Gel Documentation Form and Worksheet

HLA-C low resolution Lot No: 9L9 Expiry Date: 2025-02-01

(101.601-24/12, -24u/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.

Primer mix 2 will for most C\*02 alleles give rise to two specific PCR fragments.

Primer mix 4 will for most C\*03 alleles give rise to two specific PCR fragments.

Primer mix 7 will for most C\*05 alleles give rise to two specific PCR fragments.

Primer mix 9 will for most C\*07 alleles give rise to two specific PCR fragments.

Primer mix 10 will for most C\*08 alleles give rise to multiple specific PCR fragments.

Primer mix 12 will for most C\*12 alleles give rise to two specific PCR fragments.

Primer mix 17 will for most C\*15 alleles give rise to two specific PCR fragments.

Primer mix 25 will for most C\*04 alleles give rise to two specific PCR fragments.

HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

Primer mixes 8, 12, 13, 19 and 30 may have tendencies of unspecific amplifications.

Primer mixes 2, 15, 16, 18, 20, 25, 28 and 30 have a tendency to giving rise to primer oligomer formation.

Primer mixes 3, 6, 10 and 26 may give rise to a lower yield of HLA-specific PCR product than the other HLA-C low primer mixes.

Primer mix 14 might faintly amplify most C\*01 and the C\*14 alleles.

Primer mix 22 might generate a false band of about 500 base pairs. This band should be disregarded when interpreting HLA-C low resolution typings.

Primer mix 32 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-C alleles listed on the IMGT/HLA web page 2020-October-15, release 3.42.0, [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 following alleles give rise to identical amplification patterns with the HLA-C low resolution primer set. These alleles are separated by the HLA-A low primer set and respectively by the HLA-B low primer set.

|  |
| --- |
| Alleles |
| C\*03:02:10, 03:264, B\*15:96, B\*44:274 |
| C\*03:16, B\*46:77 |
| C\*12:222, B\*67:02:01:01-67:02:01:02 |
| C\*14:02:32, 14:06, 14:09, 14:28:01-14:28:02, 14:63, 14:105Q, A\*29:86, A\*30:62, A\*33:63, B\*08:249, B\*18:64, B\*35:183, B\*35:252, B\*39:114, B\*39:140, B\*40:138, B\*41:59 |

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

|  |
| --- |
| **Alleles** |
| C\*01:169:02, C\*03:94 |
|  |

Abbreviations

w: might be weakly amplified.

?: nucleotide sequence information not available for the primer matching sequence.