Gel Documentation Form and Worksheet

HLA-B\*58 (101.568-06/06u) Lot No: 7F4 Expiry Date: 2021-04-01

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 mixes 9 and 17 may have tendencies of primer oligomer formation.

Primer mix 14 may have tendencies of unspecific amplifications.

Primer mix 32 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.

Changes in R01 compared to R00:

1. Primer mix 30 does not amplify the B\*58:62 allele. Thus, this lot cannot discriminate between the B\*58:62 and the B\*58:01:01:01-58:01:19, 58:01:21-58:01:23, 58:32-58:34, 58:37, 58:41-58:42, 58:45:01-58:45:02, 58:47-58:50, 58:53-58:56, 58:63-58:64, 58:67-58:71, 58:73, 58:75, 58:77, 58:79-58:83, 58:85-58:90 and 58:92 alleles. This has been corrected in the specificity and interpretation tables.



 









**1**HLA-B\*58 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**The following HLA-B\*58 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*58 alleles | Other amplified HLA Class I alleles |
| **4** | 190 bp  230 bp | \*58:04  \*58:15 |  |
| **9** | 90 bp  160 bp  190 bp | \*58:44  \*58:08:01, 58:23  \*58:72N, 58:74 | \*07:219  \*57:01:20, **A\*02:01:33** |
| **10** | 115 bp  270 bp | \*58:24  \*58:09, 58:76 | **C\*03:141, C\*03:233, C\*15:18**  \*14:10, 18:22, 18:69, 18:105, 35:21,  35:24:01-35:24:02, 35:81, 35:96, 35:109, 35:157, 35:188, 35:190, 35:233, 35:287, 37:04:01-37:04:02, 40:28, 44:190, 44:203, 44:275, 51:04, 51:46, 51:56:01-51:56:03, 51:139, 51:227, 53:02, 53:06, 53:28, 57:14:01-57:14:02, **C\*03:384, C\*15:39, C\*15:130** |
| **12** | 145 bp  235 bp | \*58:13  \*58:10N | \*49:06 |
| **15** | 90 bp  155 bp  190 bp | \*58:36  \*58:12  \*58:74 | \*57:01:01:01-57:01:22, 57:01:24-57:04:01, 57:04:03-57:15, 57:17-57:19, 57:21-57:35, 57:37-57:44, 57:46-57:50, 57:52-57:61, 57:63-57:68, 57:70-57:88, 57:90-57:96  \*07:219, 57:58, 57:80, **A\*02:42, A\*02:310** |
| **16** | 100 bp  225 bp | \*58:27-58:28:02, 58:65  \*58:84 | \*07:05:01:01-07:06:03, 07:32, 07:34, 07:40, 07:53, 07:69, 07:80, 07:90, 07:97, 07:105, 07:112, 07:123, 07:137-07:138, 07:140, 07:176, 07:182N, 07:201N, 07:206-07:207, 07:209-07:210, 07:213, 07:222, 07:249, 07:258, 07:262, 07:264, 07:269-07:270, 07:278, 07:283-07:284, 07:293, 07:304, 08:01:01:01-08:05, 08:08N, 08:10-08:11, 08:13, 08:15, 08:17-08:27, 08:29, 08:31-08:34, 08:36, 08:38-08:48, 08:50-08:68, 08:70-08:83, 08:85-08:86N, 08:88, 08:90-08:106, 08:108-08:110, 08:112-08:155, 08:157-08:183, 08:185-08:194, 13:13:01-13:13:02, 13:21, 13:71, 13:86, 13:108, 14:13, 14:53, 15:324, 15:329, 27:07:01-27:07:06, 27:11, 27:24, 27:33, 27:43, 27:164, 35:02:01:01-35:02:08, 35:04:01-35:04:03, 35:09:01-35:09:03, 35:12:01-35:12:04, 35:18, 35:22, 35:31, 35:81, 35:83, 35:87-35:88, 35:95, 35:129N, 35:149, 35:154, 35:157, 35:162, 35:172, 35:182-35:184, 35:201, 35:211, 35:220, 35:230, 35:233, 35:258, 35:266, 35:270, 35:285, 35:309, 35:311, 35:316, 35:321, 35:323, 35:335, 35:339, 35:357, 35:361, 35:366, 37:12, 39:14:01:01-39:14:01:02, 40:02:01:01-40:02:15, 40:02:17-40:02:25, 40:04-40:05:01:02, 40:08, 40:13, 40:15-40:16, 40:19, 40:28-40:30, 40:34-40:35:02, 40:37, 40:39-40:40, 40:45, 40:50, 40:56-40:58, 40:64:01:01-40:64:01:02, 40:68, 40:78, 40:80, 40:82, 40:85, 40:89-40:91, 40:94, 40:97, 40:99, 40:104, 40:107, 40:111, 40:115, 40:119, 40:122, 40:129, 40:133Q, 40:137, 40:142N-40:145, 40:157, 40:160:01-40:160:02, 40:164, 40:169, 40:173-40:174, 40:176, 40:181, 40:189, 40:200-40:203, 40:205-40:206, 40:209, 40:211, 40:214, 40:219-40:220, 40:224, 40:226, 40:229, 40:232, 40:246, 40:248, 40:254-40:255, 40:266, 40:271, 40:274, 40:276, 40:283, 40:287, 40:289-40:293, 40:296-40:297, 40:302-40:305, 40:309, 40:320, 40:322, 40:331, 40:334-40:335, 40:337N, 40:343, 40:345N, 40:347, 40:356, 40:359, 40:369, 41:02:01-41:02:07, 41:10-41:11, 41:13, 41:15, 41:19, 41:23, 41:27, 41:31, 41:36, 41:38-41:43, 41:45N-41:49, 41:52, 41:55, 42:01:01-42:02:01:02, 42:05:01-42:05:02, 42:07-42:08, 42:10-42:15, 42:17-42:19, 42:21-42:25, 44:62, 44:77, 44:82, 44:166, 44:184, 44:213, 48:01:01:01-48:01:06, 48:04:01-48:06, 48:09-48:13, 48:15-48:16, 48:18-48:20, 48:22, 48:24, 48:27-48:39, 48:41-48:45, 51:04, 51:46, 51:56:01-51:56:03, 51:64, 51:81, 51:139, 51:148, 53:19, 53:36, 55:04, 55:49, 55:51, 55:86, 56:12, 57:02:01-57:03:03, 57:05, 57:07, 57:09, 57:12, 57:17, 57:39, 57:42, 57:46, 57:57, 57:63, 57:66, 57:70, 57:80, 57:84, 57:94, 57:96, 81:01-81:08, **C\*03:317, C\*03:382, C\*15:24**  \*08:55, 15:265, 35:35, 37:40, 38:19-38:20, 39:03:01:01-39:03:01:02, 39:14:01:01-39:14:01:02, 39:24:01-39:24:02, 39:29, 39:37, 39:42, 39:76, 39:120, **C\*15:51** |
| **18** | 70 bp  140 bp | \*58:25  \*58:17N |  |
| **20** | 85 bp  145 bp  175 bp  275 bp | \*58:29  \*58:39N  \*58:21, 58:29  \*58:21 | \*18:51, 53:34  \*53:34 |
| **23** | 150 bp  260 bp | \*58:26  \*58:31N, 58:52 | \*35:75, 39:106, 44:138Q  \*51:32 |
| **24** | 190 bp  280 bp | \*58:72N  \*58:40 |  |
| **25** | 130 bp  260 bp  375 bp | \*58:57  \*58:52  \*58:35 | **\***51:32 |
| **26** | 75 bp  170 bp  375 bp | \*58:66  \*58:58  \*58:35 |  |
| **31** | 145 bp  550 bp | \*58:39N  \*58:93N |  |

**4**The following HLA-B\*58 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*58:10N, 58:13 | 12 |
| B\*58:21, 58:29 | 20 |
| B\*58:58, 58:66 | 26 |

**5**This lot of the B\*58 lot cannot discriminate between the B\*58:62 and the B\*58:01:01:01-58:01:19, 58:01:21-58:01:23, 58:32-58:34, 58:37, 58:41-58:42, 58:45:01-58:45:02, 58:47-58:50, 58:53-58:56, 58:63-58:64, 58:67-58:71, 58:73, 58:75, 58:77, 58:79-58:83, 58:85-58:90 and 58:92 alleles.

‘w’, might be weakly amplified.

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