Gel Documentation Form and Worksheet

HLA-C\*05 (101.613-12/12u) Lot No: 3K0 Expiry Date: 2023-10-01

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 mix 28 may have a tendency to giving rise to primer oligomer formation.

Primer mix 29 may have tendencies of unspecific amplifications.

Primer mix 38 contains a negative control, which will amplify a 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**HLA-C\*05 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\*05 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-C\*05 alleles | Other amplified HLA Class I alleles |
| **4** | 120 bp  285 bp | \*05:03  \*05:07N | \*07:52  \*08:180N |
| **5** | 225 bp  285 bp | \*05:04:01-05:04:02, 05:103:01-05:103:02, 05:135, 05:188, 05:207, 05:215  \*05:31 | \*06:129, 07:68, 07:260:01-07:260:02, 07:302, 08:09, 08:11, 08:59, 08:113, 08:152, **B\*15:337, B\*18:83, B\*58:76** |
| **6** | 255 bp  280 bp | \*05:05:01-05:05:02, 05:99N, 05:135, 05:147-05:148  \*05:16, 05:85, 05:107 | \*03:251, 03:314, 08:62:01-08:62:02, 08:82, 08:144:01-08:144:02, **A\*02:425, A\*02:519, A\*29:10:01-29:10:02, A\*68:69, B\*14:32, B\*15:337, B\*18:83, B\*44:148**  \*06:129, 07:364, 08:12, **B\*14:32** |
| **7** | 155 bp  265 bp | \*05:01:01:01-05:01:15, 05:01:17, 05:01:19-05:01:44, 05:03-05:08, 05:10-05:11, 05:13-05:16, 05:19-05:51Q, 05:53-05:86, 05:88-05:96, 05:98-05:102, 05:104-05:105, 05:108-05:113N, 05:116-05:127, 05:129-05:132, 05:135-05:142, 05:144-05:150, 05:152-05:200, 05:202Q-05:205, 05:207-05:215  \*05:01:01:01-05:01:45, 05:03-05:04:02, 05:06-05:08, 05:10-05:16, 05:18:01-05:51Q, 05:53-05:60, 05:62-05:81, 05:83-05:84, 05:86-05:106:02, 05:108-05:134, 05:136-05:142, 05:144-05:146, 05:149-05:200, 05:202Q-05:205, 05:207-05:215 | \*07:41, 08:02:01:01-08:02:26, 08:04:01-08:05, 08:07, 08:12-08:13, 08:17-08:19:02, 08:23, 08:25, 08:28-08:32, 08:34, 08:37, 08:43, 08:45, 08:47-08:49, 08:52N-08:53, 08:55N, 08:57, 08:62:01-08:63, 08:67-08:71, 08:73-08:77, 08:90, 08:92-08:94, 08:100, 08:103-08:104, 08:107-08:108, 08:110-08:116, 08:120, 08:123, 08:125-08:126, 08:132, 08:134, 08:139-08:140, 08:142, 08:146, 08:149-08:152, 08:156, 08:158-08:159, 08:161N, 08:166-08:172, 08:179-08:185, 08:188  \*04:120, 06:129, 07:04:01:01-07:04:18, 07:11-07:12, 07:41, 07:63, 07:68, 07:101, 07:139, 07:142, 07:181, 07:199:01-07:199:02, 07:260:01-07:260:02, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354-07:355, 07:357-07:358, 07:361, 07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:447, 07:459, 07:466-07:467, 07:480, 07:487, 07:501, 07:523, 07:534-07:535, 07:552, 07:562-07:563, 07:569, 07:585-07:586, 07:600:01N-07:600:02N, 07:622, 07:626, 07:651, 07:655-07:656, 07:664, 07:672N, 07:674, 07:693, 07:698, 07:742, 07:751N, 08:01:01:01-08:01:13, 08:01:15-08:02:25, 08:03:01-08:08:01, 08:09-08:14, 08:16:01-08:50, 08:52N-08:61, 08:63, 08:65-08:69, 08:71, 08:73-08:81, 08:83-08:140, 08:142-08:143, 08:145-08:150, 08:152-08:159, 08:161N-08:188, 15:130, **B\*58:76** |
| **8** | 85 bp  210 bp | \*05:06  \*05:55 |  |
| **9** | 105 bp  175 bp  245 bp | \*05:51Q  \*05:48N  \*05:113N |  |
| **10** | 95 bp  250 bp  320 bp | \*05:08, 05:52, 05:89  \*05:30  \*05:92N | \*02:51, 08:29, 08:31, 12:144, 12:185, **B\*15:33, B\*15:248**  \*03:247, 06:125, 14:70, 16:85-16:86, 16:144, 16:147  \*08:55N |
| **11** | 115 bp  205 bp | \*05:33  \*05:25, 05:42 | \*04:129, 06:05, 06:67, 07:101, 07:148, 07:161, 07:583, 08:28, 08:137, 08:168, **A\*01:203, A\*11:166, A\*80:01:01:01w-80:05w** |
| **12** | 155 bp  225 bp  285 bp | \*05:97  \*05:38  \*05:10, 05:148 | \*08:97  \*03:251, 03:314, 08:44, 08:61, 08:82, 08:126, 15:130, **B\*44:148, B\*58:76** |
| **14** | 120 bp  200 bp | \*05:12, 05:15  \*05:80, 05:91N | \*08:153 |
| **15** | 115 bp  185 bp  240 bp | \*05:65  \*05:34  \*05:13 | \*04:96  \*02:93, 04:352, 06:13 |
| **16** | 195 bp  470 bp | \*05:14  \*05:93 | \*03:171, 03:211:01, 04:144, 06:73, 08:20, 08:40, 12:109 |
| **18** | 160 bp  245 bp | \*05:87  \*05:19, 05:99N | \*08:145 |
| **20** | 260 bp  390 bp | \*05:26  \*05:21 | \*04:238 |
| **23** | 85 bp  135 bp | \*05:24  \*05:36 | \*07:148, 15:107, 15:178 |
| **24** | 185 bp  265 bp | \*05:43  \*05:29:01-05:29:02, 05:197 | \*08:37  \*08:13, 08:16:01, 08:25, 08:94 |
| **25** | 105 bp  205 bp | \*05:40  \*05:35, 05:80 |  |
| **26** | 115 bp  185 bp  245 bp | \*05:27, 05:39, 05:184  \*05:28  \*05:113N | \*03:87:01-03:87:02, 03:414, 08:115, 08:182, **B\*15:33, B\*15:248**  **\***06:64 |
| **28** | 115 bp  200 bp | \*05:65  \*05:45 | \*04:96 |
| **29** | 140 bp  185 bp  260 bp | \*05:41  \*05:34  \*05:37 | \*04:78  \*02:93, 04:352, 06:13 |
| **30** | 70 bp  175 bp | \*05:53  \*05:32 |  |
| **31** | 155 bp  285 bp | \*05:18:02-05:18:04, 05:103:01, 05:106:01, 05:107, 05:115, 05:134, 05:151  \*05:104 | \*07:04:01:01-07:04:10, 07:04:12-07:04:18, 07:11-07:12, 07:63, 07:68, 07:101, 07:139, 07:142, 07:181, 07:199:01-07:199:02, 07:260:01-07:260:02, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354-07:355, 07:357-07:358, 07:361, 07:364-07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:459, 07:466-07:467, 07:480, 07:487, 07:501, 07:523, 07:534-07:535, 07:552, 07:562-07:563, 07:569, 07:585-07:586, 07:600:01N-07:600:02N, 07:622, 07:626, 07:651, 07:655-07:656, 07:664, 07:672N, 07:674, 07:693, 07:698, 07:742, 07:751N, 08:33:01, **B\*14:32, B\*18:83, B\*44:148, B\*58:76**  \*07:04:01:01-07:04:06, 07:04:08-07:04:18, 07:11-07:12, 07:63, 07:101, 07:139, 07:142, 07:181, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354-07:355, 07:357-07:358, 07:361, 07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:447, 07:459, 07:466-07:467, 07:480, 07:487, 07:501, 07:523, 07:534-07:535, 07:552, 07:562-07:563, 07:569, 07:585-07:586, 07:600:01N-07:600:02N, 07:622, 07:626, 07:651, 07:655-07:656, 07:664, 07:672N, 07:674, 07:693, 07:698, 07:742, 07:751N |
| **34** | 165 bp  275 bp | \*05:128N  \*05:111, 05:207 | \*07:68, 07:260:01-07:260:02, 07:302, 08:38 |

**4**The following HLA-C\*05 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| **Alleles** | **Primer mix** | **Alleles** | **Primer mix** |
| C\*05:03, 05:07N | 4 | C\*05:24, 05:36 | 23 |
| C\*05:06, 05:55 | 8 | C\*05:25, 05:33 | 11 |
| C\*05:08, 05:30, 05:89 | 10 | C\*05:28, 05:39 | 26 |
| C\*05:14, 05:93 | 16 | C\*05:32, 05:53 | 30 |
| C\*05:15, 05:91N | 14 | C\*05:35, 05:40 | 25 |
| C\*05:21, 05:26 | 20 | C\*05:37, 05:41 | 29 |

Abbreviations

‘w’, might be weakly amplified.