Gel Documentation Form and Worksheet

HLA-A\*26 (101.424-12/12u) Lot No: 7K0 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 1 and 39 have a tendency to giving rise to primer oligomer formation.

Primer mixes 4, 8, 20, 22, 26 and 33 may have tendencies of unspecific amplifications.

Primer mixes 7 and 25 may give rise to a lower yield of HLA-specific PCR product than the other A\*26 primer mixes.

Primer mix 48 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-A\*26 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 3.26.0, October 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-A\*26 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-A\*26 alleles | Other amplified HLA-A alleles |
| **9** | 145 bp190 bp | \*26:12, 26:18, 26:172 \*26:29, 26:49 | \*02:309, 02:454, 25:28, 25:30, 31:03-31:04:01:02, 31:123, 34:06, 66:06, 74:01:03 \*01:01:56, 25:36, 66:10 |
| **10** | 85 bp 260 bp | \*26:07:01-26:07:02\*26:20 | \*01:83:01-01:83:02, 02:146, 02:749 \*01:01:13, 02:146w, 02:644w, 02:749w |
| **13** | 110 bp255 bp | \*26:45, 26:106\*26:17 | \*01:184 |
| **17** | 105 bp175 bp | \*26:74\*26:09, 26:91 | \*02:309, 02:454, 03:01:19, 03:103:02, 25:06, 31:03-31:04:01:02, 31:123, 34:01:01:01-34:09, 34:12-34:23, 74:01:03 |
| **18** | 125 bp205 bp | \*26:31\*26:21, 26:115 | \*01:60, **C\*06:71, C\*07:581** |
| **19** | 190 bp 245 bp | \*26:40\*26:22 |  \*01:20w, 01:66w, 01:130w, 02:38, 02:101:01, 02:447, 02:543, 02:838, 02:848w, 02:883w, 11:288, 66:09 |
| **20**  | 60 bp 210 bp | \*26:27\*26:23 | \*01:243w\*01:182w, 11:185 |
| **21** | 125 bp205 bp | \*26:24, 26:82, 26:99\*26:41 | \*01:20w, 01:66w, 01:130w, 02:38, 02:101:01, 02:447, 02:543, 02:838, 02:848w, 02:883w, 11:288, 66:09 |
| **22**  | 100 bp170 bp220 bp | \*26:25N\*26:98\*26:38 | \*01:329**, C\*04:199, C\*06:75** |
| **23** | 130 bp165 bp | \*26:56, 26:82\*26:26 |  |
| **27** | 125 bp 150 bp275 bp | \*26:76\*26:145N\*26:35 | \*01:269N |
| **28** | 90 bp265 bp | \*26:03:01:01-26:03:01:02, 26:06, 26:21, 26:36, 26:78, 26:92, 26:111, 26:146, 26:177, 26:193 \*26:116 | \*01:104, 01:134, 01:229, 02:346, 02:427, 11:06, 11:312, 25:11, 33:184, 80:01:01:01w |
| **29** | 330 bp475 bp | \*26:37\*26:104 | \*24:74:02 |
| **30** | 120 bp235 bp | \*26:15, 26:29, 26:56, 26:99\*26:33 | \*02:140, 02:821, 11:91:01, 29:130, 31:48, 33:15, **B\*35:108:01, B\*44:248, B\*51:255, B\*53:26, C\*12:91** |
| **32** | 90 bp155 bp205 bp | \*26:61\*26:43:01\*26:21, 26:115 | \*02:309, 02:454, 03:01:19, 03:103:02, 25:19:01-25:19:02, 25:30, 31:03-31:04:01:02, 31:123, 34:02:01:01-34:02:01:03, 34:02:03-34:04, 34:06-34:09, 34:13, 34:15, 34:20-34:22, 66:06, 74:01:03 |
| **33**  | 105 bp170 bp200 bp  | \*26:46\*26:98\*26:53 |  |
| **34** | 140 bp190 bp | \*26:47, 26:127N\*26:29, 26:49 | \*25:08, 66:18\*01:01:56, 25:36, 66:10 |
| **35** | 115 bp 245 bp | \*26:48, 26:69, 26:114, 26:193\*26:59 | \*02:741, 34:01:01:01-34:01:05, 34:05, 34:11-34:12, 34:14, 34:16-34:18, 34:23, **C\*04:49, C\*07:262, C\*07:417, C\*07:475** |
| **36** | 125 bp150 bp215 bp | \*26:54\*26:127N\*26:55 | \*02:454, 25:05 |
| **37** | 245 bp 415 bp  | \*26:50\*26:64, 26:66 | \*68:89 |
| **38** | 90 bp 150 bp190 bp  | \*26:75\*26:145N\*26:51 | \*01:205, 11:34\*01:269N\*01:168, 11:262 |
| **39** | 220 bp410 bp | \*26:63\*26:62, 26:64, 26:72 | \*24:181\*02:609, 23:09, 24:129, 25:59, 68:89 |
| **40** | 90 bp150 bp255 bp | \*26:57\*26:42\*26:57 | \*68:86, **B\*39:104**\*02:886, 68:86, **B\*39:104** |
| **42** | 425 bp460 bp | \*26:66\*26:58 | \*02:81, 02:87, 02:112, 02:124, 02:129, 02:136, 02:571, 02:829, 23:01:01:01-23:68, 23:70-23:89, 23:91N-23:102, 24:02:01:01-24:02:32, 24:02:34-24:02:115:02, 24:02:117-24:03:04, 24:05:01-24:11N, 24:13:01-24:15, 24:17-24:18, 24:20:01:01-24:25, 24:27, 24:29-24:43, 24:45N-24:64, 24:66-24:88, 24:90:01N-24:99, 24:101-24:108, 24:110-24:128, 24:130-24:183N, 24:185N-24:210, 24:212-24:213, 24:215-24:239, 24:242-24:289, 24:291-24:293, 24:295-24:372, 24:374-24:405, 24:407-24:423, 24:425N-24:446, 24:448N-24:470, 24:472-24:477, 25:01:01:01-25:58, 25:61-25:64, 68:36, **B\*27:163** |
| **43** | 90 bp175 bp | \*26:107N\*26:103 | \*25:18 |
| **44** | 105 bp235 bp | \*26:68\*26:130 | \*25:27:01, 66:14 |
| **45** | 155 bp275 bp | \*26:42, 26:71N\*26:104 | \*11:208N, 68:94N, **B\*35:173:01N** |

**4**The following HLA-A\*26 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| Alleles | Primer mix | Alleles | Primer mix |
| A\*26:11N, 26:60N | 41 | A\*26:46, 26:53 | 33 |
| A\*26:17, 26:106 | 13 | A\*26:54-26:55 | 36 |
| A\*26:23, 26:27 | 20 | A\*26:59, 26:69 | 35 |
| A\*26:24, 26:41 | 21 | A\*26:62-26:63 | 39 |
| A\*26:25N, 26:38 | 22 | A\*26:68, 26:130 | 44 |
| A\*26:36, 26:116 | 28 | A\*26:103, 26:107N | 43 |
| A\*26:43:01, 26:61 | 32 |

**5**The HLA-A\*26 primer set cannot separate the following alleles. These alleles can be distinguished by the HLA-A low resolution kit and/or the respective high-resolution kits:

|  |  |
| --- | --- |
| **Alleles** | **Alleles** |
| A\*26:19, A\*66:37 | A\*26:170, 26:184, A\*25:60, A\*31:24-31:25, A\*32:26:01-32:26:02, A\*33:61, 33:190, A\*43:01, A\*66:05, 66:15, A\*74:37 |
| A\*26:156, 26:165, A\*01:01:109, 01:51, A\*29:105, A\*33:48 |  |

Abbreviations

w: may be weakly amplified.

?: nucleotide sequence of the primer matching sequence is not known.