Gel Documentation Form and Worksheet

HLA-B\*55 (101.570-06/06u) Lot No: 4L7 Expiry Date: 2024-08-01

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 6, 25, 26 and 28 may have tendencies of unspecific amplifications.

Primer mix 32 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-B\*55 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**The following HLA-B\*55 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*55 alleles | Other amplified Class I alleles |
| **5** | 95 bp  235 bp | \*55:50  \*55:04, 55:49, 55:86 | \*08:83, 13:06, 13:53, 13:131, 14:43, 14:50, 18:74N, 18:78, 38:38, 41:37, **A\*31:147, C\*05:110, C\*12:120**  \*07:19, 07:31, 07:34, 07:43, 08:01:01:01-08:05, 08:07-08:08N, 08:10, 08:13-08:15, 08:17-08:20:02, 08:22-08:24, 08:26:01-08:39, 08:41-08:48, 08:50-08:59:02, 08:61-08:78, 08:80-08:83, 08:85-08:88, 08:90-08:106, 08:108-08:124, 08:126-08:128, 08:130-08:155, 08:157-08:164, 08:166-08:170, 08:172-08:174, 08:176-08:180, 08:182-08:183, 08:185, 08:187-08:204, 08:206-08:231, 08:233-08:253, 14:05, 14:13, 14:53, 18:14, 35:87, 37:09, 38:19, 39:03:01:01-39:03:01:03, 39:14:01:01-39:14:01:03, 39:24:01-39:24:02, 39:29, 39:37:01:01-39:37:01:02, 39:76, 39:120, 39:144, 39:152, 40:39, 41:02:01:01-41:02:09, 41:04, 41:10-41:11, 41:13, 41:15, 41:18, 41:23-41:24, 41:27, 41:31, 41:36, 41:38-41:43, 41:45N-41:47, 41:49, 41:51-41:52, 41:55, 41:58, 42:01:01:01-42:02:02, 42:05:01-42:12, 42:14-42:28, 44:166, 48:37, **C\*06:264, C\*07:294, C\*07:526:01, C\*07:530, C\*07:681, C\*08:08:01-08:08:02** |
| **8** | 230 bp  425 bp | \*55:66  \*55:12 | \*56:41 |
| **9** | 215 bp  375 bp | \*55:25  \*55:11, 55:14 | \*07:225, 07:227 |
| **10** | 70 bp  220 bp | \*55:07  \*55:17, 55:38, 55:72 | \*07:13, 07:247, 07:270, 08:188, 15:436, 27:198, 39:121, 54:01:02, 59:06, 67:02:01:01-67:02:01:02, **C\*01:02:48, C\*03:02:18, C\*03:03:42, C\*03:04:50, C\*07:01:22, C\*07:02:31, C\*08:16:02, C\*14:02:27, C\*15:02:06**  \*08:09, 08:84, 15:83:01:01-15:83:01:02, 39:06:02:01-39:06:06, 39:34, 39:57, 39:62, 39:64, 39:90, 39:109, 39:129, 39:132, 39:140-39:141, 39:154, 42:04, 51:21, 51:36, 51:101, 51:143, 51:153, 51:197, 51:280, 51:295, 52:37, 52:71, 52:84, 78:07, **C\*14:92** |
| **11** | 90 bp  125 bp  180 bp | \*55:48  \*55:15  \*55:09, 55:22, 55:24 | \*07:78, 13:01:01:01-13:02:32, 13:07N-13:09, 13:11, 13:14-13:20, 13:22:01-13:23, 13:25, 13:27-13:34, 13:36-13:45, 13:47, 13:49N-13:50, 13:52, 13:54-13:58, 13:60-13:61, 13:63N-13:70, 13:73-13:78, 13:80-13:85, 13:87-13:107, 13:109-13:119, 13:121-13:126, 13:128-13:130, 13:132-13:139N, 13:141, 40:48, 40:377, 45:10, 49:07, 50:31, 54:26, 56:60, 59:09 |
| **18** | 215 bp  310 bp  415 bp | \*55:25  \*55:19  \*55:18, 55:31 | \*13:125, 18:163, 40:10:01:01-40:10:02, 44:344, 54:30, 56:23, 56:42, 56:44, 56:54, 56:67, 59:01:01:01-59:10N |
| **21** | 170 bp  270 bp | \*55:83N  \*55:10 | \*07:209, 07:271, 15:506, 18:01:01:01-18:03:02, 18:05:01:01-18:15, 18:18:01:01-18:28, 18:30-18:79, 18:81-18:97, 18:99-18:101, 18:103-18:106Q, 18:108-18:111, 18:113-18:119, 18:121-18:124, 18:126-18:192, 27:75, 35:25, 35:124-35:125, 35:142, 35:162, 35:267, 35:320, 37:01:01:01-37:21, 37:23-37:40, 37:42N-37:91, 40:149?, 44:130, 44:156, 44:221, 44:224, 44:258, 51:116, 51:176, 51:179, 51:218, 52:16, 52:27, 52:77, 53:43:01-53:43:02, 54:21, 56:16, 57:58, 57:80, 58:12, 81:01:01:01-81:01:05, 81:03?-81:04N?, 81:05, 81:06?-81:08?, 82:01:01:01-82:03, 83:01 |
| **22** | 95 bp  225 bp | \*55:23, 55:27, 55:68  \*55:09, 55:21, 55:37, 55:52 | \*07:84, 13:04, 13:35, 13:72, 13:127, 15:04:01:01-15:04:04, 15:16:01:01-15:16:04, 15:67, 15:95, 15:155, 15:222, 15:254, 15:293, 15:310, 15:362, 15:408, 15:499, 15:517, 15:531, 15:550, 35:37, 35:235, 35:265, 40:44, 40:159, 41:21, 44:20, 44:47, 44:100, 44:197, 45:09, 46:32, 49:04:01-49:05:02, 50:33, 51:37, 51:90, 51:92:01-51:92:02, 51:197, 51:216, 51:261, 51:274, 51:298, 52:12, 52:26, 52:63, 52:75, 54:14-54:15, 56:50, 58:122, **C\*03:464, C\*07:463, C\*07:758, C\*12:183**  \*07:78, 07:84, 13:18, 13:31, 13:41, 13:128, 13:131, 15:04:01:01-15:04:04, 15:137, 15:303, 15:499, 15:531, 35:265, 39:33, 40:161, 46:32, 49:41, 50:47, 51:05, 51:29, 51:54, 51:61:01-51:61:02, 51:82, 51:197, 51:217, 51:279, 52:21:01-52:21:02, 52:24, 54:10, 54:20, 54:33, 54:40, 56:43, **C\*05:152, C\*12:183, C\*14:92** |
| **23** | 165 bp  220 bp | \*55:29  \*55:16, 55:21 | \*13:105, 51:174:02  \*07:143, 13:31, 13:41, 13:131, 15:04:01:01-15:04:04, 15:137, 15:303, 15:499, 15:531, 27:157, 35:265, 40:166, 42:02:01:01-42:02:02, 42:09, 42:17-42:18, 42:27, 45:06, 46:32, 50:47, 51:61:01-51:61:02, 52:21:01-52:21:02, 54:02, 54:33, 54:40, 56:35, 56:43, **C\*12:183** |
| **24** | 100 bp  235 bp | \*55:13, 55:23, 55:27, 55:32, 55:58, 55:68  \*55:33 | \*07:84, 13:04, 13:35, 13:46, 13:72, 13:127, 13:140, 15:04:01:01-15:04:04, 15:16:01:01-15:16:04, 15:67, 15:95, 15:137, 15:155, 15:222, 15:254, 15:293, 15:310, 15:362, 15:408, 15:499, 15:517, 15:531, 15:550, 35:37, 35:235, 35:265, 35:276, 39:06:01-39:06:06, 39:33-39:34, 39:50, 39:57, 39:62, 39:64, 39:83, 39:90, 39:102, 39:109, 39:127, 39:129, 39:132, 39:140-39:141, 39:154, , 40:44, 40:86, 40:159, 40:330, 41:21, 41:30, 41:50, 44:20, 44:47, 44:100, 44:197, 45:02, 45:09, 46:32, 49:04:01-49:05:02, 49:50, 50:09, 50:33, 51:13:01-51:13:02, 51:37, 51:63:01-51:63:02, 51:90, 51:92:01-51:92:02, 51:97, 51:172, 51:197, 51:216, 51:251, 51:261, 51:274, 51:298, 52:12,  52:14:01-52:14:02, 52:26, 52:39, 52:63, 52:75, 54:14-54:15, 56:22, 56:50, 58:122, 59:03, 73:01:01:01-73:02, **C\*03:464, C\*05:152, C\*07:463, C\*07:758, C\*12:183** |
| **25** | 155 bp  280 bp  380 bp | \*55:62  \*55:26  \*55:18, 55:34, 55:40 | \*13:125, 27:196, 40:10:01:01-40:10:02, 44:344, 54:35, 56:67 |
| **26** | 75 bp  310 bp  400 bp | \*55:42  \*55:45  \*55:34, 55:47 | \*13:88 |
| **27** | 95 bp  170 bp | \*55:46  \*55:43 | \*50:39, 54:16  \*51:127 |
| **28** | 95 bp  215 bp | \*55:41, 55:44, 55:58  \*55:57 | \*13:46, 15:137, 49:54, 51:172, 51:223, 73:01:01:01, 73:02 |
| **30** | 100 bp | \*55:35, 55:50 | \*08:83, 13:06, 13:53, 13:131, 14:43, 14:50, 15:76, 15:101, 18:74N, 18:78, 38:38, 41:37, 56:39, **A\*31:147, C\*05:110, C\*12:120** |
| **31** | 105 bp  170 bp  235 bp | \*55:13, 55:58  \*55:43  \*55:55N | \*13:46, 13:140, 15:137, 35:235, 35:276, 39:06:01-39:06:06, 39:33-39:34, 39:50, 39:57, 39:62, 39:64, 39:83, 39:90, 39:102, 39:109, 39:127, 39:129, 39:132, 39:140-39:141, 39:154, 40:86, 40:330, 41:50, 45:02, 49:50, 50:09, 51:13:01-51:13:02, 51:92:01-51:92:02, 51:172, 52:14:01-52:14:02, 52:75, 56:22, 59:03, 73:01:01:01-73:02, **C\*05:152**  \*51:127 |

**4** The HLA-B\*55 primer set cannot separate the following alleles. These alleles can be distinguished by the HLA-B low resolution kit and/or the HLA-B\*15, B\*51 and B\*56 high resolution kit.

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| --- |
| Alleles |
| B\*55:78, 15:42, 51:300 |
| B\*55:22, 56:60 |

**5**The following HLA-B\*55 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*55:26, 55:62 | 25 |

Abbreviations:

‘w’, may be weakly amplified.

‘?’, the nucleotide sequence of the primer matching region is not known.