Gel Documentation Form and Worksheet

HLA-A\*29 (101.428-12/12u) Lot No: 9F9 Expiry Date: 2020-06-01

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, 12, 13, 16 and 20 may have tendencies of unspecific amplifications.

Primer mixes 10 and 19 have a tendency giving rise to primer oligomer formation.

Primer mix 13 may give rise to a lower yield of HLA-specific PCR product than the other A\*29 primer mixes.

Primer mix 28 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.





**1**HLA-A\*29 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 3.29.0, 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-A\*29 primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | Amplified HLA-A\*29 alleles | Other amplified HLA-A alleles |
| **4** | 110 bp  165 bp | \*29:35, 29:51, 29:69, 29:73  \*29:03, 29:33 | \*02:24:02, 02:507  \*23:03:01, 24:21:03, 24:208, 31:05, 32:13, 33:10 |
| **5** | 130 bp  185 bp | \*29:04  \*29:23 |  |
| **6** | 105 bp  130 bp | \*29:19  \*29:05, 29:33, 29:40, 29:77, 29:87 | \*11:01:28, 11:01:77, 24:21:03, 24:208, 31:24, 32:02, 32:22, 33:59, 33:102 |
| **7** | 105 bp  210 bp  475 bp | \*29:19-29:20, 29:34  \*29:06  \*29:82 | \*31:51, 32:12, 74:26, **B\*08:01:07w, B\*15:02:07w, B\*15:17:03, B\*27:07:05, B\*41:01:05w, B\*55:02:10, C\*02:02:15w, C\*03:03:20w, C\*04:175w, C\*08:01:15w** |
| **8** | 85 bp  160 bp | \*29:07, 29:49  \*29:46 | \*11:139, 23:53, 23:70, 24:17, 24:41, 24:208 |
| **9** | 80 bp  170 bp | \*29:16  \*29:08N | \*01:157, 03:27, 11:233 |
| **10** | 90 bp  165 bp  215 bp | \*29:09, 29:33, 29:51, 29:73  \*29:17, 29:43  \*29:54 | \*02:24:02, 02:507, 03:01:18, 11:01:28, 11:01:77, 24:21:03, 24:208, 31:24, 32:33:01, 33:34 |
| **11** | 110 bp  190 bp | \*29:14, 29:35  \*29:10:01-29:10:02, 29:23 | **C\*08:01:15** |
| **12** | 80 bp  145 bp | \*29:02:04, 29:18, 29:48  \*29:78N | \*03:01:39, 32:01:01:01-32:01:07, 32:01:09-32:01:17, 32:01:19-32:03, 32:05-32:55:02, 32:57-32:69, 32:71, 32:73-32:103, 68:01:28, 74:01:01-74:13, 74:15-74:28 |
| **13** | 90 bp  165 bp  260 bp | \*29:11, 29:51, 29:73  \*29:12, 29:92  \*29:55 | \*02:24:02, 02:507  \*31:16, 33:58 |
| **16** | 95 bp  160 bp  190 bp | \*29:15  \*29:21, 29:43  \*29:53 | \*02:221, 23:41, 31:78 |
| **17** | 100 bp  130 bp  190 bp  215 bp | \*29:51, 29:69, 29:73  \*29:24, 29:40  \*29:27, 29:53  \*29:54 | \*02:24:02, 02:507 |
| **18** | 225 bp  260 bp | \*29:37, 29:56  \*29:36 | \*32:07, 33:119 |
| **19** | 160 bp  260 bp  505 bp | \*29:25  \*29:55  \*29:26 |  |
| **22** | 115 bp  260 bp | \*29:29  \*29:13 | \*01:148, 11:128, 26:85, 68:58:01-68:58:02  \*24:82, 31:07-31:08, 31:10, 32:42 |
| **23** | 75 bp  510 bp | \*29:32  \*29:81 | \*02:24:02, 02:65, 02:152, 02:507, 23:03:01, 23:83, 24:21:03, 31:01:02:01-31:02, 31:05, 31:07-31:61, 31:63-31:66, 31:70-31:119, 31:121-31:127, 32:01:01:01-32:01:06, 32:01:08-32:01:11, 32:01:13-32:03, 32:05-32:27N, 32:29, 32:31, 32:33:01, 32:34-32:47, 32:49-32:65, 32:67-32:93, 32:95-32:100, 32:102-32:103, 33:01:01:01-33:01:04, 33:01:06-33:01:10, 33:03:01-33:03:18, 33:03:20-33:03:23, 33:03:25-33:03:26, 33:03:28-33:17, 33:20-33:31, 33:33-33:37, 33:39-33:130, 74:01:01-74:28, **B\*15:17:03** |

**4**The following HLA-A\*29 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |
| --- | --- |
| Alleles | Primer mix |
| A\*29:06, 29:34 | 7 |
| A\*29:07, 29:46 | 8 |
| A\*29:11, 29:92 | 13 |
| A\*29:20, 29:82 | 7 |

‘w’, might be weakly amplified.