Gel Documentation Form and Worksheet

HLA-B low resolution

(101.501-48/12, -48u/12u) Lot No: 5H1 Expiry Date: 2021-10-01

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 mix 4 may give rise to a lower yield of HLA-specific PCR product than the other HLA-B low resolution primer mixes in the B\*40, B\*41, B\*45, B\*49 and B\*50 alleles.

Primer mixes 4, 5, 39 and 45 may give rise to a lower yield of HLA-specific PCR product than the other HLA-B low resolution primer mixes.

Primer mixes 1, 19, 20, 26 and 45 have a tendency to giving rise to primer oligomer formation.

Primer mixes 13, 31, 38, 42, 46, 55 and 58 may have tendencies of unspecific amplifications.

Primer mix 25 might faintly amplified the C\*17 alleles.

Primer mix 43 may generate a false positive band of about 800 base pairs. This band should be disregarded when interpreting HLA-B low resolution typings.

The Bw4-associated HLA-A specificities A9, A23, A24, A2403, A25 and A32 are not amplified by the primer pair in primer mix 46.

Primer mix 39 may give rise to a lower yield of HLA-specific PCR product than the other HLA-B low resolution primer mixes in the B\*54 alleles.

In primer mixes 56 and 57 the specific PCR products of 550 respective 640 base pairs may give rise to a lower yield of HLA-specific PCR product than the other HLA-B low primer mixes. Optimized gel electrophoresis run time may need to be considered to ensure separation from the control band.

Primer mix 64 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-B alleles listed on the IMGT/HLA web page 2018-October-18, release 3.34.0, [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-B alleles is not known. In this table we use the information in the HLA Dictionary 2004 on the www.ebi.ac.uk/imgt/hla web site and the expert-assigned serological grouping in Tissue Antigens (2009) **73**:95-170.

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

|  |  |
| --- | --- |
| **Alleles** | **Alleles** |
| B\*55:23, B\*55:32, B\*56:18, B\*56:32 | B\*57:67:01, B\*58:36 |
|  |  |

Abbreviations

‘w’, might be weakly amplified.

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

Changes to revision R01 compared to R00:

1. Primer mix 26 does not amplify the B\*47:04 allele. This has been corrected in the Specificity and Interpretation tables.

2. Notes on Bw assignment of HLA-B alleles have been added in the section “Uniquely identified alleles”.

3. Additional information has been added regarding gel electrophoresis run time for primer mixes 56 and 57 under the Specificity table.