Gel Documentation Form and Worksheet

DRB3 (101.121-24/04,-24u/04u) Lot No: 5L3 Expiry Date: 2024-09-01

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 9, 10, 13 and 34 may have tendencies of unspecific amplifications.

Primer mix 7, 11, 19, 22 and 46 have a tendency giving rise to primer oligomer formation.

Primer mixes 4, 10 and 29 may give rise to a lower yield of HLA-specific PCR product than the other DRB3 primer mixes.

In primer mix 43 the positive control band may be weaker than for other DRB3 primer mixes.

Primer mix 48 contains a negative control, which will amplify the 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**DRB3 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 3.34.0, October 2018.

**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 DRB3 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified DRB3alleles | Amplified DRB1alleles |
|  **5** | 95 bp 125 bp | \*01:03, 01:71\*01:10 | \*14:46 |
|  **7**  | 90 bp150 bp 180 bp | \*01:05\*01:23, 01:46\*01:07, 01:15, 01:50, 01:75w, 01:76, 02:42 | \*03:42\*03:42, 14:46 |
|  **8** | 120 bp150 bp | \*01:06, 01:08, 01:46, 01:71\*01:23, 01:46 | \*03:42, 14:46\*03:42 |
| **12** | 90 bp 145 bp | \*02:17\*02:01, 02:04, 02:24, 02:48, 02:58, 02:89, 02:103, 02:141, 03:17 | \*03:37, 03:80, 03:140, 04:183, 11:43, 11:50, 11:115, 11:151, 11:171, 11:174, 12:34, 13:131, 13:150, 13:262, 14:59, 14:86, 14:96, 14:145, 14:153-14:154, 15:65 |
| **14** | 185 bp265 bp | \*01:07, 01:09, 02:02:01:01-02:02:18, 02:02:20-02:02:25, 02:05:01-02:13, 02:15-02:19, 02:21-02:23, 02:25-02:36, 02:39-02:47, 02:49, 02:53-02:57, 02:60, 02:62-02:69, 02:71-02:82, 02:84-02:88, 02:90-02:99, 02:101-02:102, 02:105-02:106, 02:108-02:111, 02:113-02:114, 02:116-02:118, 02:121N-02:135, 02:137N-02:139, 02:142\*01:02  | \*10:01:01:01w-10:01:14w, 10:03w-10:11w, 10:13w, 10:15w-10:16w, 10:18w-10:34w, 10:36w-10:37w, 13:216, 14:141, 16:30 |
| **15** | 120 bp 180 bp 210 bp | \*02:03, 02:38, 02:50, 02:100, 02:115, 02:119, 03:01:01:01-03:09, 03:11, 03:13-03:21, 03:23-03:34, 03:36-03:40, 03:42-03:44\*02:16\*02:17 | \*12:57, 13:195 |
| **17** | 120 bp 180 bp | \*01:08, 01:46, 01:71, 02:06, 02:20, 03:10\*02:16, 02:23 | \*03:42, 03:87, 13:67, 14:46 |
| **18** | 100 bp170 bp | \*01:09, 02:07, 02:09, 02:21, 02:44, 02:56, 02:89, 03:22, 03:41\*01:18 |  |
| **19** | 180 bp 270 bp | \*01:42, 02:08, 02:18, 02:23, 02:131\*02:14 | \*11:30 |
| **21** | 120 bp 155 bp210 bp | \*01:13\*02:43, 02:141\*01:19, 01:31, 02:11, 03:15 | **DRB4\*01:105** |
| **22** | 80 bp185 bp 240 bp  | \*02:67N\*01:11\*01:02, 02:12 |  |
| **23** | 195 bp240 bp | \*02:13\*01:02 |  |
| **25** | 150 bp220 bp 260 bp | \*02:60\*01:19, 02:26\*01:12, 02:31:01 |  |
| **28** | 110 bp235 bp260 bp | \*02:36\*02:27, 02:111\*01:12, 01:40:02N, 02:31:01, 02:55N  |  \*11:30, 12:57, 13:67, 13:195, 14:46 |
| **31** | 70 bp95 bp | \*01:21, 02:19, 02:21, 02:25, 02:48, 02:56, 02:89, 03:17\*01:16, 02:29N  | \*12:34\*01:77w |
| **33** | 150 bp180 bp | \*01:32, 01:39, 01:41, 01:50, 02:37-02:38, 02:50, 02:83, 02:100, 02:107, 02:112, 02:115, 02:119, 03:01:01:01-03:02, 03:05-03:09, 03:11-03:21, 03:23-03:34, 03:36-03:40, 03:42-03:44\*01:20 | \*03:35, 07:04, 14:38:01-14:38:02, 14:50, 14:93, 14:127:01-14:127:02 |
| **34** | 130 bp170 bp | \*01:43, 02:139\*03:05  | \*04:148, 15:64 |
| **35** | 115 bp250 bp | \*02:51\*01:17, 02:33, 02:127 |  |
| **36** | 105 bp155 bp185 bp | \*01:22\*02:43, 02:141\*01:35, 02:35, 03:25 | **DRB4\*01:105** |
| **37** | 155 bp215 bp | \*02:30\*01:31, 01:45, 02:11, 02:47, 02:97, 03:15 |  |
| **38** | 70 bp205 bp | \*02:32, 02:81\*01:07?, 02:05:01?, 02:07?-02:08?, 02:34 | \*03:44, 10:13, 13:106, 14:221 |
| **39** | 190 bp260 bp | \*02:39\*01:40:01N |  |
| **40** | 130 bp190 bp | \*03:13\*01:07, 01:15, 01:30, 01:42, 01:49-01:50, 01:76, 02:42 | \*03:42, 14:46 |
| **41** | 110 bp140 bp | \*02:36\*02:57, 02:60 |  |
| **42** | 165 bp205 bp230 bp | \*02:61Q\*01:37, 03:08\*02:73 |  |
| **44** | 100 bp195 bp260 bp | \*01:26N\*02:80N\*01:40:02N, 02:55N |  |

**4**The following DRB3 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| Alleles | Primer mix |
| DRB3\*02:12, 02:67N | 22 |
| DRB3\*02:32, 02:34 | 38 |

Abbreviations

w: might be weakly amplified.

?: nucleotide sequence information not available for the primer matching sequence.

Changes in revision R01 compared to R00:
1. Correction of an error in the interpretation table.