Gel Documentation Form and Worksheet

HLA-B\*38 (101.565-12/12u) Lot No: 2L6 Expiry Date: 2024-07-01

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, 7, 14 and 23 have a tendency giving rise to primer oligomer formation.

Primer mixes 5, 18 and 27 may have a tendency of unspecific amplification.

Primer mixes 15 and 22 may give rise to a lower yield of HLA-specific PCR product than the other B\*38 primer mixes.

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\*38 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 3.29.0, August 2017.

**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\*38 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*38 alleles | Other amplified HLA-B alleles |
| **6** | 140 bp175 bp | \*38:35, 38:81\*38:03, 38:34N | \*07:27, 07:50, 07:400, 08:04:01-08:04:02, 08:17, 08:54:01-08:54:02, 08:110, 14:73, 15:03:01:01-15:03:11, 15:47:01-15:47:02, 15:54, 15:61-15:62, 15:64:01-15:64:02, 15:68-15:69, 15:91, 15:98, 15:103, 15:123, 15:127, 15:131-15:132, 15:151, 15:156, 15:158, 15:173, 15:210, 15:220:01:01-15:220:02, 15:235, 15:242:01-15:242:02, 15:251:01-15:251:03, 15:253, 15:266, 15:274, 15:281-15:282, 15:369, 15:379, 15:389, 15:397, 15:429, 15:444, 15:448, 15:475, 15:502, 15:517, 15:527, 15:539, 15:545, 15:556, 15:560, 18:01:01:01-18:03:02, 18:05:01:01-18:06, 18:08-18:15, 18:17N-18:28, 18:30-18:32, 18:34-18:78, 18:81-18:97, 18:99-18:101, 18:103-18:106Q, 18:108-18:124, 18:126-18:135:01:02, 18:137-18:154N, 18:156:01:01-18:181, 18:183-18:192, 37:01:01:01-37:01:11, 37:01:13-37:20, 37:23-37:25, 37:27-37:56, 37:58-37:59, 37:61-37:66, 37:68-37:78, 37:80-37:91, 39:02:01-39:02:03, 39:08, 39:13:01-39:13:02, 39:23, 39:39:01-39:39:02, 39:49, 39:88, 39:101, 39:105, 39:110, 39:162, 39:164, 40:12:01-40:12:02, 40:149, 41:22, 42:11, 44:130, 44:156, 44:221, 44:224, 44:258, 48:01:01:01-48:01:09, 48:02:01, 48:02:03-48:05, 48:07-48:30, 48:32-48:50, 49:25, 52:16, 52:27, 52:77 |
| **7** | 160 bp 195 bp | \*38:03-38:04, 38:25\*38:21, 38:34N | \*07:400, 08:17, 08:38:01-08:38:02, 08:54:01-08:54:02, 08:101, 08:228, 15:03:01:01-15:03:04, 15:03:06-15:03:11, 15:47:01-15:47:02, 15:49, 15:54, 15:61-15:62, 15:68-15:69, 15:74, 15:91, 15:98, 15:103, 15:123, 15:127, 15:131-15:132, 15:151, 15:156, 15:158, 15:173, 15:210, 15:220:01:01-15:220:02, 15:235, 15:242:01-15:243, 15:251:01-15:251:03, 15:253, 15:266, 15:274, 15:281-15:282, 15:369, 15:376, 15:379, 15:389, 15:397, 15:429, 15:444, 15:448, 15:475, 15:502, 15:517, 15:527, 15:539, 15:545, 15:556, 15:560, 18:12:01-18:12:02, 18:178, 37:01:01:01-37:01:11, 37:01:13-37:07, 37:09-37:21, 37:23-37:59, 37:61-37:66, 37:68-37:91, 39:02:01-39:02:03, 39:08, 39:13:01-39:13:02, 39:22-39:23, 39:49, 39:101, 39:105, 39:110, 39:162, 39:164, 40:12:01-40:12:02, 40:149, 41:22, 42:11, 44:130, 44:156, 44:221, 44:224, 44:258, 48:01:01:01-48:01:09, 48:02:01, 48:02:03-48:05, 48:07-48:15, 48:17-48:38, 48:40-48:50, 49:25, 52:16, 52:27, 52:77 |
| **8** | 185 bp 230 bp | \*38:05, 38:33\*38:15, 38:20:01-38:20:02, 38:22 | \*14:02:01:01-14:02:02, 14:02:04-14:02:05, 14:02:07-14:03, 14:04w, 14:05-14:06:02, 14:09, 14:11, 14:13, 14:15-14:18, 14:20, 14:22-14:23, 14:25, 14:27, 14:29-14:31, 14:33-14:39, 14:41N, 14:43-14:45, 14:48, 14:50-14:52, 14:56-14:64, 14:67-14:70Q, 14:72N-14:76N, 14:79N, 14:84-14:85N, 15:189, 35:01:64, 35:03:17, 35:26, 39:04, 39:129, 51:01:68, **C\*02:02:07, C\*05:01:06****\***15:265, 35:35, 35:468, 37:40, 39:42, 58:84, **C\*15:51** |
| **9** | 145 bp 205 bp | \*38:06-38:07 \*38:21 | \*18:67, 18:136, 35:471, 37:34, 44:06, 49:03, 51:01:01:01-51:01:39, 51:01:41-51:24:05, 51:26-51:46, 51:48-51:53, 51:55-51:77, 51:79-51:103, 51:105-51:111, 51:113-51:146, 51:148-51:266, 51:268-51:283, 51:285-51:315, 52:01:01:01-52:01:28, 52:01:30-52:01:48, 52:03-52:15, 52:17-52:19, 52:21:01-52:31:02, 52:33-52:96N, 53:01:01:01-53:01:17, 53:01:19-53:02, 53:04-53:08:02, 53:10, 53:14-53:29, 53:32-53:35, 53:37, 53:40-53:54, 53:56-53:59, 57:120, 58:01:01:01-58:02:02, 58:04-58:16:02, 58:18-58:29, 58:31N-58:35, 58:37-58:43, 58:45:01-58:63, 58:65-58:110, 58:112-58:123 |
| **10** | 85 bp 145 bp 180 bp | \*38:07, 38:12\*38:16, 38:46 \*38:33  | \*18:01:37, 35:01:64, 35:03:17, 39:19:02, 51:01:68\*14:48, 49:26\*08:01:24, 14:11, 14:28, 15:189, 35:01:64, 35:03:17, 35:26, 39:04, 49:26, 51:01:68 |
| **11** | 90 bp 145 bp | \*38:13\*38:08, 38:18, 38:27 | \*07:385, 18:86, 39:102, 44:460 |
| **12** | 100 bp135 bp | \*38:09\*38:157 |  |
| **16** | 220 bp 350 bp 425 bp | \*38:19\*38:11\*38:17  | \*08:55, 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\*07:13, 07:110, 08:101, 41:55, 48:36, 67:02:01:01-67:02:01:02, **C\*16:112**\*07:27, 07:236, 07:240, 08:126, 08:131, 08:139, 40:188? |
| **22** | 175 bp210 bp | \*38:29\*38:55Q, 38:156  | \*15:69, 15:186, 15:449, 15:494, 35:35, 39:07, 39:15, 39:29, 39:49, 39:55, 39:91, 58:84, **C\*15:51**\*37:40, 39:09:01:01-39:09:04, 39:88, 39:155, 39:158, **C\*07:137:01-07:137:02** |

**4**The following HLA-B\*38 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*38:11, 38:19 | 16 |

**3**The HLA-B\*38 primer set cannot separate the following alleles. These alleles can be distinguished by the HLA-B low resolution kit and/or the HLA-B\*39 high resolution kit.

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| Alleles |
| B\*38:156, 39:15, 39:915 |

Abbreviations

w: might be weakly amplified.

?: nucleotide sequence information not available for the primer matching sequence.