Gel Documentation Form and Worksheet

DQB1\*02 (101.213-24/24u) Lot No: 6G3 Expiry Date: 2021-02-01

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 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**The following DQB1\*02 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified DQB1\*02alleles | Other amplified DQB1 alleles |
| **5** | 95 bp  140 bp  195 bp | \*02:23  \*02:04, 02:37  \*02:96N |  |
| **9** | 95 bp  195 bp | \*02:16  \*02:07:01-02:07:02 |  |
| **10** | 180 bp  230 bp | \*02:08  \*02:12 |  |
| **11** | 95 bp  170 bp | \*02:24  \*02:09 |  |
| **12** | 120 bp  160 bp | \*02:11, 02:25  \*02:13, 02:30 |  |
| **13** | 120 bp  215 bp | \*02:17, 02:32  \*02:38 |  |
| **14** | 145 bp  220 bp | \*02:18N, 02:54  \*02:34, 02:38 |  |
| **15** | 100 bp  205 bp | \*02:21, 02:39  \*02:35 |  |
| **16** | 100 bp  150 bp  230 bp | \*02:22, 02:39  \*02:54  \*02:20N |  |
| **18** | 90 bp  185 bp | \*02:15  \*02:29 |  |
| **21** | 100 bp  130 bp | \*02:23, 02:31  \*02:40 |  |
| **22** | 90 bp  170 bp | \*02:27  \*02:28, 02:59 | \*03:241, 06:44, 06:47 |
| **23** | 100 bp  255 bp | \*02:53Q  \*02:41 |  |
| **24** | 160 bp  200 bp | \*02:51  \*02:42 |  |
| **25** | 160 bp  220 bp | \*02:51  \*02:46 |  |
| **27** | 155 bp  210 bp | \*02:62  \*02:72 |  |
| **28** | 150 bp  195 bp | \*02:64, 02:79  \*02:96N | \*03:21, 05:35, 06:243 |

**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 |

**5**This lot of the DQB1\*02 kit cannot distinguish the DQB1\*02:10 and the DQB1\*02:02:01:01-02:02:05, 02:65, 02:95, 02:97 alleles or the DQB1\*02:81 and the DQB1\*02:01:01-02:01:24, 02:43-02:45, 02:47, 02:49, 02:52, 02:55-02:57, 02:60-02:61, 02:63, 02:66, 02:68-02:71, 02:73-02:76, 02:78, 02:82-02:83, 02:85-02:88, 02:90-02:94, 02:98-02:106 alleles.

Change in revision R01 compared to R00:

Primer mix 8 does not amplify the DQB1\*02:10 and 02:81 and the DQB1\*03:49 and 05:152 alleles. Thus, this lot of the DQB1\*02 kit cannot distinguish the DQB1\*02:10 and the DQB1\*02:02:01:01-02:02:05, 02:65, 02:95, 02:97 alleles or the DQB1\*02:81 and the DQB1\*02:01:01-02:01:24, 02:43-02:45, 02:47, 02:49, 02:52, 02:55-02:57, 02:60-02:61, 02:63, 02:66, 02:68-02:71, 02:73-02:76, 02:78, 02:82-02:83, 02:85-02:88, 02:90-02:94, 02:98-02:106 alleles. This has been corrected in the Interpretation and Specificity Tables.

Changes in revision R02 compared to R01:

1. Primer mix 7 does not amplify the DQB1\*02:06, 02:48, 03:24 and 03:79 alleles.

The corrections above have been implemented in the Specificity and Interpretation tables.