Gel Documentation Form and Worksheet

DQB1\*05 (101.211-24/24u) Lot No: 8G3 Expiry Date: 2021-03-01

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 mix 15 may have tendency of unspecific amplification.

Primer mixes 26 and 30 may give rise to a lower yield of HLA-specific PCR product than the other DQB1\*05 primer mixes.

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**DQB1\*05 alleles in bold lettering are listed as confirmed alleles on the on the IMGT/HLA web page [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), release 3.26.0, October 2016.

**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\*05 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified  DQB1\*05alleles | Other amplified  DQB1 alleles |
| **5** | 120 bp  185 bp | \*05:04, 05:52, 05:77, 05:132Q, 05:146  \*05:10 |  |
| **7** | 185 bp  245 bp  270 bp | \*05:06:01-05:06:02, 05:07, 05:50  \*05:52  \*05:112 |  |
| **8** | 135 bp  190 bp | \*05:27, 05:87Q, 05:132Q  \*05:09, 05:29 |  |
| **10** | 115 bp  195 bp | \*05:23  \*05:12, 05:71 |  |
| **11** | 100 bp  150 bp  190 bp | \*05:13, 05:32, 05:42 , 05:45 , 05:117  \*05:35  \*05:96 | \*03:196  \*02:64, 02:79, 03:21, 06:243 |
| **12** | 120 bp  150 bp  195 bp | \*05:25  \*05:14  \*05:41N, 05:90N, 05:96 | \*02:96N |
| **13** | 145 bp  180 bp  220 bp | \*05:40  \*05:15, 05:33, 05:49  \*05:34, 05:44, 05:128N, 05:130 |  |
| **14** | 155 bp  205 bp | \*05:40, 05:69, 05:101, 05:145, 05:153  \*05:16, 05:73, 05:98, 05:116 | \*06:156, 06:162, 06:169 |
| **15** | 65 bp  105 bp  135 bp | \*05:03:06, 05:03:14  \*05:17  \*05:37, 05:104 | \*03:03:05  \*06:250 |
| **16** | 145 bp  195 bp | \*05:20, 05:105  \*05:47, 05:159 | \*02:99, 03:249, 06:105, 06:185, 06:225 |
| **17** | 125 bp  200 bp | \*05:25, 05:31, 05:46, 05:108  \*05:41N, 05:90N, 05:106 | \*06:111  \*02:96N |
| **18** | 180 bp  220 bp | \*05:24  \*05:72, 05:128N |  |
| **19** | 195 bp  225 bp | \*05:28, 05:30  \*05:21, 05:60 |  |
| **20** | 110 bp  210 bp  270 bp | \*05:32, 05:42, 05:57  \*05:106  \*05:38, 05:62, 05:119 | \*06:146:01 |
| **21** | 140 bp  165 bp  200 bp  230 bp | \*05:37, 05:88, 05:104  \*05:63  \*05:39  \*05:26, 05:82 | \*06:250 |
| **24** | 150 bp  185 bp | \*05:71  \*05:73, 05:80, 05:98, 05:116 | \*06:28, 06:56, 06:79:01-06:79:02, 06:89 |
| **25** | 115 bp  180 bp | \*05:75, 05:111  \*05:112 |  |
| **26** | 85 bp  185 bp | \*05:103  \*05:78 |  |
| **27** | 145 bp  200 bp  280 bp | \*05:88  \*05:110N  \*05:79, 05:156 | \*06:158N |
| **28** | 135 bp  170 bp | \*05:56  \*05:107 |  |
| **30** | 100 bp  145 bp | \*05:105, 05:111  \*05:51 | \*03:03:05, 06:02:19, 06:03:08, 06:79:02 |

**4**The following DQB1\*05 alleles can be distinguished by the different sizes of the specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| Alleles | Primer mix | Alleles | Primer mix |
| DQB1\*05:16, 05:101 | 14 | DQB1\*05:35, 05:117 | 11 |
| DQB1\*05:20, 05:159 | 16 | DQB1\*05:110N, 05:156 | 27 |
| DQB1\*05:27, 05:29 | 8 |

’w’, might be weakly amplified.

‘?’, nucleotide sequence information not available for the primer matching sequence.

Change in revision R01 compared to R00:

1. Primer mix 12 does not amplify the DQB1\*05:84 and DQB1\*06:103 alleles. This correction has been implemented in the Specificity and Interpretation tables.