Gel Documentation Form and Worksheet

HLA-B\*52 (101.562-06/06u) Lot No: 0G1 Expiry Date: 2020-06-01

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 mix 3 may give rise to a lower yield of HLA-specific PCR product than the other B\*52 primer mixes.

Primer mixes 7, 11 and 14 may have tendencies of unspecific amplifications.

Primer mix 7 has a tendency to giving rise to primer oligomer formation.

Primer mix 21 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\*52 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 3.22.0, October 2015.

**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\*52 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*52 alleles | Other amplified HLA Class I alleles |
| **2** | 135 bp 235 bp | \*52:04\*52:09  | \*08:52, 15:87, 51:185, 53:05:01-53:05:02, 53:16, 53:33, 57:60 |
| **4** | 140 bp280 bp | \*52:02:01-52:02:02 \*52:36 | \*15:13:01-15:13:02, 15:16:01:01-15:17:06, 15:24:01-15:24:02, 15:67, 15:87, 15:95, 15:157, 15:162, 15:168, 15:177, 15:196, 15:208, 15:216, 15:222, 15:230, 15:254, 15:268, 15:273, 15:356, 15:361-15:362, 15:396, 15:403, 15:408, 15:411, 15:418, 15:423-15:424, 51:104, 57:01:01:01-57:11, 57:13-57:15, 57:17-57:44, 57:46-57:50, 57:52-57:68, 57:70-57:91, 58:36 |
| **5** | 145 bp 190 bp225 bp | \*52:21:01-52:21:02 \*52:03, 52:11, 52:67 \*52:05 | \*15:01:02, 15:277-15:278, 51:61:01-51:61:02, **C\*02:02:23, C\*12:03:31****\***07:02:11, 07:05:03, 15:01:02, 15:09:01-15:09:02, 15:243, 15:252, 15:277-15:278, 15:361, 27:04:03, 35:01:10, 35:04:02, 35:251, 40:01:06, 40:26, 40:95, 44:03:40, 44:62, 49:18:01, 50:14, 51:02:01:01-51:02:03, 51:02:05, 51:05, 51:23, 51:34, 51:36, 51:40, 51:54, 51:59, 51:93, 51:108, 51:143-51:144, 51:146, 51:180, 55:01:04, 78:04, **C\*02:02:23, C\*12:03:31** |
| **6** | 135 bp 180 bp225 bp | \*52:03, 52:10:01-52:10:03, 52:71 \*52:15\*52:05 | \*35:01:10, 35:04:02, 35:251, 40:01:06, 44:03:40, 51:05w, 51:09:01-51:09:03, 51:19, 51:31, 51:40, 51:54w, 51:73, 51:93, 51:108, 51:122, 51:139, 51:194, 51:217, 78:04, 78:08\*44:03:40, 44:62w, 51:23w, 51:108w |
| **7** | 160 bp215 bp | \*52:13\*52:19  | \*08:09, 08:84, 13:46, 15:83, 42:04, 44:20, 51:08:01-51:08:02, 51:20, 51:36, 51:44N, 51:97, 51:141, 51:153, 55:20, 55:56, 56:13 |
| **8** | 145 bp500 bp | \*52:20\*52:25:01  | \*13:58, 18:09, 37:10, 44:83, 44:134, 51:54, 51:78:01-51:78:02, 53:09, 53:11-53:13, 53:31, 53:36, 53:38\*13:58, 35:60, 35:291, 49:03, 51:15, 51:62, 51:157, 51:225, 56:45, 58:73 |
| **9** | 100 bp285 bp | \*52:06:01, 52:14 \*52:49N | \*13:46, 15:137, 35:01:08, 35:01:15, 35:29:02, 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, 40:86, 40:330, 41:50, 45:02, 50:09, 51:01:33, 51:13:01-51:13:02, 51:92:01-51:92:02, 51:172, 55:13, 55:58, 56:22, 59:03, 73:01-73:02, **C\*05:152** |
| **10** | 95 bp 245 bp | \*52:18\*52:08, 52:67  | \*07:78, 07:84, 13:02:01:01-13:02:21, 13:08-13:09, 13:14-13:16, 13:18-13:19, 13:27, 13:30-13:35, 13:37-13:38, 13:40-13:42, 13:44-13:45, 13:47, 13:49N, 13:54-13:56:02N, 13:58-13:59, 13:65-13:70, 13:72, 13:74-13:75, 13:81-13:82, 13:84-13:85, 13:88-13:89, 13:91, 13:93-13:94, 13:96-13:105, 27:14, 27:81, 27:130, 39:50, 40:06:01:01-40:06:16, 40:44, 40:53, 40:70:01-40:70:02, 40:75, 40:83, 40:86, 40:93, 40:95-40:96, 40:103, 40:109-40:110, 40:127, 40:131, 40:148, 40:159, 40:161-40:162, 40:165, 40:167, 40:177, 40:190, 40:230, 40:244, 40:256N, 40:268-40:270, 40:275, 40:294-40:295, 40:298:01-40:298:02, 40:306-40:307, 40:311, 40:313, 40:317-40:318, 40:330, 40:340-40:342, 40:348-40:350, 40:354, 40:361N, 45:10, 49:07, 50:31, 51:10, 51:16, 51:31, 51:34, 51:82, 51:93, 54:26, 55:09, 55:22, 55:24, 59:09, 73:01-73:02, 78:08 |
| **11** | 85 bp 225 bp | \*52:06:01-52:06:03\*52:17  | \*07:38, 08:02-08:03, 08:52, 08:78, 08:117, 08:126, 18:136, 27:23, 35:329, 37:21, 38:06-38:07, 40:13, 41:46, 44:06, 44:232, 51:01:01:01-51:01:16, 51:01:18-51:06:03, 51:08:01-51:21, 51:23-51:24:05, 51:26-51:46, 51:48-51:117, 51:119-51:213, 51:215-51:221, 51:223-51:226, 53:01:01-53:08:02, 53:10-53:16, 53:18-53:27, 53:29-53:37, 53:39, 53:41-53:48N, 59:01:01:01-59:07, 59:09-59:10N**A\*24:328** |
| **16** | 90 bp120 bp | \*52:31:01-52:31:02 | \*35:01:10, 35:04:02, 40:28, 44:03:40, 44:62, 51:04, 51:46, 51:56:01-51:56:03, 51:139, 53:28 |

**4**The HLA-B\*52 primer set cannot separate the B\*52:28-52:29 from the B\*53:17:01-53:17:02 and the B\*52:31:01-52:31:02 from the 53:28 alleles. These alleles can be distinguished by the HLA-B low resolution kit and/or the HLA-B\*53 high resolution kit.

**5**The following HLA-B\*52 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*52:04, 52:09 | 2 |
| B\*52:14, 52:49 | 9 |
| B\*52:20, 52:25 | 8 |

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

‘w’, might be weakly amplified.