Gel Documentation Form and Worksheet

DRB3 (101.121-24/04,-24u/04u) Lot No: 6K0 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 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 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 DRB3  alleles | Amplified DRB1  alleles |
| **5** | 95 bp  125 bp | \*01:03, 01:71  \*01:10 | \*14:46 |
| **7** | 90 bp  150 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 bp  150 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, 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 bp  265 bp | \*01:07, 01:09, 02:02:01:01-02:02:18, 02:02:20-02:02:22, 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-02:128  \*01:02 | \*10:01:01:01w-10:01:13w, 10:03w-10:11w, 10:13w, 10:15w-10:16w, 10:18w-10:34w, 10:36w, 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  \*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 bp  170 bp | \*01:09, 02:07, 02:09, 02:21, 02:44, 02:56, 02:89, 03:22  \*01:18 |  |
| **19** | 180 bp  270 bp | \*01:42, 02:08, 02:18, 02:23  \*02:14 | \*11:30 |
| **21** | 120 bp  155 bp  210 bp | \*01:13  \*02:43  \*01:19, 01:31, 02:11, 03:15 | **DRB4\*01:105** |
| **22** | 80 bp  185 bp  240 bp | \*02:67N  \*01:11  \*01:02, 02:12 |  |
| **23** | 195 bp  240 bp | \*02:13  \*01:02 |  |
| **25** | 150 bp  220 bp  260 bp | \*02:60  \*01:19, 02:26  \*01:12, 02:31:01 |  |
| **28** | 110 bp  235 bp  260 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 bp  95 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 bp  180 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  \*01:20 | \*03:35, 07:04, 14:38:01-14:38:02, 14:50, 14:93, 14:127:01-14:127:02 |
| **34** | 130 bp  170 bp | \*01:43  \*03:05 | \*04:148, 15:64 |
| **35** | 115 bp  250 bp | \*02:51  \*01:17, 02:33, 02:127 |  |
| **36** | 105 bp  155 bp  185 bp | \*01:22  \*02:43  \*01:35, 02:35, 03:25 | **DRB4\*01:105** |
| **37** | 155 bp  215 bp | \*02:30  \*01:31, 01:45, 02:11, 02:47, 02:97 03:15 |  |
| **38** | 70 bp  205 bp | \*02:32, 02:81  \*01:07?, 02:05:01?, 02:07?-02:08?, 02:34 | \*03:44, 10:13, 13:106 |
| **39** | 190 bp  260 bp | \*02:39  \*01:40:01N |  |
| **40** | 130 bp  190 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 bp  140 bp | \*02:36  \*02:57, 02:60 |  |
| **42** | 165 bp  205 bp  230 bp | \*02:61Q  \*01:37, 03:08  \*02:73 |  |
| **44** | 100 bp  195 bp  260 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.