Gel Documentation Form and Worksheet

HLA-B\*37 (101.541-06/06u) Lot No: 7F5 Expiry Date: 2020-04-01

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 10 and 21 may have tendencies of unspecific amplifications.

Primer mixes 23 has a tendency of giving rise to primer oligomer formation.

Primer mix 17 may give rise to a lower yield of HLA-specific PCR product than the other B\*37 primer mixes.

Primer mix 30 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by control primer pairs. PCR product sizes range from 75 to 200 base pairs. The PCR product generated by the control primer pair is 430 base pairs.









**1**HLA-B\*37 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 3.29.0, August 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\*37 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-B\*37 alleles | Other amplified HLA-B alleles |
|  **2** | 95 bp 135 bp | \*37:02\*37:28 | \*07:197, 15:342, 27:01-27:05:15, 27:05:17-27:05:32, 27:08, 27:10, 27:12-27:13, 27:15-27:18, 27:23, 27:25-27:26, 27:28-27:29, 27:31, 27:36-27:40, 27:42, 27:44-27:45, 27:47-27:69, 27:71-27:75, 27:77, 27:79-27:80, 27:82-27:90:04, 27:92-27:101, 27:103-27:105, 27:108-27:124, 27:126, 27:128-27:129, 27:131-27:135, 27:137, 27:139-27:149, 27:151-27:152, 27:155-27:163, 47:04-47:05, 48:26, **A\*32:89**\*07:27, 07:236, 08:126, 08:131, 08:139, 27:03, 27:05:02:01-27:05:20, 27:05:22-27:05:32, 27:07:01-27:07:06, 27:09-27:10, 27:13-27:14, 27:16-27:17, 27:19, 27:27-27:29, 27:32, 27:34-27:35, 27:37-27:39, 27:41, 27:43, 27:45-27:48, 27:50:01-27:51, 27:54-27:56, 27:58-27:60, 27:64N, 27:70-27:74, 27:76, 27:78, 27:80-27:82, 27:84-27:85, 27:87-27:88, 27:90:01-27:90:04, 27:92-27:94N, 27:96:01-27:99, 27:101, 27:104, 27:111, 27:116-27:118, 27:121-27:124, 27:127-27:130, 27:132-27:133, 27:135-27:137, 27:139-27:141, 27:143-27:146, 27:148, 27:150-27:152, 27:155, 27:159-27:162, 27:164, 38:17 |
|  **3** | 200 bp 235 bp | \*37:13\*37:03N |  |
|  **4** | 200 bp 240 bp | \*37:13\*37:04:01-37:04:02, 37:39,37:48 | \*15:32:01-15:32:02, 15:299, 18:18, 35:48, 44:209, 53:07,**C\*03:90, C\*03:103, C\*03:178, C\*03:300, C\*07:03, C\*07:186, C\*07:242, C\*07:265, C\*07:516** |
|  **7** | 130 bp 195 bp | \*37:06:01-37:06:02, 37:42N\*37:36 | \*40:188, 44:257, 47:01:01:01-47:01:03, 47:05-47:10 |
|  **9** | 80 bp125 bp 155 bp 215 bp 495 bp | \*37:08\*37:42N\*37:30N\*37:22 | \*07:27, 07:236, 08:126, 08:131, 08:139, 18:54, 27:92, 38:17, 53:03, **A\*68:112:02**\*15:209N |
| **10**  | 110 bp 145 bp310 bp | \*37:26\*37:14\*37:46 |  |
| **11** | 95 bp 215 bp355 bp | \*37:18\*37:09\*37:43 | \*07:04, 07:19, 07:25, 07:146, 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, 35:87, 41:02:01-41:02:07, 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, 42:01:01-42:02:01:02, 42:05:01-42:12, 42:14-42:18, 42:20-42:24, 44:106, 44:158, 44:166, 44:213 |
| **14**  | 110 bp245 bp | \*37:47\*37:11, 37:37, 37:67 | \*27:04:01-27:04:06, 27:06, 27:24-27:25, 27:66N, 27:68-27:69, 27:100, 27:103, 27:105, 27:109, 27:112-27:115, 27:138, 27:147, 27:149\*07:143, 08:62, 15:71, 15:175, 15:204, 15:210, 15:212, 15:225, 15:344, 15:381, 15:426, 18:01:01:01-18:01:12, 18:01:14-18:01:20, 18:01:22-18:03, 18:05-18:08, 18:10-18:15, 18:17N-18:24, 18:26-18:42, 18:44:01-18:48, 18:50-18:53, 18:55-18:66, 18:68-18:78, 18:80-18:106, 18:109-18:124, 18:126-18:131, 18:133-18:135, 18:137-18:139, 27:08, 27:12, 27:18, 27:26, 27:33, 27:40, 27:44, 27:153, 35:50, 35:63, 35:84, 35:162, 35:217, 35:231, 35:280, 35:317, 35:323, 39:31, 39:101, 39:128, 40:01:01-40:01:04, 40:01:06-40:06:14, 40:06:16-40:09, 40:11:01-40:11:02, 40:14:01-40:16, 40:18, 40:20, 40:22N-40:36, 40:38-40:39, 40:42-40:46, 40:48, 40:50-40:57, 40:59-40:75, 40:77-40:95, 40:97-40:108, 40:111-40:116, 40:118N-40:128, 40:130:01-40:134, 40:136, 40:138-40:156, 40:158-40:163, 40:165-40:187, 40:189-40:190, 40:192-40:200, 40:202-40:209, 40:211-40:218, 40:220-40:228, 40:230-40:255, 40:257-40:280, 40:282-40:291N, 40:293-40:305, 40:307-40:317, 40:319-40:324, 40:326-40:327, 40:329-40:334, 40:336-40:339, 40:341, 40:343, 40:345N-40:360, 41:01:01-41:04, 41:06-41:32, 41:34-41:45N, 41:48-41:52, 42:02:01:01-42:02:01:02, 42:09, 42:17-42:18, 44:131, 45:01:01-45:20, 46:14, 48:22, 48:30, 50:01:01:01-50:02, 50:04-50:12, 50:14-50:20, 50:31-50:42, 50:44-50:53, 54:02, 55:16, 56:35, 73:01-73:02, **C\*03:278, C\*16:86** |
| **15** | 135 bp315 bp | \*37:11, 37:37, 37:67\*37:45 | \*07:65, 07:134, 08:32, 08:133, 08:180, 15:202, 15:239, 15:308, 15:376, 18:01:01:01-18:01:20, 18:01:22-18:08, 18:10-18:15, 18:17N-18:36, 18:38-18:47, 18:50-18:53, 18:55-18:65, 18:68-18:78, 18:80-18:106, 18:109-18:124, 18:126-18:131, 18:133-18:135, 18:137-18:139, 35:01:01:01-35:02:02, 35:02:04-35:03:02, 35:03:04-35:08:01:02, 35:08:03-35:08:04, 35:08:06-35:18, 35:20:01-35:24:02, 35:28-35:45, 35:48, 35:50-35:55, 35:57-35:62, 35:64:01-35:72, 35:74-35:153, 35:155-35:197, 35:199-35:202, 35:204-35:206, 35:208-35:209, 35:211-35:216N, 35:218-35:221, 35:223-35:253, 35:255-35:270, 35:272-35:273, 35:275-35:298, 35:300-35:310, 35:312-35:316, 35:318-35:328, 35:330-35:349, 39:19:01-39:19:02, 40:185, 40:209, 40:308,40:350, 46:40:01-46:40:02, 56:06, 56:45, 58:64, 78:01:01:01-78:05, 78:07-78:08 |
| **16** | 170 bp195 bp | \*37:09, 37:12, 37:35, 37:56\*37:20 | \*07:04, 07:19, 07:25, 07:146, 08:01:01:01-08:01:22, 08:01:24-08:05, 08:07-08:12:03, 08:15-08:19N, 08:21-08:24, 08:26:01-08:27, 08:29-08:39, 08:41-08:48, 08:50-08:54:02, 08:56:01-08:69, 08:71-08:73, 08:75-08:78, 08:80-08:86N, 08:88-08:110, 08:112-08:142, 08:144-08:155, 08:157-08:170, 08:172-08:184, 15:51, 15:83, 15:179:01-15:179:02, 15:199, 15:218Q, 18:56, 18:113, 35:38, 35:87, 35:115, 35:169, 35:260, 38:30, 40:136, 40:231, 40:279, 41:01:01-41:09, 41:11-41:51, 42:01:01-42:02:01:02, 42:04-42:18, 42:21-42:24, 44:14, 44:17, 44:51, 44:62, 44:123, 44:166, 44:213, 44:230, 45:09, 45:14, 51:08:01-51:08:02, 51:20, 51:36, 51:44N, 51:97, 51:141, 51:153, 52:19, 53:22, 55:20, 55:56, 56:13, 57:09, 57:24, 82:01-82:03 |
| **17** | 165 bp195 bp | \*37:25\*37:20 | \*45:03 |
| **19** | 215 bp315 bp | \*37:21, 37:67\*37:45 | \*08:62, 18:07:01-18:07:02, 18:29, 18:79, 18:136, 27:23, 35:50, 35:84, 35:162, 35:217, 35:231, 35:280, 35:323, 40:07-40:08, 40:13, 40:68, 40:106, 40:162, 40:220, 40:232, 41:46, 51:103, 51:116, 51:151 |
| **20** | 195 bp 230 bp | \*37:36\*37:16Q, 37:39, 37:48 | \*15:32:01-15:32:02, 15:299, 35:48, 44:209, 53:07, **C\*03:90, C\*03:103, C\*03:178, C\*03:300, C\*07:03, C\*07:186, C\*07:242, C\*07:265, C\*07:494Q** |
| **21** | 165 bp 195 bp 270 bp | \*37:27\*37:33N\*37:24 | \*27:57\*27:94N\*27:122, 40:152 |
| **23**  | 90 bp 350 bp | \*37:19:01\*37:23, 37:43 | \*14:10, 35:59:01, 35:242, 38:20, 39:42, 39:106, 44:117, 44:251, **C\*15:05:08, C\*15:140, C\*17:01:10****\***15:227, 27:69, 40:213, 51:32, 58:52 |

4The following HLA-B\*37 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| **Alleles** | **Primer mix** |
| B\*37:24, 37:27 | 21 |
| B\*37:26, 37:46 | 10 |

‘w’, might be weakly amplified.