Gel Documentation Form and Worksheet

DQ-DR Combi Tray Lot No: 6F5 Expiry Date: 2020-04-01

(101.704-48/12, -48u/12u)

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

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

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

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

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

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

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

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

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |

**DQ low resolution**



**DR low resolution**





‘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-DQ low resolution primer set**

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

Primer mixes 4, 7 and 12 may give rise to a lower yield of HLA-specific PCR product than the other DQ low primer mixes, most pronounced in primer mixes 4, 7 and 12.

Primer mix 13 may have a tendency of unspecific amplification.

**HLA-DR low resolution primer set**

HLA-Specific PCR fragments shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR bands.

Due to sharing of sequence motifs in codon 38 and 47, DRB3\*01:14 will also be amplified in primer mixes 20, 21 and 32 and DRB3\*01:23 and \*02:32 in mix 14, in addition to primer mix 44.

Due to sharing of sequence motifs, DRB3\*02:27 is amplified by the primer pairs in well 30 in addition to primer mix 44.

DRB5\*01:08N is amplified by the primer pairs in well 39 in addition to primer mix 46.

Primer mixes 16, 18, 31, 34 and 37 may have a tendency of giving rise to primer oligomer formation.

Primer mix 34 has a tendency of giving rise to an intense primer cloud due to the high number of primers present in the primer mix.

Primer mixes 18, 19 and 24 may have a tendency of unspecific amplification.

Primer mix 47 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.

Changes in revision R01 compared to R00:

1. Primer mix 6 does not amplify the DQB1\*03:03:06, 03:06, 03:25:01-03:25:02 and DQB1\*04:03:01-04:03:03 alleles. This has been corrected in the specificity and interpretation tables.

**DQ low resolution Interpretation Table**



**1**DQB1 alleles listed on the IMGT/HLA web page 2017-January-20, release 3.27.0, [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 serological reactivity of all DQ alleles is not known. In this table we use the expert-assigned serological grouping in Tissue Antigens (2009) **73**:95-170 and the serological grouping of the sequence-defined allele. The DQB1\*03:10 allele has been assigned type DQ7 by NMDP.

**4**The DQB1 alleles will be grouped into their corresponding serological specificities, except that following alleles give rise to identical amplification patterns.

|  |
| --- |
| Alleles |
| DQB1\*05:03:10, 05:04, 05:34, 05:44, 05:52, 05:54, 05:72, 05:77, 05:105, 05:114, 05:128N, 05:130, 05:132Q, DQB1\*06:212 |

‘w’, might be weakly amplified.

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

**DR low resolution Interpretation Table**









**1**DRB alleles listed on the IMGT/HLA web page 2017-January-20, release 3.27.0, [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 serological split of all DRB1 alleles is not known. In this table we use the expert-assigned serological grouping in Tissue Antigens (2009) **73**:95-170 and the serological grouping of the sequence-defined allele.

‘w’, might be weakly amplified.

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