DQB1 high resolution for frequent alleles

101.221-12 – including *Taq* pol. **Release Note** 101.221-12u – without *Taq* pol.

Lot No.: **71V** 

## Olerup SSP® DQB1 high resolution for frequent alleles

Product number: **101.221-12 – including** *Taq* **polymerase** 

101.221-12u - without Tag polymerase

Lot number: **71V** 

**Expiry date:** 2016-November-01

Number of tests: 12 tests Number of wells per test: 95 + 1

## Changes compared to the previous DQB1 high resolution Lot (60S):

Well	5'-primer	3'-primer	rationale
4	-	Added	3'-primer added for the DQB1*03:50 allele.
6	-	-	Strength of control band has been optimized.
7	-	-	Strength of control band has been optimized.
8	-	-	Strength of control band has been optimized.
9	-	-	Strength of control band has been optimized.
10	Added	Added	5'-primers added for the DQB1*02:25 and DQB1*02:26 alleles, 3'-primer added for the DQB1*03:58 allele.
11	Added	-	5'-primer added for the DQB1*03:53 and DQB1*03:62 alleles.
12	-	Added	3'-primer added for the DQB1*03:57 allele.
13	Added	-	5'-primer added for the DQB1*03:54 allele.
14	Added	-	5'-primer added for the DQB1*03:55 allele.
15	Added	-	5'-primer added for the DQB1*06:01:07 allele.
16	-	-	Strength of control band has been optimized.
18	Added	Added	5'-primers added for the DQB1*03:60 and DQB1*06:85, 3'-primer added for the DQB1*06:89 alleles.
19	-	-	Strength of control band has been optimized.
20	-	-	Strength of control band has been optimized.
21	Added	-	Strength of control band has been optimized, 5'-primer added for the DQB1*04:11 allele.
22	Added	-	Strength of control band has been optimized, 5'-primer added for the DQB1*04:14 allele.
25	-	Added	3'-primers added for the DQB1*05:03:06 and DQB1*05:03:07 alleles.
26	Added	Added	Strength of control band has been optimized, primers have been optimized for improved HLA-specific amplification, primer pairs added for the DQB1*02:17 and DQB1*02:32 alleles.
27	-	Added	3'-primer added for the DQB1*03:67 allele.
29	Added	-	5'-primer added for the DQB1*06:03:07 allele.
30	Added	-	5'-primers added for the DQB1*04:15 and DQB1*04:16 alleles.
31	Added	-	5'-primers added for the DQB1*06:03:07 allele.
32	-	Added	3'-primer added for the DQB1*06:04:06 allele.
34	Added	-	5'-primer added for the DQB1*05:25 allele.
35	Added	Added	5'-primer added for the DQB1*03:87 allele, 3'-primer added for the DQB1*03:48 allele.
36	-	Added	3'-primer added for the DQB1*03:68 allele.
37	Added	-	5'-primers added for the DQB1*05:21 and DQB1*05:39 alleles.
38	Added	-	5'-primer added for the DQB1*05:26 allele.





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

Lot No.: **71V** 

39	Added	Added	5'-primer added for the DQB1*03:52, 3'-primers added for the DQB1*03:52 and DQB1*04:13 alleles.
40	Added	-	5'-primers added for the DQB1*05:27 and DQB1*05:41N alleles.
42	Added	Added	5'-primer added for the DQB1*04:16, 3'-primer added for the DQB1*03:66N alleles.
43	Added	-	5'-primers added for the DQB1*03:71 and DQB1*06:100 alleles.
44	-	Added	3'-primer added for the DQB1*03:89 allele.
45	Added	-	5'-primer added for the DQB1*06:85 allele.
47	-	Added	Strength of control band has been optimized, 3'-primers added for the DQB1*06:72, DQB1*03:84N and DQB1*06:65 alleles.
48	Added	- A -l -ll	5'-primers added for the DQB1*03:85 alleles.
49	Added	Added	Primer pair added for the DQB1*02:33 allele, 5'-primer added for the DQB1*05:32 and DQB1*05:42 alleles.
50	Added	-	5'-primer added for the DQB1*03:80 allele.
51	Added	Added	5'-primers added for the DQB1*03:53 and DQB1*03:62 alleles, 3'-primers added for the DQB1*03:49 and DQB1*03:51 alleles.
52	Added	-	5'-primer added for the DQB1*06:98 allele.
53	Added	-	5'-primer added for the DQB1*05:30 allele.
54	-	Added	3'-primers added for the DQB1*05:23 and DQB1*06:105 alleles.
56	-	Added	3'-primer added for the DQB1*03:83 allele.
57	-	-	Strength of control band has been optimized.
58	Added	Added	5'-primers added for the DQB1*05:28 and DQB1*05:30 allleles, 3'-primer added for the DQB1*03:56 allele.
59	Added	-	5'-primers added for the DQB1*05:24 and DQB1*06:54N alleles.
60	-	Added	3'-primers added for the DQB1*05:33 and DQB1*05:40 alleles.
61	Added	-	5'-primers added for the DQB1*05:34 and DQB1*05:40 alleles.
62	Added	Added	5'-primer added for the DQB1*03:75 allele, 3'-primers added for the DQB1*06:95 and DQB1*06:97 alleles.
63	-	Added	3'-primer added for the DQB1*03:86 alleles.
64	Moved, added	Moved, added	Negative Control moved to well 96, primer pairs added for the DQB1*02:16, DQB1*02:20N, DQB1*02:21 and DQB1*04:17 alleles.
65	New	New	New primer pair for the DQB1*02:21 allele.
66	New	New	New primer pairs for the DQB1*02:18N, DQB1*02:19 and DQB1*05:31 alleles.
67	New	New	New primer pairs for the DQB1*02:15, DQB1*02:27 and DQB1*02:30 alleles.
68	New	New	New primer pairs for the DQB1*02:23, DQB1*02:24, DQB1*02:27 and DQB1*02:28 alleles.
69	New	New	New primer pairs for the DQB1*02:24, DQB1*02:29 and DQB1*02:31 alleles.
70	New	New	New primer pair for the DQB1*03:61 allele.
71	New	New	New primer pairs for the DQB1*03:63, DQB1*03:76 and DQB1*05:36 alleles.
72	New	New	New primer pairs for the DQB1*03:64, DQB1*03:77 and DQB1*05:37 alleles.



DQB1 high resolution for frequent alleles

101.221-12 – including *Taq* pol. 101.221-12u – without *Taq* pol. **Release Note** 

Lot No.: **71V** 

74	New	New	New primer pairs for the DQB1*05:19 and DQB1*05:22 alleles.
75	New	New	New primer pairs for the DQB1*05:20 and DQB1*06:55 alleles.
76	New	New	New primer pairs for the DQB1*06:53 and DQB1*06:54N alleles.
77	New	New	New primer pairs for the DQB1*06:60 and DQB1*06:61 alleles.
78	New	New	New primer pairs for the DQB1*06:62 and DQB1*06:64 alleles.
79	New	New	New primer pairs for the DQB1*06:65 and DQB1*06:93 alleles.
80	New	New	New primer pairs for the DQB1*06:70 and DQB1*06:76 alleles.
81	New	New	New primer pairs for the DQB1*06:71 and DQB1*06:96 alleles.
82	New	New	New primer pairs for the DQB1*06:73 and DQB1*06:77N alleles.
83	New	New	New primer pairs for the DQB1*06:74 and DQB1*06:78 alleles.
84	New	New	New primer pairs for the DQB1*06:75N and DQB1*06:80 alleles.
85	New	New	New primer pairs for the DQB1*06:67 and DQB1*06:68 alleles.
86	New	New	New primer pairs for the DQB1*06:59 and DQB1*06:90 alleles.
87	New	New	New primer pairs for the DQB1*06:59, DQB1*06:87 and DQB1*06:91 alleles.
88	New	New	New primer pairs for the DQB1*06:57 and DQB1*06:81 alleles.
89	New	New	New primer pairs for the DQB1*06:83 and DQB1*06:101 alleles.
90	New	New	New primer pairs for the DQB1*06:86, DQB*06:104 and DQB1*06:102N alleles.
91	New	New	New primer pair for the DQB1*05:43 allele.
92	New	New	New primer pairs for the DQB1*02:12 and DQB1*02:19 alleles.
93	New	New	New primer pairs for the DQB1*02:13 and DQB1*03:85 alleles.
94	New	New	New primer pair for improved resolution of DQB1*03:69 allele.
95	New	New	New primer pair for the DQB1*02:22 allele.
96	Added	Added	Negative Control.
			<del>_</del>

THE NUMBER OF WELLS is increased from 64 to 96 wells.

## **ALLELE COVERAGE:**

All the currently recognized DQB1 alleles give rise to unique amplification patterns; <a href="https://www.ebi.ac.uk/imgt/hla">www.ebi.ac.uk/imgt/hla</a>, 2013-July-25, release 3.13.1.

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>.



DQB1 high resolution for frequent alleles 101.221-12 – including *Taq* pol. Release Note

101.221-12u – without *Taq* pol.

Lot No.: **71V** 

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*06:35, 06:45	35
DQB1*02:23, 02:28	68	DQB1*06:48, 06:97	62
DQB1*02:29, 02:31	69	DQB1*06:70, 06:76	80
DQB1*03:31, 03:87	35	DQB1*06:73, 06:77N	82
DQB1*03:36, 03:51	51	DQB1*06:74, 06:78	83
DQB1*03:59, 03:71	43	DQB1*06:75, 06:80	84
DQB1*04:03:01, 04:12	42	DQB1*06:102N, 06:104	90
DQB1*04:05, 04:15	30		

The DQB1 typing kit cannot distinguish the following silent mutations: the DQB1\*02:01:01-02:01:13 alleles, the DQB1\*02:02:01-02:02:02 alleles, the DQB1\*03:01:01-03:01:02, 03:01:05-03:01:07, 03:01:09-03:01:12, 03:01:14 and 03:01:16-03:01:20 alleles, the DQB1\*03:01:03, 03:01:13 and 03:01:15 alleles, the DQB1\*03:02:01-03:02:09 alleles, the DQB1\*03:03:02:01-03:03:05 and 03:03:07 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\*04:02:01-04:02:04 alleles, the DQB1\*05:01:01-05:01:08 alleles, the DQB1\*05:02:01 and 05:02:03-05:02:07 alleles, the DQB1\*05:03:01:01-05:03:10 alleles, the DQB1\*05:05:01-05:05:02 alleles, the DQB1\*06:01:07 alleles, the DQB1\*06:02:01, 06:02:03, 06:02:06 and 06:02:08-06:02:10 alleles, the DQB1\*06:03:01, 06:03:03, 06:03:05-06:03:07 alleles, the DQB1\*06:03:04 and 06:03:08-06:03:09 alleles, the DQB1\*06:04:01, 06:04:03-06:04:07 and 06:04:03, the DQB1\*06:14:01-06:14:02 alleles and the DQB1\*06:15:01-06:15:02 alleles.

**RESOLUTION IN DQB1 HOMOZYGOTES AND HETEROZYGOTES:** Very good.

MODIFICATIONS MADE DUE TO COMMENTS FROM CUSTOMERS:

No suggestions received.

