Gel Documentation Form and Worksheet

HLA-B low resolution

(101.501-48/12, -48u/12u) Lot No: 3F8 Expiry Date: 2019-12-01

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 and 38 may have tendencies of unspecific amplifications.

The C\*17:01 to C\*17:04 alleles might be faintly amplified by primer mix 25.

Primer mixes 32 and 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 2016-October-14, release 3.26.0, [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\*08:146, B\*42:07, 42:24 | B\*55:23, 55:32, B\*56:18, 56:32 |
| B\*35:329, B\*53:31, 53:36 | B\*57:67:01, B\*58:36 |

‘w’, might be weakly amplified.

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

Changes in revision R01 compared to R00:

1. Primer mix 27 does not amplify the B\*08:31, 41:06, 41:15 and 42:14 alleles, and primer mix 48 does not amplify the B\*08:31 allele. This has been corrected in the Specificity and Interpretation Tables.

Changes in revision R02 compared to R01:

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