Gel Documentation Form and Worksheet

DQB1\*04 (101.215-12/12u) Lot No: 26Y Expiry Date: 2017-November-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 16 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 in bold lettering are listed as confirmed alleles on the IMGT/HLA web page 2015-January-19, release 3.19.0, [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, 04:03:01-04:04, 04:09-04:13 and 04:18-04:27 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 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 and 03:96 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 or the DQB1\*04:02:01-04:02:07 alleles.

‘w’, may be weakly amplified.

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

Changes in revision R01 compared to R00:

1. The Product Insert and Worksheet have been corrected to reflect the resolution capability of the kit.

As of lot series “Y”, the DQB1\*04 kit enables separation of the confirmed DQB1\*04 alleles as listed in the IMGT/HLA database, polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles.