Gel Documentation Form and Worksheet

HLA-B\*55 (101.570-06/06u) Lot No: 9G5 Expiry Date: 2021-04-01

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 6, 25, 26, 28 and 30 may have tendencies of unspecific amplifications, most pronounced in primer mix 30.

Primer mix 32 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**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 bp235 bp | \*55:50\*55:04, 55:49, 55:86 | \*08:83, 13:06, 13:53, 14:43, 14:50, 18:74N, 18:78, 38:38, 41:37, **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, 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, 08:187-08:195, 14:05, 14:13, 14:53, 18:14, 35:87, 37:09, 38:19, 39:03:01:01-39:03:01:02, 39:14:01:01-39:14:01:02, 39:24:01-39:24:02, 39:29, 39:37, 39:76, 39:120, 40:39, 41:02:01-41:02:07, 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, 42:01:01-42:02:01:02, 42:05:01-42:12, 42:14-42:25, 44:166, 48:37, **C\*07:294, C\*07:526, C\*07:530, C\*08:08:01-08:08:02** |
|  **8** | 230 bp425 bp | \*55:66\*55:12 | \*56:41 |
|  **9** | 215 bp 375 bp | \*55:25\*55:11, 55:14 | \*07:225, 07:227 |
| **11** | 90 bp 125 bp 180 bp | \*55:48\*55:15\*55:09, 55:22, 55:24 | \*07:78, 13:01:01:01-13:02:22, 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, 13:109-13:110, 40:48, 45:10, 49:07, 50:31, 54:26, 59:09 |
| **18** | 215 bp 310 bp 415 bp | \*55:25\*55:19\*55:18, 55:31 | \*40:10:01:01-40:10:02, 54:30, 56:23, 56:42, 56:44, 56:54, 59:01:01:01-59:10N |
| **21** | 170 bp270 bp | \*55:83N\*55:10 | \*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, 18:103-18:106, 18:108-18:111, 18:113-18:119, 18:121-18:124, 18:126-18:145, 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-37:71, 40:149?, 44:130, 44:156, 44:221, 44:224, 44:258, 51:116, 51:176, 51:179, 51:218, 52:16, 52:27, 53:43, 54:21, 56:16, 57:58, 57:80, 58:12, 81:01, 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, 15:04:01:01-15:04:04, 15:16:01:01-15:16:03, 15:67, 15:95, 15:155, 15:222, 15:254, 15:293, 15:310, 15:362, 15:408, 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, 50:33, 51:37, 51:90, 51:92:01-51:92:02, 51:197, 51:216, 52:12, 52:26, 52:63, 52:75, 54:14-54:15, 56:50, **C\*07:463, C\*12:183**\*07:78, 07:84, 13:18, 13:31, 13:41, 15:04:01:01-15:04:04, 15:137, 15:303, 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, 52:21:01-52:21:02, 52:24, 54:10, 54:20, 54:33, 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, 15:04:01:01-15:04:04, 15:137, 15:303, 27:157, 35:265, 40:166, 42:02:01:01-42:02:01:02, 42:09, 42:17-42:18, 45:06, 46:32, 50:47, 51:61:01-51:61:02, 52:21:01-52:21:02, 54:02, 54:33, 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, 15:04:01:01-15:04:04, 15:16:01:01-15:16:03, 15:67, 15:95, 15:137, 15:155, 15:222, 15:254, 15:293, 15:310, 15:362, 15:408, 35:37, 35:235, 35:265, 35:276, 39:06:01-39:06:05, 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, 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, 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, 52:12, 52:14, 52:26, 52:39, 52:63, 52:75, 54:14-54:15, 56:22, 56:50, 59:03, 73:01-73:02, **C\*05:152, C\*07:463, C\*12:183** |
| **25** | 155 bp280 bp 380 bp | \*55:62\*55:26\*55:18, 55:34, 55:40 | \*40:10:01:01-40:10:02, 54:35 |
| **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 bp215 bp | \*55:41, 55:44, 55:58\*55:57 | \*13:46, 15:137, 51:172, 51:223, 73:01-73:02 |
| **30** | 100 bp220 bp | \*55:35, 55:50\*55:17, 55:38, 55:72 | \*08:83, 13:06, 13:53, 14:43, 14:50, 15:76, 15:101, 18:74N, 18:78, 38:38, 41:37, 56:39, **C\*05:110, C\*12:120**\*08:09, 08:84, 15:83, 39:06:02:01-39:06:05, 39:34, 39:57, 39:62, 39:64, 39:90, 39:109, 39:129, 39:132, 42:04, 51:21, 51:36, 51:101, 51:143, 51:153, 51:197, 52:37, 52:71, 78:07, **C\*14:92** |
| **31** | 105 bp 170 bp235 bp | \*55:13, 55:58\*55:43\*55:55N | \*13:46, 15:137, 35:235, 35:276, 39:06:01-39:06:05, 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, 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, 52:75, 56:22, 59:03, 73:01-73:02, **C\*05:152**\*51:127 |

**4**The HLA-B\*55 primer set cannot separate the B\*55:78 and the B\*15:42 alleles. These alleles can be distinguished by the HLA-B low resolution kit and/or the HLA-B\*15 high resolution kit.

**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 |

‘w’, may be weakly amplified.

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