Gel Documentation Form and Worksheet

DR low resolution screening Lot No: 2H1 Expiry Date: 2021-08-01

(101.103-48/12,-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 |



 ‘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 1, 3, 16, 19 and 22 have a tendency to giving rise to primer oligomer formation.

Primer mixes 3, 4 and 9 may have tendencies of unspecific amplification.

Primer mixes 3 and 11 may give rise to a lower yield of HLA-specific PCR product than the other DR low primer mixes.

Primer mix 19 has a tendency of primer oligomer formation and also has an intense primer cloud due to the high number of primers present in the primer mix.

The DRB4\*01:03:01:02N allele is amplified by the primer pairs in wells 18 and 22, whereas the DRB4\*02:01N and DRB4\*03:01N null alleles are only amplified by the primer pairs in well 22.

Due to sharing of sequence motifs in codon 38 and 47, DRB3\*01:14 will also be amplified in primer mixes 5, 6, 17, and DRB3\*01:23 and \*02:32 will be amplified in primer mix 5, in addition to primer mix 21.

Due to sharing of sequence motifs, DRB3\*02:27 is amplified by the primer pairs in well 15, and DRB3\*01:42 is amplified by the primer pairs in well 11, in addition to primer mix 21.

Due to sharing of sequence motifs, DRB4\*01:31 is amplified by the primer pairs in well 20 in addition to primer mix 22.

Primer mix 24 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**DRB alleles listed on the IMGT/HLA web page 2018-July-11, release 3.33.0, [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 DRB alleles is not known. In this table we use the information in the HLA Dictionary 2004 on the www.ebi.ac.uk/imgt/hla web site, the information available at the [www.worldmarrow.org](http://www.worldmarrow.org) web site and the expert-assigned serological grouping in Tissue Antigens (2009) **73**:95-170.

**4**The following alleles give rise to identical amplification patterns with the DR low resolution screening primer set. These alleles can be separated by the respective high-resolution primer sets.

|  |  |
| --- | --- |
| Alleles | Alleles |
| DRB1\*03:126, 14:179 | DRB1\*08:57, 08:80, 13:248 |
| DRB1\*08:20, 13:18, 13:47, 13:55, 13:158, 13:164, 13:232 | DRB1\*13:13, 13:119, 13:154, 13:156, 14:84, 14:116, 14:144 |
| DRB1\*08:31, 11:05, 11:209 | DRB1\*13:44, 13:86, 13:206, 14:183 |
| DRB1\*08:41, 08:75, 11:67, 11:193:01-11:193:02 | DRB1\*13:235, 14:98 |

‘w’, might be weakly amplified.

‘?’, nucleotide sequence of the primer matching region not known.