Gel Documentation Form and Worksheet

DRB1\*01 (101.111-24/06 -24u/06u) Lot No: 9E8 Expiry Date: 2019-09-01

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

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

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

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

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

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

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

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

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |



‘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 1 and 24 has a tendency of giving rise to primer oligomer formation.

Primer mix 18 may have tendency of unspecific amplification and may give rise to a lower yield of HLA-specific PCR product than the other DRB1\*01 primer mixes.

Primer mix 24 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**DRB1\*01 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 3.26.0, 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**Primer mix 4: Specific PCR fragment of 180 bp in the DRB1\*01:62N allele. Specific PCR fragment of 210 bp in the DRB1\*01:03, 01:10, 01:39N, 01:42 and 01:61 alleles.

Primer mix 5: Specific PCR fragment of 210 bp in the DRB1\*01:29:01and 01:74 alleles. Specific PCR fragment of 230 bp in the DRB1\*01:04, 01:11:01-01:11:02, 01:16, 01:35 and 01:55 alleles.

Primer mix 6: Specific PCR fragment of 135 bp in the DRB1\*01:05 and DRB1\*01:31 alleles. Specific PCR fragment of 215 bp in the DRB1\*01:29:01-01:29:02 and 01:74 alleles.

Primer mix 8: Specific PCR fragment of 115 bp in the DRB1\*01:50 allele. Specific PCR fragment of 175 bp in the DRB1\*01:27 and the DRB1\*14:112 alleles. Specific PCR fragment of 210 bp in the DRB1\*01:07 allele.

Primer mix 9: Specific PCR fragment of 110 bp in the DRB1\*01:08 allele. Specific PCR fragment of 255 bp in the DRB1\*01:04, 01:06, 01:20:01-01:20:02 and 01:61 alleles.

Primer mix 10: Specific PCR fragment of 210 bp in the DRB1\*01:06, 01:09 and 01:15 alleles. Specific PCR fragment of 250 bp in the DRB1\*01:52N allele.

Primer mix 11: Specific PCR fragment of 140 bp in the DRB1\*01:18 and 01:44:01-01:44:02 alleles. Specific PCR fragment of 210 bp in the DRB1\*01:10 and 01:68N alleles.

Primer mix 12: Specific PCR fragment of 140 bp in the DRB1\*01:31 allele. Specific PCR fragment of 180 bp in the DRB1\*01:26 and 01:37 alleles. Specific PCR fragment of 215 bp in the DRB1\*01:12 allele.

Primer mix 13: Specific PCR fragment of 85 bp in the DRB1\*01:13 allele. Specific PCR fragment of 150 bp in the DRB1\*01:28 allele. Specific PCR fragment of 215 bp in the DRB1\*01:23 and \*01:51 alleles.

Primer mix 14: Specific PCR fragment of 170 bp in the DRB1\*01:14 allele. Specific PCR fragment of 205 bp in the DRB1\*01:23-01:24:02, 01:51, 01:54 and 01:68N alleles.

Primer mix 15: Specific PCR fragment of 150 bp in the DRB1\*01:28 allele. Specific PCR fragment of 220 bp in the DRB1\*01:16, 01:21 and 01:55 alleles.

Primer mix 16: Specific PCR fragment of 200 bp in the DRB1\*01:24:01-01:24:02 and 01:54 alleles. Specific PCR fragment of 230 bp in the DRB1\*01:19 and 01:21 alleles.

Primer mix 17: Specific PCR fragment of 125 bp in the DRB1\*01:30 and the DRB1\*13:165 alleles. Specific PCR fragment of 230 bp in the DRB1\*01:27 allele. Specific PCR fragment of 260 bp in the DRB1\*01:22 allele.

Primer mix 18: Specific PCR fragment of 115 bp in the DRB1\*01:50 allele. Specific PCR fragment of 230 bp in the DRB1\*01:25 allele.

Primer mix 19: Specific PCR fragment of 125 bp in the DRB1\*01:67 allele. Specific PCR fragment of 235 bp in the DRB1\*01:77 allele. Specific PCR fragment of 270 bp in the DRB1\*01:39N-01:40N alleles.

Primer mix 20: Specific PCR fragment of 205 bp in the DRB1\*01:33N allele. Specific PCR fragment of 235 bp in the DRB1\*01:77 allele.

Primer mix 21: Specific PCR fragment of 90 bp in the DRB1\*01:34 allele. Specific PCR fragment of 180 bp in the DRB1\*01:62N allele. Specific PCR fragment of 250 bp in the DRB1\*01:32 allele.

Primer mix 22: Specific PCR fragment of 205 bp in the DRB1\*01:36 allele. Specific PCR fragment of 250 bp in the DRB1\*01:52N allele.

**4**The following DRB1\*01 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| DRB1\*01:40N, 01:67 | 19 |

The DRB1\*01 primer set cannot distinguish the silent mutations in DRB1\*01:01:01-01:01:29 alleles, the DRB1\*01:02:01-01:02:05 and 01:02:07-01:02:12 alleles, the DRB1\*01:11:01-01:11:02, the DRB1\*01:24:01-01:24:02 or the DRB1\*01:44:01-01:44:02 alleles.

’w’, might be weakly amplified.