Gel Documentation Form and Worksheet

HLA-B\*41 (101.542-06/06u) Lot No: 9K0 Expiry Date: 2024-03-01

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 9 and 20 may have tendencies of unspecific amplifications.

Primer mix 24 contains a negative control, which will amplify the 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\*41 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 3.27.0, January 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\*41 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified  HLA-B\*41 alleles | Other amplified HLA Class I alleles |
| **2** | 165 bp  215 bp | \*41:02:01:01-41:02:09, 41:04, 41:10-41:11, 41:13, 41:15, 41:18-41:19, 41:23, 41:27, 41:31, 41:36, 41:38-41:43, 41:45N-41:47, 41:49, 41:51-41:52, 41:55, 41:58, 41:62  \*41:02:01:01-41:02:09, 41:04, 41:10-41:11, 41:13, 41:15, 41:18-41:19, 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, 41:58 | \*07:02:13, 07:02:35, 07:04:02, 07:05:10, 07:22:02, 07:68:02, 07:151:02, 07:209, 07:262, 08:01:01:01-08:01:01:35, 08:01:03-08:01:27, 08:01:29-08:01:32, 08:01:34-08:05, 08:07-08:08N, 08:10-08:11, 08:13-08:15, 08:17-08:48, 08:50-08:53:01, 08:54:01-08:59:02, 08:61-08:78, 08:80-08:83, 08:85-08:88, 08:90-08:106, 08:108-08:128, 08:130-08:155, 08:157-08:180, 08:182-08:183, 08:185-08:212, 08:214N-08:223, 08:225-08:231, 08:233-08:249, 13:108, 14:05, 14:13, 14:53, 15:07:03, 15:383, 18:14, 35:05:01:01-35:05:03, 35:22:01:01-35:22:01:02, 35:51, 35:58, 35:66, 35:72, 35:87, 35:89, 35:97, 35:199, 35:232, 35:368, 35:389, 35:416, 35:427N, 35:440, 35:459N, 37:09, 38:19, 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, 39:76, 39:120, 39:144, 39:152, 40:02:20, 40:71, 42:01:01:01-42:01:01:02, 42:01:03-42:02:02, 42:05:01-42:12, 42:14-42:27, 44:54, 44:106, 44:135, 44:158, 44:166, 44:184, 44:213, 48:12, 51:64, 51:148, 53:14, 55:04, 55:49, 55:51, 55:86, 58:18, **C\*03:296:01, C\*07:294, C\*07:526:01, C\*07:530, C\*07:681**  \*07:04:01-07:04:02, 07:19, 07:25, 07:146, 07:349, 08:01:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26:01-08:39, 08:41-08:48, 08:50-08:54:02, 08:56:01-08:59:02, 08:61-08:69, 08:71-08:78, 08:80-08:83, 08:85-08:88, 08:90-08:106, 08:108-08:128, 08:130-08:142, 08:144-08:155, 08:157-08:170, 08:172-08:180, 08:182-08:183, 08:185-08:204, 08:206-08:231, 08:233-08:249, 35:87, 37:09, 42:01:01:01-42:02:02, 42:05:01-42:12, 42:14-42:18, 42:20-42:27, 44:106, 44:158, 44:166, 44:213 |
| **3** | 75 bp  225 bp | \*41:03:01, 41:10, 41:22  \*41:45N | \*07:143, 07:335, 08:62, 08:226, 08:242, 15:210, 15:426, 18:01:01:01-18:01:12, 18:01:14-18:03:02, 18:05:01:01-18:15, 18:17N-18:24, 18:26-18:28, 18:30-18:42, 18:44:01-18:79, 18:81-18:97, 18:99-18:101, 18:103-18:106, 18:108-18:111, 18:113-18:119, 18:121-18:124, 18:126-18:189, 27:75, 35:162, 37:01:01:01-37:21, 37:23-37:40, 37:42N-37:54, 37:56-37:61, 37:63-37:84, 37:86N-37:91, 39:31:01:01-39:31:01:02, 39:101, 39:128, 40:01:51, 40:149, 42:02:01:01-42:02:02, 42:09, 42:17-42:18, 42:26, 48:22, 48:30, 51:116, **C\*06:77, C\*07:714, C\*07:724** |
| **4** | 90 bp  265 bp | \*41:12, 41:36  \*41:04, 41:07 | \*15:46, 15:106, 35:47, 35:154, 35:450, 40:10:01:01-40:10:02, 40:248, 40:282, 40:325, 40:351, 40:364, 44:34:02, 44:245, 44:269, 49:48, 53:30, 56:67, 57:45, 58:111  \*08:96:01, 08:107, 53:15, 55:20 |
| **5** | 230 bp  255 bp | \*41:23, 41:27  \*41:05 | \*07:143, 08:62, 08:226, 08:242, 18:03:01:01-18:03:02, 18:152, 18:171, 27:04:01-27:04:06, 27:06:01:01-27:06:01:02, 27:08, 27:11-27:12:01:03, 27:15, 27:20-27:21, 27:24-27:26, 27:31, 27:33, 27:36, 27:40, 27:61, 27:63, 27:66N, 27:68-27:69, 27:79, 27:86, 27:89w, 27:91, 27:100, 27:103, 27:105-27:109, 27:112-27:115, 27:120, 27:125, 27:138, 27:147, 27:149, 27:153-27:154, 27:165, 27:168, 27:173, 27:183, 27:192, 27:202, 27:204, 27:208, 27:210-27:211, 27:214, 37:37, 39:31:01:01-39:31:01:02, 39:101, 39:128, 40:43, 40:50:01:01-40:50:01:02, 40:166, 42:02:01:01-42:02:02, 42:09, 42:17-42:18, 42:26-42:27, 45:06, 46:14w, 50:52, 54:02, 55:16, 56:35, **C\*03:278w, C\*03:504w, C\*07:714w, C\*07:724w, C\*16:86w** |
| **14** | 115 bp  180 bp  215 bp | \*41:13  \*41:49  \*41:16 |  |
| **15** | 115 bp  255 bp | \*41:29  \*41:14 | \*15:159, 15:260, 15:491, 35:302, 35:391, 35:437, 40:79, 46:52 |
| **17** | 85 bp  245 bp | \*41:19  \*41:49 | \*07:388, 08:40, 08:165, 08:171, 08:205, 27:83 |
| **19** | 130 bp  155 bp | \*41:28  \*41:11 | \*44:80  \*13:30, 40:293, 44:219 |

**4**The following HLA-B\*41 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*41:04, 41:36 | 4 |
| B\*41:10, 41:45N | 3 |

**5**The following alleles give rise to identical amplification patterns with the HLA-B\*41 high resolution kit. These alleles can be distinguished by the HLA-B low resolution and/or the respective kits.

|  |
| --- |
| **Alleles** |
| B\*41:08, B\*40:136, 40:231, 40:279 |
| B\*41:23, B\*42:27 |
| B\*41:46-41:47, B\*44:166 |
| B\*41:62, B\*40:02:20 |

Abbreviations

w: might be weakly amplified.

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