Gel Documentation Form and Worksheet

HLA-B\*08 (101.513-24/04 -24u/04u) Lot No: 3K4 Expiry Date: 2023-10-01

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 7 and 44 may have a tendency of giving rise to primer oligomer formation.

Primer mixes 8 and 23 may give rise to a lower yield of HLA-specific PCR product than the other B\*08 primer mixes.

Primer mixes 39 and 43 may have tendencies of unspecific amplifications.

Primer mix 47 may give rise to a lower yield of HLA-specific PCR product than the other HLA-B\*08 primer mixes in the B\*08:03 alleles.

Primer mix 48 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 is 200 and 430 base pairs.




  









**1**HLA-B\*08 alleles in bold lettering are listed as confirmed alleles on the IMGT/HLA web page [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla), release 3.24.0, April 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\*08 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*08 alleles | Other amplified HLA Class I alleles |
|  **5** | 205 bp245 bp | \*08:148N\*08:03, 08:52, 08:78, 08:23, 08:54:01-08:54:02, 08:110, 08:133 | \*15:142, 15:429, 35:218, 35:256, 40:328, 49:25, 51:68, 51:176, 52:77, 57:49, **C\*06:147** |
|  **7** | 215 bp 250 bp | \*08:05\*08:03, 08:36, 08:78 | \*49:25, 51:68, 51:176, 52:77, 57:49, **C\*07:377** |
|  **9** | 115 bp165 bp | \*08:49, 08:71\*08:07, 08:37, 08:89, 08:107 | \*13:46, 15:51, 15:83, 15:179:01-15:179:02, 15:199, 15:218Q, 15:518, 18:56, 18:113, 27:47, 27:127, 35:38, 35:115, 35:169, 37:01:01:01-37:01:16, 37:03N-37:06:02, 37:08, 37:10-37:11, 37:13-37:38, 37:41-37:65, 37:67-37:80, 37:82N, 37:84-37:87, 38:30, 41:24, 42:10, 42:17, 44:02:01:01-44:02:59, 44:05:01-44:06, 44:08-44:09, 44:11-44:12, 44:14-44:25, 44:27:01:01-44:27:03, 44:33-44:34:02, 44:41:01-44:42, 44:44, 44:48-44:49, 44:51-44:52N, 44:55, 44:58N-44:59:02, 44:62-44:63, 44:66-44:68, 44:70-44:73, 44:75, 44:78, 44:80, 44:83-44:84:02, 44:86-44:91, 44:93, 44:95, 44:97, 44:99-44:102, 44:104, 44:106, 44:112-44:113, 44:116-44:119, 44:123, 44:126:01-44:127, 44:131-44:134, 44:136-44:140, 44:142, 44:145, 44:148-44:149N, 44:151-44:152, 44:158, 44:162, 44:168-44:173, 44:176-44:177, 44:179, 44:185, 44:187, 44:190-44:191, 44:195N-44:196, 44:200-44:201, 44:206, 44:208, 44:211-44:214, 44:216-44:221, 44:225-44:226, 44:229-44:230, 44:235-44:236, 44:238, 44:240-44:244, 44:249, 44:253-44:255, 44:257, 44:260-44:265, 44:267N, 44:269-44:270:02, 44:273-44:274, 44:279, 44:287-44:289, 44:291-44:293, 44:296-44:297, 44:301, 44:303N, 44:306N, 44:308, 44:311-44:316, 44:320-44:322, 44:326-44:327, 44:329-44:331, 44:334N-44:335, 44:337-44:338, 44:341N-44:342, 44:344, 44:437, 45:01:01:01-45:25, 51:08:01:01-51:08:04, 51:20, 51:36, 51:44N, 51:97, 51:141, 51:153, 51:263, 51:274-51:275, 52:19, 53:22, 55:56, 56:13, 57:09, 57:24, 57:119, 82:01:01:01-82:03, 83:01\*07:04:01-07:04:02, 07:19, 07:25, 07:146, 15:51, 15:179:01-15:179:02, 15:199, 15:218Q, 15:518, 18:56, 18:113, 35:38, 35:115, 35:169, 35:260, 37:09, 37:35, 37:56, 37:77, 41:04, 41:18, 41:21, 41:51, 42:09, 42:16, 44:17, 44:51, 44:123, 44:230, 45:09, 53:22, 57:24, 57:119, **C\*07:626** |
| **10** | 85 bp 170 bp | \*08:40, 08:165, 08:171, 08:205\*08:08N | \*27:83, 41:19 |
| **13** | 85 bp 290 bp | \*08:11\*08:49, 08:60, 08:76, 08:129, 08:181 | \*41:48, 42:13, 44:342, 53:15 |
| **14** | 115 bp 280 bp | \*08:43\*08:12:01-08:12:03, 08:16, 08:49, 08:89, 08:107, 08:129 | \*15:516, 41:03:01-41:03:02, 41:48, 42:13, 44:342, 53:15 |
| **18** | 425 bp 470 bp | \*08:15\*08:39 | \*07:13, 07:15, 07:92, 07:253w, 07:304, 14:63, 39:27, 39:143, 40:73, 67:02, 73:01-73:02, **C\*16:112**\*07:93, 38:27 |
| **19** | 245 bp 415 bp | \*08:44\*08:16, 08:123, 08:145 | \*07:13, 07:15, 07:160, 42:18, 67:02 |
| **20** | 140 bp 205 bp | \*08:22\*08:17, 08:38, 08:54:01-08:54:02, 08:148N | \*13:93, 15:142, 15:429, 37:62, 40:328, 44:49, 44:156, 49:25, 52:77 |
| **22** | 130 bp215 bp | \*08:19N\*08:109 |  |
| **23** | 85 bp 235 bp | \*08:21, 08:25\*08:17, 08:47 | \*15:516, 41:17, 44:342, 53:15\*13:39, 13:67, 15:57, 15:135, 35:27, 35:56, 35:185, 35:203, 35:355, 44:75, 44:254, 55:12, 56:41, 78:06, 78:09-78:10, **C\*05:30, C\*06:125, C\*16:144** |
| **24** | 85 bp210 bp | \*08:101\*08:26:01-08:26:03, 08:50, 08:94, 08:128 | \*51:39, **C\*06:147**\*07:08:01-07:08:02, 07:32, 07:38, 07:207, 07:228:01-07:228:02, 14:42, 15:08:01-15:08:02, 15:29, 15:56, 15:191, 15:236, 15:479, 15:508, 35:01:01:01-35:19, 35:21-35:25, 35:27, 35:29:01-35:43:01, 35:43:03-35:49, 35:51-35:62, 35:64:01-35:71, 35:74-35:75, 35:77, 35:79-35:81, 35:83, 35:86-35:94, 35:96-35:134N, 35:136-35:161, 35:163-35:185, 35:187-35:216N, 35:219-35:225, 35:227-35:228, 35:230, 35:232-35:254, 35:257-35:279, 35:281-35:289, 35:291-35:293, 35:295, 35:297-35:316, 35:318-35:322, 35:324-35:360, 35:362-35:367, 35:369-35:436, 38:06-38:07, 38:74, 39:58, 39:83, 44:06, 44:232, 48:06, 48:31, 51:01:01:01-51:06:04, 51:08:01:01-51:21, 51:23-51:24:05, 51:26-51:46, 51:48-51:67, 51:69-51:102, 51:104-51:115, 51:117-51:127, 51:129-51:144, 51:146-51:150, 51:152-51:166, 51:168-51:175, 51:177-51:188, 51:190-51:213, 51:215-51:221, 51:223-51:235N, 51:237-51:250, 51:252-51:271, 51:273N-51:281, 52:06:01-52:06:03, 53:01:01:01-53:08:02, 53:10-53:16, 53:18-53:27, 53:29-53:37, 53:39, 53:41-53:56, 59:01:01:01-59:07, 59:09-59:10N, 78:01:01:01-78:02:02, 78:04, 78:07-78:10 |
| **25** | 180 bp225 bp250 bp | \*08:49, 08:71\*08:28, 08:35, 08:37, 08:89, 08:107\*08:150 | \*15:516, 27:83, 41:24, 42:10, 42:17, 44:342, 53:15\*41:24, 41:30, 41:51, 42:09, 53:15 |
| **27** | 105 bp 140 bp215 bp | \*08:30N\*08:22\*08:29 | \*07:195, 18:147, 40:281 |
| **28** | 85 bp210 bp | \*08:31\*08:66 |  |
| **29** | 150 bp 190 bp250 bp | \*08:32, 08:133, 08:180\*08:137\*08:36 | \*35:218, 35:256, 37:62, 51:68, 51:176, 52:77**, C\*07:209****C\*07:377** |
| **33** | 220 bp 255 bp285 bp | \*08:55\*08:135\*08:42 | \*38:19, 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, 39:76, 39:120, 39:144\*35:89 |
| **34** | 210 bp 305 bp | \*08:45\*08:59:01-08:59:02 | \*40:228? |
| **35** | 120 bp 205 bp235 bp | \*08:51\*08:57\*08:113 |  |
| **36** | 125 bp270 bp | \*08:20:01-08:20:02, 08:53:01-08:53:02, 08:84\*08:33, 08:100 | \*15:516, 42:19 |
| **37** | 85 bp155 bp190 bp270 bp | \*08:40, 08:165, 08:171, 08:205\*08:41\*08:105\*08:48 | \*27:83, 41:19\*35:192, 35:240, 51:141, 51:277 |
| **38** | 175 bp 190 bp265 bp | \*08:61\*08:105\*08:58 |  |
| **39** | 190 bp225 bp | \*08:46, 08:137\*08:132 | **C\*06:195, C\*07:506**\*07:29, 07:186**, C\*02:14:01-02:14:02, C\*02:107, C\*02:164, C\*03:39, C\*03:67, C\*03:344:01:01-03:344:01:02, C\*05:43, C\*06:05, C\*06:44, C\*06:124, C\*06:138, C\*06:198, C\*06:217, C\*06:248, C\*07:29, C\*07:39-07:40, C\*07:177, C\*07:186, C\*07:210, C\*07:238, C\*07:328, C\*07:335, C\*07:563, C\*08:37, C\*15:23:01-15:23:02, C\*15:63, C\*15:138, C\*15:158, C\*16:21, C\*16:80** |
| **41** | 180 bp210 bp | \*08:108\*08:62, 08:94 | \*07:08:01-07:08:02, 07:32, 07:38, 07:207, 07:228:01-07:228:02, 18:07:01-18:07:02, 18:29, 18:79, 18:136, 27:23, 35:50, 35:84, 35:162, 35:197, 35:231, 35:267, 35:423, 37:21, 37:67, 38:06-38:07, 38:74, 39:58, 39:83, 40:08, 40:13, 40:68, 40:162, 40:220, 40:232, 42:26, 48:06, 48:31, 51:57, 51:103, 51:116, 51:218, 53:21 |
| **43** | 185 bp 215 bp | \*08:64\*08:70 | \*07:113\*07:55, 07:100, 15:07:01:01-15:07:03, 15:45, 15:68, 15:126, 15:207, 15:324, 15:331, 15:405, 15:431, 15:450, 46:12, 48:19, **C\*02:60** |
| **44** | 170 bp 215 bp | \*08:67N, 08:97\*08:65 | **C\*07:01:06**\*14:28, 39:12:01:01-39:12:01:02 |
| **45** | 120 bp 225 bp | \*08:68\*08:49, 08:69, 08:200 w | \*41:50, 42:06, 42:20 w |
| **46** | 175 bp295 bp | \*08:140\*08:104 |  |

**4**The HLA-B\*08 primer set cannot separate the B\*08:156 and the B\*15:180 alleles. These alleles can be distinguished by the HLA-B low resolution kit and/or the HLA-B\*15 high resolution kit.

**5**The following HLA-B\*08 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| Alleles | Primer mix | Alleles | Primer mix |
| B\*08:11, 08:76 | 13 | B\*08:45, 08:59:01-08:59:02 | 34 |
| B\*08:19N, 08:109 | 22 | B\*08:51, 08:57 | 35 |
| B\*08:21, 08:47 | 23 | B\*08:58, 08:61 | 38 |
| B\*08:29, B\*08:30 | 27 | B\*08:68, 08:69 | 45 |
| B\*08:33, 08:53:01-08:53:02 | 36 | B\*08:101, 08:128 | 24  |
| B\*08:41, 08:48 | 37 | B\*08:104, 08:140 | 46  |
| B\*08:44, 08:145 | 19 |

Abbreviations

‘w’, might be weakly amplified.

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