Gel Documentation Form and Worksheet

DRB4 (101.122-24/06, -24u/06u) Lot No: 9F6 Expiry Date: 2020-07-01

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.

The DRB1\*15:01:01:01-15:01:34, 15:02:01:01-15:02:17, 15:03:01:01-15:147 and the DRB1\*16:01:01-16:05:02, 16:07-16:47 alleles might be faintly amplified by primer mix 7.

Primer mixes 5 and 7 may have tendencies of unspecific amplifications.

Primer mixes 2 and 9 have a tendency to giving rise to primer oligomer formation.

Primer mix 8 may give rise to a lower yield of HLA-specific PCR product than the other DRB4 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**DRB4 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 3.29.0, August 2017.

**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 DRB1\*15:01:01:01-15:01:34, 15:02:01:01-15:02:17, 15:03:01:01-15:147 and the DRB1\*16:01:01-16:05:02, 16:07-16:47 alleles might be faintly amplified by primer mix 7.

**4**The following DRB4 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified DRB4  alleles | Other amplified DRB  alleles |
| **6** | 115 bp  200 bp | \*01:12  \*01:04, 01:14 |  |
| **13** | 110 bp  140 bp  215 bp | \*01:12, 01:39  \*01:45  \*01:08 |  |
| **15** | 190 bp  245 bp | \*01:10, 01:30  \*01:02?, 01:21 |  |
| **16** | 125 bp  265 bp | \*01:13  \*01:02?, 01:17 |  |
| **20** | 225 bp  250 bp | \*01:23, 01:27  \*01:02?, 01:22 | **DRB1\*04:109, DRB1\*12:65, DRB1\*15:42** |
| **21** | 105 bp  225 bp | \*01:20  \*01:05?, 01:07:01?, 01:36, 01:42 |  |
| **22** | 100 bp  230 bp | \*01:33, 01:40  \*01:38N |  |
| **23** | 105 bp  240 bp | \*01:24  \*01:37 |  |
| **24** | 75 bp  175 bp  240 bp | \*01:32  \*01:35, 01:43  \*01:54N |  |
| **25** | 75 bp  160 bp | \*01:44  \*01:15, 01:35, 01:56N |  |
| **26** | 135 bp  165 bp | \*01:25  \*01:18, 01:34, 01:56N |  |
| **27** | 160 bp  220 bp | \*01:19, 01:34  \*01:42 |  |

**5**The following DRB4 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| Alleles | Primer mix |
| DRB4\*01:20, 01:36 | 21 |
| DRB4\*01:24, 01:37 | 23 |
| DRB4\*01:32, 01:43, 01:54N | 24 |
| DRB4\*01:38N, 01:40 | 22 |

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

‘w’, may be weakly amplified.