Gel Documentation Form and Worksheet

DQB1\*02 (101.213-24/24u) Lot No: 8E9 Expiry Date: 2019-10-01

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sample ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DNA Conc.(ng/ul):\_\_\_\_\_\_\_\_\_

Test Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tested By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewed By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Interpretation:\_\_\_\_\_\_\_\_\_\_\_ Failed lanes*: \_\_\_\_\_\_\_\_\_\_\_\_ *Comments:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |





‘ICB’ Internal Control Band,

‘AmpS’ Amplicon Size

**Notes:**

Product sizes are approximate. For detailed information, see the lot-specific Specificity Table and Interpretation Table.

This table is intended as a guide. For interpretation always use the Interpretation Table and/or Specificity Table.

HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

Primer mixes 2, 3 and 22 may have tendencies of unspecific amplifications.

Primer mix 11 has a tendency to giving rise to primer oligomer formation.

Primer mix 32 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.



**1**HLA-DQB1 in bold lettering are listed as confirmed alleles on the IMGT/HLA web page 2016-October-14, release 3.26.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

**2**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>.

**3**Primer mix 5: Specific PCR fragment of 95 bp in the DQB1\*02:23 alleles. Specific PCR fragment of 140 bp in the DQB1\*02:04 and 02:37 alleles.

Primer mix 7: Specific PCR fragment of 165 bp in the DQB1\*02:19 allele. Specific PCR fragment of 245 bp in the DQB1\*02:06 and 02:48 and the DQB1\*03:24 and 03:79 alleles.

Primer mix 9: Specific PCR fragment of 95 bp in the DQB1\*02:16 allele. Specific PCR fragment of 195 bp in the DQB1\*02:07:01-02:07:02 alleles.

Primer mix 10: Specific PCR fragment of 180 bp in the DQB1\*02:08 allele. Specific PCR fragment of 230 bp in the DQB1\*02:12 allele.

Primer mix 11: Specific PCR fragment of 105 bp in the DQB1\*02:24 allele. Specific PCR fragment of 270 bp in the DQB1\*02:09 allele.

Primer mix 12: Specific PCR fragment of 120 bp in the DQB1\*02:11 and 02:25 alleles. Specific PCR fragment of 160 bp in the DQB1\*02:13 and 02:30 alleles.

Primer mix 13: Specific PCR fragment of 120 bp in the DQB1\*02:17 and 02:32 alleles. Specific PCR fragment of 215 bp in the DQB1\*02:38 allele.

Primer mix 14: Specific PCR fragment of 145 bp in the DQB1\*02:18N and 02:54 alleles. Specific PCR fragment of 220 bp in the DQB1\*02:34 and 02:38 alleles.

Primer mix 15: Specific PCR fragment of 100 bp in the DQB1\*02:21 and 02:39 alleles. Specific PCR fragment of 205 bp in the DQB1\*02:35 allele.

Primer mix 16: Specific PCR fragment of 100 bp in the DQB1\*02:22 and 02:39 alleles. Specific PCR fragment of 150 bp in the DQB1\*02:54 allele. Specific PCR fragment of 230 bp in the DQB1\*02:20N allele.

Primer mix 18: Specific PCR fragment of 90 bp in the DQB1\*02:15 allele. Specific PCR fragment of 185 bp in the DQB1\*02:29 allele.

Primer mix 21: Specific PCR fragment of 100 bp in the DQB1\*02:23 and 02:31 alleles. Specific PCR fragment of 130 bp in the DQB1\*02:40 allele.

Primer mix 22: Specific PCR fragment of 90 bp in the DQB1\*02:27 allele. Specific PCR fragment of 170 bp in the DQB1\*02:28 and 02:59 and the DQB1\*06:44 and 06:47 alleles.

Primer mix 23: Specific PCR fragment of 100 bp in the DQB1\*02:53Q allele. Specific PCR fragment of 255 bp in the DQB1\*02:41 allele.

Primer mix 24: Specific PCR fragment of 160 bp in the DQB1\*02:51 allele. Specific PCR fragment of 200 bp in the DQB1\*02:42 allele.

Primer mix 25: Specific PCR fragment of 160 bp in the DQB1\*02:51 allele. Specific PCR fragment of 220 bp in the DQB1\*02:46 allele.

Primer mix 27: Specific PCR fragment of 155 bp in the DQB1\*02:62 allele. Specific PCR fragment of 210 bp in the DQB1\*02:72 allele.

**4**The following DQB1\*02 alleles can be distinguished by the different sizes of the specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| **Alleles** | **Primer mix** | **Alleles** | **Primer mix** |
| DQB1\*02:07:01-02:07:02, 02:16 | 9 | DQB1\*02:20N, 02:22  | 16 |
| DQB1\*02:09, 02:24 | 11 | DQB1\*02:21, 02:35 | 15 |
| DQB1\*02:15, 02:29 | 18 | DQB1\*02:27, 02:28 | 22 |
| DQB1\*02:18N, 02:34 | 14 | DQB1\*02:41, 02:53Q | 23 |

5This lot of the DQB1\*02 kit cannot distinguish the DQB1\*02:10 and the DQB1\*02:02:01:01-02:02:03 and 02:65 alleles.

The DQB1\*02 kit cannot distinguish the silent mutation in the DQB1\*02:01:01-02:01:24 alleles, the DQB1\*02:02:01:01-02:02:03 alleles, the DQB1\*02:07:01-02:07:02 alleles or the DQB1\*02:14:01-02:14:02 alleles.

Change in revision R01 compared to R00:

1. Primer mix 8 does not amplify the DQB1\*02:10 and the DQB1\*03:49 alleles. Thus, this lot of the DQB1\*02 kit cannot distinguish the DQB1\*02:10 and the DQB1\*02:02:01:01-02:02:03 and 02:65 alleles. This has been corrected in the Interpretation and Specificity Tables.