primer added for the DQB1*03:199 allele.
34	Added	-	5'-primer added for the DQB1*05:112 allele.
35	Added	Added	5'-primer added for the DQB1*06:212 allele, 3'-primer added for the DQB1*05:103 allele.
38	Added	Added	5'-primer added for the DQB1*06:194 allele, 3'-primer added for the DQB1*04:33 and DQB1*06:188 alleles.
39	Added	Added, modified	5'-primers added for the DQB1*05:111 and DQB1*06:202 alleles, 3'-primer added for the DQB1*03:191 allele, 3'-primer modified for improved HLA-specific amplification.
40	Added	-	5'-primers added for the DQB1*03:245 and DQB1*05:133 alleles.
41	Removed	Added	5'-primer removed for improved HLA-specific amplification, 3'-primer added for the DQB1*03:212 allele.
42	-	Added	3'-primer added for the DQB1*03:239 allele.
44	-	Modified, added	3'-primer modified for decreased tendency of primer oligomer formation, 3'-primer added for the DQB1*03:191 allele.
45	Added	Added	5'-primer added for the DQB1*06:212 allele, 3'-primers added for the DQB1*06:216N and DQB1*06:224 alleles.
49	Added	-	5'-primer added for the DQB1*03:246 allele.
50	Added	-	5'-primer added for the DQB1*03:201 allele.
51	Modified, moved	Moved	5'-primer modified, 5'-primer moved to well 91 and 3'-primer moved to well 90 for decreased tendency of primer oligomer formation.
54	-	Added	3'-primer added for the DQB1*04:36N allele.
56	-	Added	3'-primer added for the DQB1*06:224 allele.
58	-	Added	3'-primer added for the DQB1*03:228 allele.
61	-	Added	3'-primer added for the DQB1*05:128N allele.
62	Added	-	5'-primer added for the DQB1*03:205 allele.

63	-	Added	3'-primer added for the DQB1*03:240 allele.
66	Added	-	5'-primers added for the DQB1*03:243 and DQB1*05:133 alleles.
67	Added	-	5'-primer added for the DQB1*02:26 allele.
69	Added, modified	-	5'-primer added for the DQB1*03:225 allele, 5'-primers modified for improved HLA-specific amplification.
71	Added, modified	Exchanged	5'-primer added for the DQB1*03:207 allele, 5'-primer modified and 3'-primer exchanged for improved HLA-specific amplification and decreased tendency of primer oligomer formation.
72	Added	Added	5'-primers added for the DQB1*03:150 and DQB1*03:201 alleles, 3'-primer added for the DQB1*06:218 allele.
73	Added	-	5'-primer added for the DQB1*03:150 allele.
74	-	Added	3'-primer added for the DQB1*05:97 allele.
75	Added, modified	Added	5'-primer added for the DQB1*06:202 allele, 5'-primer modified for improved HLA-specific amplification, 3'-primer added for the DQB1*06:122 allele.
76	Modified	Modified, added	5'-and 3'-primers modified for improved HLA-specific amplification, 3'-primer added for the DQB1*06:53:02 allele.
77	-	Added, modified	3'-primer added for the DQB1*06:190:01 allele, 3'-primer modified for improved HLA-specific amplification.
78	Added	Added	5'-primer added for the DQB1*02:232 allele, 3'-primer added for the DQB1*06:190:01 allele.
79	Added	-	5'-primer added for the DQB1*06:187 allele.
84	Added	Added	Primer pair added for the DQB1*06:217 allele.
85	Added	-	5'-primer added for the DQB1*06:184 allele.
86	Added, modified	-	5'-primer added for the DQB1*06:210 allele, 5'-primer modified for improved HLA-specific amplification.
87	Added	-	5'-primer added for the DQB1*06:184 allele.
90	-	Added	3'-primer added for the DQB1*03:247 allele, 3'-primer added from well 51 for decreased tendency of primer oligomer formation.
91	Added	-	5'-primer added from well 51 for decreased tendency of primer oligomer formation.
92	-	Added	3'-primer added for the DQB1*02:78 allele.
94	Modified	-	5'-primer modified for increased yield.

**THE NUMBER OF WELLS** is unchanged.

**ALLELE COVERAGE:**

All the currently recognized DQB1 alleles give rise to unique amplification patterns<sup>1,2</sup>; [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), 2017-January-20, release 3.27.0.

**DQB1 high resolution for frequent alleles**  
**101.221-12 – including Taq pol. Release Note**  
**101.221-12u – without Taq pol.**

**Lot No.: 2F4**

The following DQB1 alleles can be distinguished by the different sizes of the specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
DQB1*02:15, 02:30	67	DQB1*05:13, 05:24	59
DQB1*02:16, 02:20N	64	DQB1*05:17, 05:47	54
DQB1*02:23, 02:28	68	DQB1*05:25, 05:112	34
DQB1*02:29, 02:31	69	DQB1*06:02:04, 06:02:16	47
DQB1*03:31, 03:87	35	DQB1*06:02:19, 06:48	62
DQB1*03:35, 03:246	49	DQB1*06:31, 06:145	35
DQB1*03:59, 03:71	43	DQB1*06:35, 06:45	35
DQB1*03:66N, 03:224	42	DQB1*06:70, 06:76	80
DQB1*03:116, 03:243	66	DQB1*06:75N, 06:80	84
DQB1*04:05, 04:15	30	DQB1*06:102N, 06:104	90
DQB1*05:10, 05:23	54		

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

<sup>2</sup>The DQB1 high primer set cannot separate the DQB1\*05:03:14 from the DQB1\*05:43:01 alleles. These alleles can be distinguished by the DQB1\*05 kit.

**RESOLUTION IN DQB1 HOMOZYGOTES AND HETEROZYGOTES:**

Very good.

**MODIFICATIONS MADE DUE TO COMMENTS FROM CUSTOMERS:**

In primer mix 94, a 5'-primer was modified for increased yield.