KIR Genotyping (104.101-12/12u) Lot No: 3S5 Expiry Date: 2027-09-01

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 30 have a tendency to giving rise to primer oligomer formation.

Primer mixes 2, 3, 7, 13, 14, 24 and 28 may have tendencies of unspecific amplifications, most pronounced for primer mix 24.

Primer mixes 6, 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\*0020101-006 and 008-012 alleles and a specific PCR fragment of 235 bp for the 3DP1\*001-002, 004, 007, 0090101-00902 and 011-012 alleles.

Primer mix 8 does not amplify the 2DS1\*013 allele. Due to sequence homology between allele groups this allele is amplified in primer mixes 1 and 29. Hence, a sample that is positive for 2DL1 and 2DP1\*006, 009 or 010 may be falsely interpreted as 2DS1-positive. 2DS1\*013 is a rare, unconfirmed allele. Caution should be used when interpreting these results.

Well 30 contains negative control primer pairs, that will produce exon 4 and/or exon 5 amplicons for the majority of applicable KIR alleles as well as amplicons generated by positive control primer pairs.





**1**KIR alleles listed on the IPD KIR web page 2021-December-16, release 2.11.0, [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 |
| **14** | 90 bp  135 bp | 3DL1  3DL1 | 0010101-0020105, 0050101-0090104, 0150101-018, 0200101-0200103, 022-03502, 038, 040-044, 051-054, 057?, 05901-062, 064-068, 070, 071, 073-077, 079-081N, 086-090, 092-103, 109, 111-116, 118-1190102  0010101-0020105, 0040101-0090104, 0150101-044, 051-054, 056, 057, 05901-077, 079-081N, 086-103, 109-1190102 |
| **22** | 95 bp  235 bp | 2DS1  3DP1 | 0020101-006, 008-012  001-002, 004, 007, 0090101-00902, 011-012 |

Abbreviations

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

Changes in revision R01 compared to R00:

1. Primer mix 14 may give rise to unspecific amplifications. A footnote has been added.