Gel Documentation Form and Worksheet

KIR Genotyping (104.101-12/12u) Lot No: 3L9 Expiry Date: 2024-06-01

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.

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

The specific PCR product generated by primer mixes 6 and 7 are longer than the internal positive control band and the positive control band may be weaker than for other KIR primer mixes.

Primer mixes 5, 7 and 28 have a tendency to giving rise to primer oligomer formation.

Primer mixes 2, 3, 7, 13 and 24 may have tendencies of unspecific amplifications.

Primer mixes 7 and 24 may give rise to a lower yield of specific PCR product than the other KIR primer mixes, most pronounced for primer mix 7.

The 2DL2\*004 and 2DL2\*011 and the 2DL2\*0010101-010 and 012-013 alleles may be distinguished by the different sizes of the specific PCR product in primer mix 2; three specific PCR fragments of 65, 150 and 225 bp in the 2DL2\*004 and 2DL2\*011 alleles and one specific PCR fragment of 150 bp in the 2DL2\*0010101-00304, 005-010 and 012-013 alleles.

The 2DS1 and the 3DP1 amplicons in primer mix 22 may be distinguished by the different sizes of the specific PCR product; a specific PCR fragment of 95 bp for the 2DS1\*0020101-009 alleles and a specific PCR fragment of 235 bp for the 3DP1\*001-002, 004, 007, 0090101-00902 and 011-012 alleles.

Well 28 contains negative control primer pairs, that will produce exon 4 and/or exon 5 amplicons for more than 97% of applicable KIR alleles as well as amplicons generated by positive control primer pairs.



**1**KIR alleles listed on the IPD KIR web page 2019-December-11, release 2.9.0, [www.ebi.ac.uk/ipd/kir](http://www.ebi.ac.uk/ipd/kir).

**2**Alleles that have been deleted from or renamed up to and including the IPD-KIR database release can be retrieved from web page <https://www.ebi.ac.uk/cgi-bin/ipd/kir/deleted.cgi>.

**3**The following KIR Genotyping primer mixes have two or more product sizes:

|  |  |  |  |
| --- | --- | --- | --- |
| Primer Mix | Size of spec. PCR product | KIR Gene | Amplified KIRalleles |
| **2** | 65 bp  150 bp  225 bp | 2DL2  2DL2  2DL2 | 004, 011  0010101-015  004, 011 |
| **3** | 130 bp  520 bp | 2DL3  2DL3 | 0010101w-0020103w, 004w-015w, 017w-036w  0010101-011, 013-026, 028-036 |
| **22** | 95 bp  235 bp | 2DS1  3DP1 | 0020101-009  001-002, 004, 007, 0090101-00902, 011-012 |

Abbreviations

w: might be weakly amplified.

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

Changes in revision R01 compared to R00:

1. The sizes of the specific PCR products in wells 3, 5, 8 and 10 have been corrected.

Changes in revision R02 compared to R01:

1. The footnote referring to a lower yield of specific PCR product in primer mix 7 was modified.

Changes in R03 compared to R02:

1. Primer mix 14 amplifies the 3DS1\*078 allele. The correction has been implemented in the specificity and interpretation tables.