Gel Documentation Form and Worksheet

HLA-B\*55 (101.570-06/06u) Lot No: 9E2 Expiry Date: 2019-10-01

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

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

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

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

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

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

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

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

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |





‘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.

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**Primer mix 8: Specific PCR fragment of 230 bp in the B\*55:66 allele. Specific PCR fragment of 425 bp in the B\*55:12 and the B\*56:41 alleles.

Primer mix 9: Specific PCR fragment of 215 bp in the B\*55:25 allele. Specific PCR fragment of 375 bp in the B\*55:11 and 55:14 and the B\*07:225 and 07:227 alleles.

Primer mix 11: Specific PCR fragment of 90 bp in the B\*55:48 allele. Specific PCR fragment of 125 bp in the B\*55:15 allele. Specific PCR fragment of 180 bp in the B\*55:09, 55:22 and 55:24 and the B\*07:78, 13:01:01-13:02:18, 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, 13:87-13:96, 40:48, 45:10, 49:07, 50:31, 54:26 and 59:09 alleles.

Primer mix 18: Specific PCR fragment of 215 bp in the B\*55:25 allele. Specific PCR fragment of 310 bp in the B\*55:19 allele. Specific PCR fragment of 415 bp in the B\*55:18 and 55:31 and the B\*40:10:01:01-40:10:02, 54:30, 56:23, 56:42, 56:44 and 59:01:01:01-59:09 alleles.

Primer mix 22: Specific PCR fragment of 95 bp in the B\*55:23, 55:27 and 55:68 and the B\*13:04, 13:35, 13:72, 15:16:01:01-15:16:03, 15:67, 15:95, 15:155, 15:222, 15:254, 15:293, 15:310, 15:362, 35:37, 35:235, 40:44, 40:159, 41:21, 44:20, 44:47, 44:100, 44:197, 45:09, 49:04:01-49:05, 50:33, 51:37, 51:90, 51:92:01-51:92:02, 52:12, 52:26, 52:63, 54:14-54:15 and 56:50 and in the C\*07:463 alleles. Specific PCR fragment of 225 bp in the B\*55:09, 55:21, 55:37 and 55:52 and the B\*07:78, 13:18, 13:31, 13:41, 15:137, 15:303, 39:33, 40:161, 49:41, 50:47, 51:05, 51:29, 51:54, 51:61:01-51:61:02, 51:82, 52:21, 52:24, 54:10, 54:20, 54:33 and 56:43 alleles. Specific PCR fragment of 95 bp and 225 bp in the B\*07:84, 15:04:01:01-15:04:04, 35:265, 46:32 and 51:197 and in the C\*12:183 alleles.

Primer mix 23: Specific PCR fragment of 165 bp in the B\*55:29 and the B\*51:174:02 alleles. Specific PCR fragment of 220 bp in the B\*55:16 and 55:21 and the B\*07:143, 13:31, 13:41, 15:04:01:01-15:04:04, 15:137, 15:303, 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, 54:02, 54:33, 56:35 and 56:43 and in the C\*12:183 alleles.

Primer mix 24: Specific PCR fragment of 100 bp in the B\*55:13, 55:23, 55:27, 55:32, 55:58 and 55:68 and the B\*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, 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, 40:44, 40:86, 40:159, 40:330, 41:21, 41:30, 44:20, 44:47, 44:100, 44:197, 45:02, 45:09, 46:32, 49:04:01-49:05, 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, 52:12, 52:14, 52:26, 52:39, 52:63, 54:14-54:15, 56:22, 56:50, 59:03 and 73:01-73:02 and in the C\*07:463 and C\*12:183 alleles. Specific PCR fragment of 235 bp in the B\*55:33 allele.

Primer mix 25: Specific PCR fragment of 155 bp in the B\*55:62 allele. Specific PCR fragment of 280 bp in the B\*55:26 allele.

Specific PCR fragment of 380 bp in the B\*55:18, 55:34 and 55:40 and the B\*40:10:01:01-40:10:02 and 54:35 alleles.

Primer mix 26: Specific PCR fragment of 75 bp in the B\*55:42 allele. Specific PCR fragment of 310 bp in the B\*55:45 and the B\*13:88 alleles. Specific PCR fragment of 400 bp in the B\*55:34 and 55:47 alleles.

Primer mix 27: Specific PCR fragment of 95 bp in the B\*55:46 and the B\*50:39 and 54:16 alleles. Specific PCR fragment of 170 bp in the B\*55:43 and the B\*51:127 alleles.

Primer mix 28: Specific PCR fragment of 95 bp in the B\*55:41, 55:44 and 55:58 and the B\*13:46, 15:137, 51:172 and 73:01-73:02 alleles. Specific PCR fragment of 215 bp in the B\*55:57 allele.

Primer mix 30: Specific PCR fragment of 95 bp in the B\*55:50 and the B\*08:83, 13:06, 13:53, 14:43, 14:50, 18:74N, 18:78, 38:38 and 41:37 and in the C\*05:110 and C\*12:120 alleles. Specific PCR fragment of 105 bp in the B\*55:35 and the B\*15:76, 15:101 and 56:39 alleles. Specific PCR fragment of 220 bp in the B\*55:17, 55:38 and 55:72 and the B\*08:09, 08:84, 15:83, 39:06:02-39:06:05, 39:34, 39:57, 39:62, 39:64, 39:90, 39:109, 42:04, 51:21, 51:36, 51:101, 51:143, 51:153, 51:197, 52:37 and 78:07 alleles.

Primer mix 31: Specific PCR fragment of 105 bp in the B\*55:13 and 55:58 and the B\*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, 40:86, 40:330, 45:02, 50:09, 51:13:01-51:13:02, 51:92:01-51:92:02, 51:172, 52:14, 56:22, 59:03 and 73:01-73:02 alleles. Specific PCR fragment of 170 bp in the B\*55:43 and the B\*51:127 alleles. Specific PCR fragment of 235 bp in the B\*55:55N allele

**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\*54 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 |

The HLA-B\*55 subtyping kit cannot separate the silent mutations in the B\*55:01:01-55:01:06 and 55:01:08-55:01:16 alleles or the B\*55:02:01:01-55:02:10 alleles.

‘w’, may be weakly amplified.

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