Gel Documentation Form and Worksheet

DRB1\*03 (101.113-24/04, -24u/04u) Lot No: 5K9 Expiry Date: 2023-12-01

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

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

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

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

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

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

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

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

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |





Abbreviations

‘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 6, 22 and 23 may have a tendency of giving rise to primer oligomer formation.

Primer mixes 2 and 24 may give rise to a lower yield of specific PCR product than the other DRB1\*03 primer mixes.

Primer mix 32 contains a negative control, which will amplify a majority 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 200 base pairs.















**1**DRB1\*03 alleles in bold lettering are listed as confirmed alleles on the IMGT/HLA web page [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), release 3.26.0, October 2016.

**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 following DRB1\*03 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| **Primer Mix** | **Size of spec. PCR product** | **Amplified DRB1\*03 alleles** | **Other amplified DRB alleles** |
| **3** | 155 bp  190 bp | \*03:97, 03:126  \*03:02:01-03:02:04, 03:05:01-03:05:03, 03:09, 03:14, 03:27, 03:29, 03:38, 03:53, 03:74, 03:81, 03:88, 03:90, 03:102-03:103, 03:115, 03:122, 03:130-03:131, 03:154 | \*14:18, 14:33, 14:51, 14:59, 14:64, 14:95, 14:106, 14:132-14:134, 14:154  \*11:09, 11:20, 11:28:02, 11:87, 11:122, 13:02:01:01-13:02:03, 13:02:05-13:02:17, 13:05:01-13:05:03, 13:26:01-13:26:02, 13:29, 13:31, 13:34, 13:36, 13:39, 13:41, 13:50:02-13:50:03, 13:56, 13:63, 13:65, 13:67, 13:73-13:74, 13:85, 13:96:01-13:96:02, 13:99, 13:103-13:104, 13:119-13:120, 13:123-13:124, 13:126, 13:128, 13:136, 13:139-13:140, 13:142N-13:143, 13:145, 13:147, 13:155, 13:157-13:159, 13:165, 13:168, 13:170-13:171:02, 13:179, 13:189, 13:196, 13:198-13:199, 13:202-13:203, 13:207-13:212, 13:220, 13:225, 13:235-13:237, 13:239-13:241, 13:243-13:244, 13:255N, 13:257, 13:264-13:265, 13:268N-13:269, 13:275, 13:277, 13:280, 13:282, 13:285, 14:02:01:01-14:03:02, 14:09, 14:13, 14:19, 14:24, 14:27:01-14:27:02, 14:30, 14:46-14:48, 14:51, 14:63, 14:67, 14:85, 14:89, 14:98, 14:109, 14:115, 14:134-14:135, 14:144, 14:174, 14:179, 14:194, 14:198, 14:200, 14:209, 16:08, **DRB3\*01:08, DRB3\*01:46, DRB3\*01:52, DRB3\*01:71, DRB3\*02:06, DRB3\*02:20** |
| **7** | 125 bp  150 bp  215 bp | \*03:08, 03:65, 03:72, 03:140  \*03:124  \*03:132 | \*11:59, 11:80, 11:83, 11:87, 11:135, 11:142, 11:182, **DRB3\*01:42**  **DRB5\*01:04?** |
| **11** | 100 bp  125 bp  180 bp | \*03:09, 03:23, 03:112  \*03:115  \*03:13:01-03:13:02, 03:38, 03:79, 03:88 | \*14:151  \*11:116, 11:120, 13:39, 13:54, 13:77-13:79, 13:100, 13:162-13:163, 13:181, 14:48, 14:64, 14:109, 14:115, 14:177, **DRB3\*01:14** |
| **12** | 135 bp  190 bp | \*03:10, 03:110  \*03:51, 03:76, 03:125 | \*14:82, 14:132  \*11:59w, 11:80w, 11:83w, 11:87w, 11:135w, 11:142w, 11:182w, 13:27:01w-13:27:02w, 13:41w, 13:71w, 13:129w, 13:176w, 13:277w, 14:179w |
| **13** | 125 bp  160 bp  225 bp | \*03:115  \*03:47, 03:62  \*03:11:01, 03:17, 03:24, 03:27, 03:35, 03:81 | \*14:151  \*11:136, 14:38:01-14:38:02, 14:127:01-14:127:02 |
| **14** | 105 bp  135 bp  245 bp | \*03:16  \*03:12, 03:110, 03:158  \*03:68N | \*09:08  **DRB3\*01:77N** |
| **15** | 95 bp  155 bp | \*03:112  \*03:17, 03:37, 03:80, 03:140 | \*11:39, 11:43, 11:50, 11:115, 11:145, 11:151, 11:168, 11:171, 11:174, 13:118, 13:131, 13:135, 13:150, 13:262, 14:59, 14:86, 14:96, 14:153-14:154 |
| **16** | 50 bp  215 bp | \*03:14-03:15:02, 01:90, 03:90, 03:145  \*03:132 | \*04:98:01-04:98:02, 11:105, 14:107, 14:111  **DRB3\*01:82** |
| **17** | 100 bp  230 bp  255 bp | \*03:93  \*03:34  \*03:20, 03:145 | \*13:125  \*11:06:01-11:06:03, 11:21, 11:47, 11:57, 11:129, 11:174, 13:58, 13:81, 13:163, 13:242:01-13:242:02, 13:284, 14:29, 14:99 |
| **20** | 75 bp  120 bp  245 bp | \*03:25:01-03:25:02, 03:31, 03:75, 03:118  \*03:28  \*03:68N | \*11:80, 11:135, 11:142  **DRB3\*01:77N** |
| **21** | 70 bp  150 bp | \*03:21, 03:30, 03:43  \*03:42, 03:87 | \*11:10:01-11:10:02, 11:12:01w, 11:12:02, 11:12:03w, 11:13:01-11:13:02, 11:114w, 11:179w, 11:190, 11:191w, 11:196w, 11:202, 11:218, 12:05, 12:14-12:15, 12:56, 13:57, 13:64, 13:83, 13:107, 13:175, 13:195, 13:204w, 13:250, 14:35, 14:65, 14:72, 14:138, 14:175, 14:187, 15:167, **DRB3\*01:23, DRB3\*03:26**  \*11:30, 13:67, 13:195, **DRB3\*01:23, DRB3\*01:46, DRB3\*02:32, DRB3\*02:81, DRB3\*03:26** |
| **22** | 95 bp  215 bp | \*03:18  \*03:48 |  |
| **23** | 65 bp  165 bp | \*03:09, 03:23  \*03:19 | **DRB3\*01:31** |
| **25** | 80 bp  170 bp  230 bp | \*03:13:01-03:13:02, 03:67N, 03:88  \*03:22, 03:32  \*03:69 | **DRB3\*01:01:03, DRB3\*01:75, DRB3\*02:19** |
| **27** | 115 bp  150 bp  175 bp  235 bp | \*03:43, 03:71:01-03:71:02  \*03:53  \*03:46, 03:130  \*03:34, 03:55 | \*11:15, 11:76, 11:114, 11:183, 11:196, 13:34, 13:62, 13:64, 13:136, 13:151, 13:174, 13:204, 13:221, 13:250, 14:41, 14:77, 14:110, **DRB3\*01:14**  \*14:150 |
| **28** | 75 bp  155 bp  195 bp | \*03:67N  \*03:36, 03:124  \*03:45 | **DRB5\*01:04?** |
| **29** | 155 bp  180 bp  215 bp | \*03:22, 03:25:02, 03:40-03:41:02, 03:52, 03:75, 03:105, 03:118, 03:155  \*03:39  \*03:92 | \*11:07:01-11:07:02, 11:103:01-11:103:02, 11:105, 11:107, 11:125, 11:173  \*14:76, 14:79 |
| **31** | 205 bp  245 bp | \*03:45, 03:92  \*03:50 | \*14:76, 14:79 |

**4**The DRB1\*03 primer set cannot separate the DRB1\*03:97 and the 14:33 alleles. These alleles can be distinguished by the DR low resolution kit and/or the DRB1\*14 high resolution kit.

The DRB1\*03 primer set cannot separate the DRB1\*03:126 and the 14:95 alleles. These alleles can be distinguished by the DR low resolution kit and/or the DRB1\*14 high resolution kit.

The DRB1\*03 primer set cannot separate the DRB1\*03:35 and the 14:127:01-14:127:02 alleles. These alleles can be distinguished by the DR low resolution kit and/or the DRB1\*14 high resolution kit.

**5**The following DRB1\*03 alleles can be distinguished by the different sizes of the specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| DRB1\*03:18, 03:48 | 22 |
| DRB1\*03:20, 03:93 | 17 |

Abbreviations

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

“w”, may be weakly amplified.