Gel Documentation Form and Worksheet

HLA-A low resolution Lot No: 7L1 Expiry Date: 2024-12-01

(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\*30:04:01-30:04:03, 30:06, 30:09, 30:17, 30:29, 30:46, 30:77, 30:90, 30:99, 30:103, 30:105, 30:117, 30:139 and 30:150 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 13, 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, 27 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 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 products generated by the HGH positive control primer pair is 200 base pairs.

























**1**HLA-A alleles listed on the IMGT/HLA web page 2020-July-13, release 3.41.0, [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, 23:105, 24:71, 24:315, 24:392 | A\*30:12:01-30:12:02, 30:31, 30:152, 30:166, *B\*07:260* |
| \*23:104, 24:02:01:01-24:06, 24:08, 24:10:01:01-24:10:02, 24:13:01-24:13:02, 24:17, 24:20:01:01-24:23, 24:25-24:43, 24:45N-24:50, 24:54-24:56, 24:58-24:63, 24:66-24:70, 24:72-24:81, 24:83N-24:91, 24:93, 24:95-24:103, 24:105-24:107, 24:109-24:111, 24:113, 24:115-24:130, 24:132N-24:137, 24:139-24:187, 24:189-24:203, 24:205-24:210, 24:212, 24:214-24:221, 24:223-24:227, 24:229-24:242, 24:244-24:287, 24:289, 24:292-24:293, 24:295, 24:297-24:303N, 24:305-24:314, 24:317-24:323N, 24:325-24:338, 24:340-24:346, 24:348-24:386, 24:388N-24:391, 24:393-24:405, 24:407-24:411, 24:413-24:452, 24:454-24:456N, 24:459-24:470, 24:472-24:476, 24:478-24:480, 24:482-24:488, 24:490-24:507 | A\*31:08, 33:53 |
| A\*23:66, 23:99, 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, 24:481, *C\*04:01:03* | A\*34:06, 66:40 |
| A\*26:01:63, 26:57, 66:15 |  |

Abbreviations

ser: serological HLA specificity

w: might be weakly amplified