Gel Documentation Form and Worksheet

HLA-C\*02 (101.622-12/12u) Lot No: 3G8 Expiry Date: 2021-01-01

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 13 and 16 may give a lower yield of HLA-specific PCR product than the other C\*02 primer mixes.

Primer mixes 10, 16 and 30 may have tendencies of unspecific amplifications.

Primer mix 43 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.

Change in revision R01 compared to R00:

1. The expiry date has been corrected.



















**1**HLA-C\*02 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 3.24.0, April 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 HLA-C\*02 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-C\*02 alleles | Other amplified HLA Class I alleles |
| **3** | 105 bp  135 bp | \*02:03, 02:16:02, 02:18, 02:31  \*02:20 | \*03:03:22, 03:04:34, 07:02:75, **B\*27:34, B\*35:01:30w, B\*40:02:07, B\*40:06:02, B\*51:01:52w, B\*57:01:16w, B\*57:03:02w** |
| **4** | 65 bp  150 bp | \*02:56  \*02:04 | **B\*35:01:30, B\*51:01:52, B\*57:01:16, B\*57:03:02**  \*04:198, 08:119, 12:115, 14:41 |
| **5** | 145 bp  245 bp | \*02:22  \*02:05:01-02:05:03, 02:17, 02:81 | \*05:105, 08:31, **B\*07:02:07, B\*27:05:15, B\*48:04:02**  \*01:10, 06:08, 12:119, 14:25, 16:29,  16:50, 17:21, **B\*07:239, B\*14:46,**  **B\*40:243** |
| **6** | 160 bp  215 bp | \*02:06:01-02:06:02, 02:47  \*02:46, 02:64 | \*06:168, 12:15, 12:208, 15:74  \*12:162 |
| **8** | 70 bp  280 bp | \*02:08  \*02:33 | \*03:18:02, 03:64:01, 03:301, 12:03:23, 15:10:02-15:10:03**, B\*56:01:09,** **B\*58:74** |
| **11** | 90 bp  170 bp | \*02:18, 02:32  \*02:09 | \*05:18:04, 07:02:75 |
| **12** | 150 bp  230 bp | \*02:11, 02:14:01-02:14:02, 02:107  \*02:17 | \*04:42:01-04:42:02, 04:220, 05:43, 06:05w, 07:02:09, 08:37, 12:16, 12:147, 12:195:02, 12:217, 15:23, 15:63, 15:138, 16:21, 16:80, **B\*27:84**  **\***14:25 |
| **13** | 225 bp  265 bp | \*02:12, 02:27:01-02:27:02, 02:115, 02:126, 02:131  \*02:49, 02:75, 02:115 | \*03:308, 16:34  \*04:03:01-04:03:04, 04:06:01-04:06:02, 04:80, 04:147, 04:160, 04:171, 04:190, 04:256, 04:286 |
| **14** | 80 bp  115 bp | \*02:13  \*02:43:01 | \*05:18:04, 05:106:01, 07:02:75, 12:03:17 |
| **15** | 130 bp  190 bp | \*02:21  \*02:15, 02:71 | **B\*07:221** |
| **17** | 110 bp  160 bp | \*02:31, 02:43:01  \*02:23 | \*05:18:04, 05:106:01, 07:02:75, 12:03:17 |
| **20** | 180 bp  215 bp | \*02:24, 02:71  \*02:72 | **B\*07:113, B\*08:64, B\*15:385, B\*40:192**  **B\*07:52** |
| **21** | 115 bp  210 bp | \*02:30  \*02:25Q, 02:64, 02:67Q | \*15:19  \*12:162 |
| **22** | 65 bp  110 bp | \*02:56  \*02:34 | **B\*35:01:30, B\*51:01:52, B\*57:01:16, B\*57:03:02**  \*16:09 |
| **23** | 85 bp  210 bp  390 bp | \*02:70  \*02:29, 02:69  \*02:35, 02:120 |  |
| **25** | 160 bp  215 bp | \*02:19, 02:23  \*02:60 | \*01:09, 03:21, 03:80:01-03:80:02, 03:142, 03:287, 06:107, 06:179, **B\*07:55, B\*07:100**, **B\*15:45, B\*15:63, B\*15:248, B\*15:287**  **B\*07:55, B\*07:100, B\*08:70, B\*15:07:01:01-15:07:03, B\*15:45, B\*15:68, B\*15:126, B\*15:207, B\*15:324, B\*15:331, B\*15:405, B\*15:431, B\*46:12, B\*48:19** |
| **26** | 140 bp  260 bp | \*02:39  \*02:40:01-02:40:02, 02:53:01-02:53:02 | \*12:124, **B\*15:363:01-15:363:02, B\*18:91, B\*39:122** |
| **28** | 90 bp  170 bp | \*02:52N  \*02:37, 02:46, 02:60, 02:67Q | **B\*27:34, B\*40:02:07** |
| **29** | 165 bp  210 bp | \*02:83  \*02:12, 02:49, 02:55:01-02:55:02, 02:115 | \*08:24, 16:90  \*04:03:01, 04:03:03-04:03:04, 04:06:01-04:06:02, 04:80, 04:107, 04:147, 04:160, 04:171, 04:190, 04:256, 04:286 |
| **30** | 80 bp  270 bp | \*02:38N  \*02:58 | \*01:35, 01:107, 01:131, 04:08, 04:34, 04:147, 04:212, 05:27, 05:39, 05:151, 06:96, 06:197, 08:41, 08:115, 08:138, 12:83, 12:106, 12:122, 14:20, 15:15, 15:77, 17:07, 18:08 |
| **31** | 100 bp  165 bp | \*02:42, 02:107  \*02:83 | \*01:02:34, 01:21, 04:140, 04:166, 04:220, 05:98, 06:05, 07:02:09, 08:14, 08:80, 08:103, 12:16, 12:147, 15:63, 15:113, 16:80, **B\*67:02**  \*08:24, 16:90 |
| **32** | 215 bp  245 bp | \*02:92N  \*02:81 |  |
| **41** | 140 bp  250 bp | \*02:104  \*02:121N |  |

**4**The HLA-C\*02 primer set cannot separate the C\*02:10:01:01-02:10:02, 02:89 and 02:133 alleles from the C\*06:18 allele. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C\*06 high resolution kit.

**5**The following HLA-C\*02 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| Alleles | Primer mix | Alleles | Primer mix |
| C\*02:05:02-02:05:03, 02:22 | 5 | C\*02:35, 02:69, 02:70, 02:120 | 23 |
| C\*02:15, 02:21 | 15 | C\*02:37, 02:52N | 28 |
| C\*02:25Q, 02:30 | 21 | C\*02:75, 02:126 | 13 |
|  |  |  |  |

‘w’, might be weakly amplified.

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