Gel Documentation Form and Worksheet

DQB1\*04 (101.215-12/12u) Lot No: 5E2 Expiry Date: 2019-04-01

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 2 may give rise to a lower yield of HLA-specific PCR product than the other DQB1\*04 primer mixes.

Primer mix 14 may have tendencies of unspecific amplifications.

In primer mix 7 the positive control band may be weaker than for other DQB1\*04 primer mixes.

Primer mix 19 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 alleles listed on the IMGT/HLA web page 2016-July-14, release 3.25.0, [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 1: Specific PCR fragment of 160 bp in the DQB1\*04:02:01-04:02:07, 04:02:09-04:04, 04:09-04:13, 04:18-04:29 and 04:31-04:36N and the DQB1\*03:132 alleles. Specific PCR fragment of 205 bp in the DQB1\*04:01:03 allele. Specific PCR fragment of 160 bp and 205 bp in the DQB1\*04:01:01-04:01:02, 04:01:04, 04:05-04:08 and 04:14-04:17 alleles.

Primer mix 5: Specific PCR fragment of 110 bp in the DQB1\*04:06 and 04:12 alleles. Specific PCR fragment of 245 bp in the DQB1\*04:04 and 04:05 and the DQB1\*03:06 and 03:25:01 alleles.

Primer mix 6: Specific PCR fragment of 95 bp in the DQB1\*04:16 allele. Specific PCR fragment of 210 bp in the DQB1\*04:20 allele.

Primer mix 11: Specific PCR fragment of 120 bp in the DQB1\*04:11 and 04:15 alleles. Specific PCR fragment of 160 bp in the DQB1\*04:23 and the DQB1\*03:22, 03:96, 06:04:01w-06:05:02w, 06:06?, 06:07:01w-06:07:02w, 06:08:01?-06:08:03?, 06:09:01w-06:09:06w, 06:10?-06:11:03?, 06:12w, 06:13:01?-06:18:01?, 06:18:02w, 06:19:01?-06:20?, 06:21w, 06:22:01?-06:32:02?, 06:34w, 06:35?, 06:36w, 06:37?, 06:38w, 06:40?, 06:41w-06:42w, 06:45?-06:46?, 06:48?-06:50?, 06:51:02?, 06:52w, 06:53:01?-06:83?, 06:84w, 06:85?, 06:89?, 06:91?-06:97?, 06:118:01w, 06:118:02?-06:126?, 06:128?, 06:129w, 06:131?-06:147?, 06:149?-06:184?, 06:186w, 06:189w, 06:190?-06:199?, 06:201?-06:204? and 06:206?-06:208? alleles.

Primer mix 12: Specific PCR fragment of 160 bp in the DQB1\*04:07 allele. Specific PCR fragment of 230 bp in the DQB1\*04:18 allele.

**4**The following DQB1\*04 alleles can be distinguished by the different sizes of the specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| DQB1\*04:04, 04:12 | 5 |
| DQB1\*04:05, 04:06 | 5 |

The DQB1\*04 subtyping kit cannot distinguish the silent mutations in the DQB1\*04:01:01-04:01:04 alleles, the DQB1\*04:02:01-04:02:07 or the DQB1\*04:02:09-04:02:10 alleles.

‘w’, may be weakly amplified.

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