Gel Documentation Form and Worksheet

HLA-B\*38 (101.565-12/12u) Lot No: 5E3 Expiry Date: 2019-06-01

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

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

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

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

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

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

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

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

**Gel Picture**

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| --- |
| 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, 7 and 14 may have tendencies of primer oligomer formation.

Primer mix 27 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\*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 3.25.0, July 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 6: Specific PCR fragment of 140 bp in the B\*38:35 allele. Specific PCR fragment of 175 bp in the B\*38:03 and 38:34Nw and the B\*07:27, 07:50, 08:04, 08:17, 08:54, 08:110, 15:03:01:01-15:03:06, 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, 15:235, 15:242:01-15:242:02, 15:251, 15:253, 15:266, 15:274, 15:281-15:282, 15:369, 15:379, 15:389, 15:397, 18:01:01:01-18:03, 18:05-18:06, 18:08-18:15, 18:17N-18:28, 18:30-18:32, 18:34-18:78, 18:81-18:97, 18:99-18:101, 18:103-18:106, 18:108-18:123, 18:126-18:127, 37:01:01-37:20, 37:23-37:25, 37:27-37:56, 37:58-37:59, 39:02:01-39:02:02, 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, 40:12, 40:149, 41:22, 42:11, 44:130, 44:156, 44:221, 44:224, 48:01:01-48:02:01, 48:02:03-48:05, 48:07-48:30, 48:32-48:40, 49:25, 52:16 and 52:27 alleles.

Primer mix 7: Specific PCR fragment of 160 bp in the B\*38:03-38:04 and 38:25 and the B\*08:17, 08:38, 08:54, 08:101, 15:03:01:01-15:03:04, 15:03:06, 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, 15:235, 15:242:01-15:243, 15:251, 15:253, 15:266, 15:274, 15:281-15:282, 15:369, 15:376, 15:379, 15:389, 15:397, 18:12:01-18:12:02, 37:01:01-37:07, 37:09-37:21, 37:23-37:59, 39:02:01-39:02:02, 39:08, 39:13:01-39:13:02, 39:22-39:23, 39:49, 39:101, 39:105, 39:110, 40:12, 40:149, 41:22, 42:11, 44:130, 44:156, 44:221, 44:224, 48:01:01-48:02:01, 48:02:03-48:05, 48:07-48:15, 48:17-48:38, 48:40, 49:25, 52:16 and 52:27 alleles. Specific PCR fragment of 195 bp in the B\*38:21 and 38:34Nw alleles.

Primer mix 8: Specific PCR fragment of 185 bp in the B\*38:05 and 38:33 and the B\*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, 15:189, 35:03:17, 35:26 and 39:04 and in the C\*02:02:07 and C\*05:01:06 alleles. Specific PCR fragment of 230 bp in the B\*38:15, 38:20 and 38:22 and the B\*15:265, 35:35, 37:40 and 39:42 and in the C\*15:51 alleles.

Primer mix 9: Specific PCR fragment of 145 bp in the B\*38:06-38:07 and the B\*18:67, 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, 51:148-51:208, 52:01:01:01-52:01:28, 52:03-52:15, 52:17-52:19, 52:21-52:31:02, 52:33-52:61, 53:01:01-53:02, 53:04-53:08:02, 53:10, 53:14-53:29, 53:32-53:35, 53:37, 53:40-53:43, 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 and 58:65-58:81 alleles. Specific PCR fragment of 205 bp in the B\*38:21 allele.

Primer mix 10: Specific PCR fragment of 85 bp in the B\*38:07 and 38:12 and the B\*39:19:02 alleles. Specific PCR fragment of 145 bp in the B\*38:16 and 38:46 and the B\*14:48 alleles. Specific PCR fragment of 180 bp in the B\*38:33 and the B\*08:01:24, 14:11, 14:28, 15:189, 35:26 and 39:04 alleles. Specific PCR fragment of 85 bp and 180 bp in the B\*35:03:17 allele. Specific PCR fragment of 145 bp and 180 bp in the B\*49:26 allele.

Primer mix 11: Specific PCR fragment of 90 bp in the B\*38:13 allele. Specific PCR fragment of 145 bp in the B\*38:08, 38:18 and 38:27 and the B\*18:86 and 39:102 alleles.

Primer mix 16: Specific PCR fragment of 220 bp in the B\*38:19 and the B\*08:55, 39:03, 39:14, 39:24:01-39:24:02, 39:29, 39:37 and 39:76 alleles. Specific PCR fragment of 350 bp in the B\*38:11 and the B\*07:13, 07:110, 08:101, 48:36 and 67:02 alleles. Specific PCR fragment of 425 bp in the B\*38:17 and the B\*07:27, 07:236, 07:240, 08:126, 08:131, 08:139 and 40:188? alleles.

Primer mix 22: Specific PCR fragment of 175 bp in the B\*38:29 and the B\*15:69, 15:186, 35:35, 39:07, 39:15, 39:29, 39:49, 39:55 and 39:91 and in the C\*15:51 alleles. Specific PCR fragment of 210 bp in the B\*38:55Q allele.

**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 |
|  |  |

The HLA-B\*38 subtyping kit cannot distinguish the silent mutations in the B\*38:01:01-38:01:07 and 38:01:09-38:01:12 or the B\*38:02:01-38:02:02 and 38:02:04-38:02:07 alleles.

‘w’, might be weakly amplified.

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

Change in revision R01 compared to R00:

1. Primer mixes 6 and 7 weakly amplifies the B\*38:34N allele. This has been corrected in the Specificity and Interpretation Tables.