Gel Documentation Form and Worksheet

HLA-B\*41 (101.542-06/06u) Lot No: 2K8 Expiry Date: 2023-10-01

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Test Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Review Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sample ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Tested By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Reviewed By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

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

|  |
| --- |
| PHOTO DOCUMENT |

**Gel Picture**



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 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 products generated by the HGH positive control primer pair are 200 and 430 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 |
| **3** | 75 bp  225 bp | \*41:03:01, 41:10, 41:22  \*41:45N | \*07:143, 07:335, 08:62, 08:226, 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, 18:126-18:168, 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-37:87, 39:31:01:01-39:31:01:02, 39:101, 39:128, 40:01:51, 40:149, 42:02:01:01-42:02:01:02, 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, 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, 57:45  \*08:96, 08:107, 53:15, 55:20 |
| **5** | 230 bp  255 bp | \*41:23, 41:27  \*41:05 | \*07:143, 08:62, 08:226, 18:03:01-18:03:02, 18:152, 27:04:01-27:04:06, 27:06:01:01-27:06:01:02, 27:08, 27:11-27:12:01:02, 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, 37:37, 39:31:01:01-39:31:01:02, 39:101, 39:128, 40:43, 40:50, 40:166, 42:02:01:01-42:02:01:02, 42:09, 42:17-42:18, 42:26, 45:06, 46:14w, 50:52, 54:02, 55:16, 56:35, **C\*03:278w, 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, 40:79, 46:52 |
| **17** | 85 bp  245 bp | \*41:19  \*41:49 | \*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 B\*41:08 and the B\*40:136, 40:231, 40:279 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 HLA-B\*40 kits.

The B\*41:46-41:47 and the B\*44:166 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 HLA-B\*44 kits.

**5**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 |

Abbreviations

‘w’, might be weakly amplified.

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