

## **Olerup SSP® DQB1 high resolution for frequent alleles**

**Product number:** 101.221-12 – including *Taq* polymerase  
 101.221-12u – without *Taq* polymerase  
**Lot number:** 9D8  
**Expiry date:** 2019-02-01  
**Number of tests:** 12 tests  
**Number of wells per test:** 95+ 1

### **CHANGES COMPARED TO THE PREVIOUS DQB1 HIGH RESOLUTION LOT (17Y):**

<b>Well</b>	<b>5'-primer</b>	<b>3'-primer</b>	<b>rationale</b>
1	-	Added	3'-primer added for the DQB1*02:01:21 allele.
5	Modified, Added	-	5'-primer modified for increased yield, 5'-primer added for the DQB1*05:51 allele.
8	-	Added	3'-primers added for the DQB1*02:01:21 and DQB1*06:171 alleles.
13	Added	-	5'-primer added for the DQB1*03:204 allele.
14	Added	-	5'-primer added for the DQB1*03:204 allele.
15	Added	-	5'-primer added for the DQB1*02:42 allele.
18	Added	Removed	5'-primer added for the DQB1*03:188 allele, 3'-primer removed for decreased tendency of primer oligomer formation.
21	Added	-	5'-primer added for the DQB1*04:27 allele.
24	-	Added	3'-primers added for the DQB1*05:02:13, DQB1*05:72 and DQB1*05:88 alleles.
25	-	Added	3'-primers added for the DQB1*05:03:14 and DQB1*05:72 alleles.
30	Added	-	5'-primer added for the DQB1*04:27 allele.
33	Added	-	5'-primer added for the DQB1*03:200 allele.
35	-	Added	3'-primer added for the DQB1*05:101 allele.
36	Added	-	5'-primer added for the DQB1*06:164 allele.
38	Added	-	5'-primer added for the DQB1*05:79 allele.
39	Modified	-	5'-primer modified for increased yield.
40	Added, Modified	-	5'-primer added and modified from well 41 for increased yield.
41	Modified, Moved	Added	5'-primer modified and moved to well 40 for improved HLA-specific amplification, 3'-primer added for the DQB1*03:213N allele.
42	Added	Added	5'-primer added for the DQB1*05:79 allele, 3'-primer added for the DQB1*03:213N allele.
45	Added	-	5'-primer added for the DQB1*06:164 allele.
51	-	Modified	3'-primer modified for decreased tendency of primer oligomer formation.
53	-	Added	3'-primer added for the DQB1*02:51 allele.
54	-	Added	3'-primer added for the DQB1*05:71 allele.
56	Added	Added	5'-primer added for the DQB1*03:177 allele, 3'-primer added for the DQB1*03:197Q allele.
57	-	Added	3'-primer added for the DQB1*02:54 allele.
58	Added	-	5'-primer added for the DQB1*05:51 allele.
59	-	Added	3'-primer added for the DQB1*05:101 allele.
60	-	Added	3'-primer added for the DQB1*05:88 allele.
61	-	Added	3'-primer added for the DQB1*05:88 allele.
62	-	Added	3'-primer added for the DQB1*05:110N allele.
64	-	Added	3'-primer added for the DQB1*02:51 allele.

65	-	Added	3'-primer added for the DQB1*02:46 allele.
66	Added	-	5'-primer added for the DQB1*05:90N allele.
67	Added	-	5'-primer added for the DQB1*02:58N allele.
69	Added	-	5'-primer added for the DQB1*02:58N allele.
71	Added	-	5'-primers added for the DQB1*03:188 and DQB1*03:211 alleles.
72	Added	-	5'-primer added for the DQB1*02:50 allele.
73	Added	-	5'-primers added for the DQB1*03:23:02 and DQB1*03:211 alleles.
74	-	Added	3'-primer added for the DQB1*05:71 allele.
75	-	Added	3'-primer added for the DQB1*03:197Q allele.
78	-	Added	3'-primer added for the DQB1*06:170 allele.
81	Added	-	5'-primer added for the DQB1*03:170 allele.
84	-	Modified	3'-primer modified for increased yield.
85	Added	-	5'-primer added for the DQB1*06:191 allele.
86	Added	Added	Primer pair added for the DQB1*06:99:02, 5'-primer added for the DQB1*06:191 allele.
87	Added	-	5'-primer added for the DQB1*06:179N allele.
88	Moved	Exchanged	5'-primer moved to well 89, 3'-primer exchanged for decreased tendency of primer oligomer formation.
89	Added	-	5'-primer added from well 88.
92	-	Added	3'-primer added for the DQB1*02:54 allele.
93	Removed	-	5'-primer removed for improved HLA-specific amplification.

THE NUMBER OF WELLS is unchanged.

**ALLELE COVERAGE:**

All the currently recognized DQB1 alleles give rise to unique amplification patterns; [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), 2016-January-19, release 3.23.0.

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>.

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*06:02:04, 06:02:16	47
DQB1*02:16, 02:20N	64	DQB1*06:31, 06:145	35
DQB1*02:23, 02:28	68	DQB1*06:35, 06:45	35
DQB1*02:29, 02:31	69	DQB1*06:48, 06:97	62
DQB1*03:31, 03:87	35	DQB1*06:70, 06:76	80
DQB1*03:59, 03:71	43	DQB1*06:73, 06:77N	82
DQB1*04:03:01, 04:12	42	DQB1*06:74, 06:78	83
DQB1*04:05, 04:15	30	DQB1*06:75N, 06:80	84
DQB1*05:10, 05:23	54	DQB1*06:102N, 06:104	90
DQB1*05:13, 05:24	59	DQB1*06:131, 06:176	54
DQB1*05:17, 05:47	54		

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The DQB1 typing kit cannot distinguish the following silent mutations: the DQB1\*02:01:01-02:01:23 alleles, the DQB1\*02:02:01:01 and 02:02:02 alleles, the DQB1\*02:14:01-02:14:02 alleles, the DQB1\*03:01:01:01-03:01:02, 03:01:05-03:01:07, 03:01:09-03:01:12, 03:01:14, 03:01:16-03:01:24 and 03:01:26-03:01:31 alleles, the DQB1\*03:01:03, 03:01:13, 03:01:15 and 03:01:25 alleles, the DQB1\*03:02:01-03:02:19 alleles, the DQB1\*03:03:02:01-03:03:05 and 03:03:07-03:03:13 alleles, the DQB1\*03:05:01-03:05:04 alleles, the DQB1\*03:17:01-03:17:02 alleles, the DQB1\*04:01:01-04:01:02 and 04:01:04 alleles, the DQB1\*04:02:01-04:02:06 and the 04:02:09-04:02:10 alleles, the DQB1\*05:01:01:01-05:01:08, 05:01:11-05:01:22 and 05:01:22 and 05:01:22 and 05:01:22 alleles, the DQB1\*05:01:09-05:01:10 alleles, the DQB1\*05:02:01 and 05:02:03-05:02:13 alleles, the DQB1\*05:03:01:01-05:03:01:02, 05:03:03-05:03:11, 05:03:13 and 05:03:15-05:03:17 alleles, the DQB1\*05:05:01-05:05:02 alleles, the DQB1\*05:06:01-05:06:02 alleles, the DQB1\*05:11:01-05:11:02 alleles, the DQB1\*05:66:01-05:66:02, the DQB1\*06:01:01, 06:01:03-06:01:06, 06:01:08-06:01:09, 06:01:11 and 06:01:13-06:01:15 alleles, the DQB1\*06:01:02 and 06:01:07 alleles, the DQB1\*06:02:01, 06:02:03, 06:02:06, 06:02:08-06:02:15, 06:02:17-06:02:18 and 06:02:20-06:02:25 alleles, the DQB1\*06:02:04 and 06:02:16 alleles, the DQB1\*06:03:01, 06:03:03, 06:03:05-06:03:07, 06:03:11-06:03:12, 06:03:14-06:03:18 and 06:03:20-06:03:22 alleles, the DQB1\*06:03:04 and 06:03:08-06:03:09 alleles, the DQB1\*06:04:01 and 06:04:03-06:04:10 alleles, the DQB1\*06:08:02-06:08:03 alleles, the DQB1\*06:09:03, 06:09:06 alleles, the DQB1\*06:11:02-06:11:03 alleles, the DQB1\*06:14:01-06:14:02 alleles, the DQB1\*06:15:01-06:15:02 alleles, the DQB1\*06:19:01-06:19:02 alleles or the DQB1\*06:27:01-06:27:02 alleles.

**RESOLUTION IN DQB1 HOMOZYGOTES AND HETEROZYGOTES:**

Very good.

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

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

In primer mix 40, a 5'-primer was modified for improved HLA-specific amplification.