Gel Documentation Form and Worksheet

HLA-A low resolution Lot No: 9H8 Expiry Date: 2022-01-01

(101.401-48/12,-48u/12u)

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 mix 3 may faintly amplify the A\*30:04:01-30:04:02, 30:06, 30:09, 30:17, 30:29, 30:46, 30:77, 30:90, 30:99, 30:103, 30:105 , 30:117 and 30:139 alleles.

Primer mix 6 may give rise to a lower yield of A\*23 alleles than the other A low primer mixes.

Primer mix 9 may weakly amplify the A\*34 alleles.

Primer mix 22 might faintly amplify most A\*11 alleles.

Primer mixes 15, 24, 27 and 28 may give rise to a lower yield of HLA-specific PCR product than the other HLA-A low primer mixes.

Primer mixes 6, 10, 14, 20, 23 and 30 have a tendency to giving rise to primer oligomer formation.

Primer mixes 15, 20, 24 and 29 may have tendencies of unspecific amplifications.

Primer mix 30 may generate a false positive band of about 500 base pairs. This band should be disregarded when interpreting HLA-A low resolution typings.

Primer mix 32 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 are 200 and 430 base pairs.



















**1**HLA-A alleles listed on the IMGT/HLA web page 2019-January-23, release 3.35.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

**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 serological reactivity of all HLA-A alleles is not known. In this table we use the expert-assigned serological grouping in Tissue Antigens (2009) **73**:95-170 and the serological grouping of the sequence-defined allele.

**4**The following alleles give rise to identical amplification patterns with the HLA-A low resolution primer set. These alleles can be separated by the respective high resolution primer sets.

|  |  |
| --- | --- |
| **Alleles** | **Alleles** |
| A\*23:14:01-23:14:02, 24:71, 24:315, 24:392 | A\*30:12:01-30:12:02, 30:31, *B\*07:260* |
| A \*23:66, 24:14:01:01-24:15, 24:51-24:53, 24:57, 24:64, 24:94, 24:114, 24:138, 24:188, 24:222N, 24:228, 24:291, 24:296, 24:304, 24:316, 24:324, 24:412, *C\*04:01:03* | A\*31:08, 33:53 |

Abbreviations

‘ser’, serological HLA specificity.

‘w’, might be weakly amplified.

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

Change in revision R01 compared to R00:

1. Primer mix 27 amplifies the A\*03:66, 03:225 and the A\*11:08 alleles. This has been corrected in the Specificity and Interpretation Tables.