Gel Documentation Form and Worksheet

DRB3 (101.121-24/04,-24u/04u) Lot No: 2E8 Expiry Date: 2019-03-01

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

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

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

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

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

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

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

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

**Gel Picture**

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

Primer mix 2, 7, 9, 11, 19, 20 and 22 have a tendency to 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.

Primer mix 33 gives rise to a notably lower yield of HLA-specific PCR product than the other DRB3 primer mixes in the DRB3\*03:01:01-03:02 and 03:05-03:06 and in the DRB1\*03:35, DRB1\*14:38:01-14:38:02, 14:50, 14:93 and 14:127:01-14:127:02 alleles.

Primer mix 39 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 2016-April-15, release 3.24.0, [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**Primer mix 5: Specific PCR fragment of 95 bp in the DRB3\*01:03 and in the DRB1\*14:46 alleles. Specific PCR fragment of 125 bp in the DRB3\*01:10 allele.

Primer mix 7: Specific PCR fragment of 90 bp in the DRB3\*01:05 allele. Specific PCR fragment of 180 bp in the DRB3\*01:07 and 01:15 and in the DRB1\*03:42 and DRB1\*14:46 alleles.

Primer mix 12: Specific PCR fragment of 90 bp in the DRB3\*02:17 allele. Specific PCR fragment of 145 bp in the DRB3\*02:01, 02:04 and 02:24 and in the DRB1\*03:37, 03:80, DRB1\*04:183, DRB1\*11:43, 11:50, 11:115, 11:151, 11:171, 11:174, DRB1\*12:34, DRB1\*13:131, 13:150, DRB1\*14:59, 14:86, 14:96, 14:145, 14:153-14:154 and DRB1\*15:65 alleles.

Primer mix 14: Specific PCR fragment of 185 bp in the DRB3\*01:07, 01:09, 02:02:01:01-02:02:06, 02:05-02:13, 02:15-02:19, 02:21-02:23 and 02:25-02:36 and in the DRB1\*10:01:01:01w-10:01:09w, 10:03w-10:11w, 10:13w, 10:15w-10:16w, DRB1\*14:141 and DRB1\*16:30 alleles. Specific PCR fragment of 265 bp in the DRB3\*01:02 allele.

Primer mix 15: Specific PCR fragment of 120 bp DRB3\*02:03 and 03:01:01-03:06 and in the DRB1\*12:57 and DRB1\*13:195 alleles. Specific PCR fragment of 180 bp in the DRB3\*02:16 allele. Specific PCR fragment of 210 bp in the DRB3\*02:17 allele.

Primer mix 17: Specific PCR fragment of 120 bp in the DRB3\*01:08, 02:06 and 02:20 and in the DRB1\*03:42, DRB1\*03:87, DRB1\*13:67 and DRB1\*14:46 alleles. Specific PCR fragment of 180 bp in the DRB3\*02:16 and 02:23 alleles.

Primer mix 18: Specific PCR fragment of 100 bp in the DRB3\*01:09, 02:07, 02:09 and 02:21 alleles. Specific PCR fragment of 170 bp in the DRB3\*01:18 allele.

Primer mix 19: Specific PCR fragment of 180 bp in the DRB3\*02:08, 02:18 and 02:23 and in the DRB1\*11:30 alleles. Specific PCR fragment of 270 bp in the DRB3\*02:14 allele.

Primer mix 21: Specific PCR fragment of 120 bp in the DRB3\*01:13 allele. Specific PCR fragment of 210 bp in the DRB3\*01:19 and 02:11 alleles.

Primer mix 22: Specific PCR fragment of 185 bp in the DRB3\*01:11 allele. Specific PCR fragment of 245 bp in the DRB3\*01:02 and 02:12 allele.

Primer mix 23: Specific PCR fragment of 195 bp in the DRB3\*02:13 allele. Specific PCR fragment of 240 bp in the DRB3\*01:02 allele.

Primer mix 25: Specific PCR fragment of 225 bp in the DRB3\*01:19 and 02:26 alleles. Specific PCR fragment of 260 bp in the DRB3\*01:12 and 02:31 alleles.

Primer mix 28: Specific PCR fragment of 235 bp in the DRB3\*02:27 and in the DRB1\*11:30, DRB1\*12:57, DRB1\*13:67, 13:195 and DRB1\*14:46 alleles. Specific PCR fragment of 260 bp in the DRB3\*01:12 and 02:31 alleles.

Primer mix 31: Specific PCR fragment of 70 bp in the DRB3\*01:21, 02:19, 02:21 and 02:25 and in the DRB1\*12:34 alleles. Specific PCR fragment of 95 bp in the DRB3\*01:16 and 02:29N alleles.

Primer mix 33: Specific PCR fragment of 150 bp in the DRB3\*03:01:01-03:02 and 03:05-03:06 and in the DRB1\*03:35, DRB1\*07:04, DRB1\*14:38:01-14:38:02, 14:50, 14:93 and 14:127:01-14:127:02 alleles.Specific PCR fragment of 180 bp in the DRB3\*01:20 allele.

Primer mix 34: Specific PCR fragment of 140 bp in the DRB3\*03:05 allele. Specific PCR fragment of 175 bp in the DRB3\*02:36 allele.

Primer mix 36: Specific PCR fragment of 105 bp in the DRB3\*01:22 allele. Specific PCR fragment of 195 bp in the DRB3\*02:35 allele.

Primer mix 38: Specific PCR fragment of 70 bp in the DRB3\*02:32 and in the DRB1\*03:44, DRB1\*10:13 and DRB1\*13:106 alleles. Specific PCR fragment of 205 bp in the DRB3\*01:07?, 02:05?, 02:07?-02:08? and 02:34 alleles.

The DRB3 subtyping kit cannot distinguish the silent mutations in the DRB3\*01:01:02:01-01:01:06 alleles, the DRB3\*02:02:01:01-02:02:06 alleles or the DRB3\*03:01:01-03:01:03 alleles.

‘w’, might be weakly amplified.

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