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ORIGINAL PAPER

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Human KIR sequences 2003

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Abstract We have compiled the nucleotide sequences and their amino acid translations from a total of 89 Killer Immunoglobulin-like Receptor (KIR) alleles, derived from 17 different KIR genes. The alignments use the KIR3DL2*001 allele as a reference sequence. Each of the KIR sequences included in these alignments has been checked and where discrepancies have arisen between reported sequences, the original authors have been contacted where possible, and necessary amendments to published sequences have been incorporated into this alignment. Future sequencing may identify errors in this list and we would welcome any evidence that helps to maintain the accuracy of this compilation.

Keywords Alignments · KIR · Nucleotide · Protein · Sequences

The sequences included in this compilation are taken from the publications listed in the Killer Immunoglobulin-like Receptor (KIR) Nomenclature Committee Report (Marsh et al. 2003). The KIR Nomenclature Committee has officially assigned the names to all the sequences included in these sequence alignments with the exception of two. Details of the officially named sequences including accession numbers and publication details can be found in the accompanying Nomenclature Report (Marsh et al. 2003). The two sequences listed under the names KIR2DL5(KIR2DLXa) (AF271607) and KIR2DL5(KIR2DLXb) (AF271608) have not yet been assigned official names as it is unclear whether they represent alleles of the KIR2DL5A or KIR2DL5B genes.

Each of the KIR sequences included in these alignments has been checked and where discrepancies have arisen between reported sequences, the original authors have been contacted where possible, and necessary amendments to published sequences have been incorporated into this alignment. Future sequencing may identify errors in this list and we would welcome any evidence that helps to maintain the accuracy of this compilation.

In the nucleotide (Fig. 1) and amino acid (Fig. 2) sequence alignments, a total of 89 sequences comprising 14 KIR genes and three pseudogenes have been aligned to the KIR3DL2*001 sequence. The KIR3DL2*001 sequence was used as a reference sequence as it provided a sufficiently long reference sequence which also possessed a high level of nucleotide identity and structural homology to the majority of the other KIR genes. The KIR sequences were retrieved from the EMBL Nucleotide Sequence Database or GenBank by means of the accession numbers given in the KIR Nomenclature Report (Marsh et al. 2003). Criteria used for the grouping of these sequences into genes is based on the number of immunoglobulin domains, the length of the cytoplasmic tail and sequence homology as proposed in previous publications (Long et al. 1996; Steffens et al. 1998; Vilches and Parham 2002). The sequence comparison was done by using a combination of Clustal (Thompson et al. 1994) and manual analysis after which sequence alignments were subjected to a reformatting tool available in house, which allowed us to show identity to a reference sequence and translate the nucleotide sequences into their corresponding protein sequences (Fig. 2).

In the alignments, exon intron boundaries and protein domains have been marked with a pipe (|), asterisks (*) indicate positions where sequence is unavailable, periods (.) indicate an insertion or deletion. Identity to the reference sequence KIR3DL2*001 is shown by a hyphen

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Fig. 1 Alignment of KIR nucleotide sequences

```
                                                  40                                      50                                      60                                      70                                      80
                                                   |                                       |                                       |                                       |                                       |
KIR3DL2*001Ref        GGG TTT AAC AAT TTC ATG CTG TAC AAA GAA GAC AGA AGC CAC GTT CCC ATC TTC CAC GGC AGA ATA TTC CAG GAG AGC TTC ATC ATG GGC CCT GTG ACC CCA GCA CAT GCA GGG ACC TAC AGA TGT CGG GGT TCA CGC CCA CAC TCC CTC ACT GGG TGG TCG GCA
KIR2DL1*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*00301         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*00302         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*004           --- --- --- --C --- -GT --- --A --G --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -T- --- --- TG- A-C --- C-T T-- --- --- --- --- --- --- --- --C --- --- --- --T -C- --- --- --- --- -AA --- --- -A- -C- -G- --- --- --- ---
KIR2DL1*005           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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KIR2DL2*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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KIR2DL3*006           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL4*00101         --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*00102         --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*00201         --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*00202         --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*003           --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- C-- --- --T --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*004           --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- C-- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*005           --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*006           --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- --- --- --- --A --- -TT -A- --G --- --- -C- --- -A- --- --- ---
KIR2DL4*007           --- --- --- -TC --- -C- --- --- --G A-- --T G-G GT- -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --T --- C-- --T A-- --- --- --- --- --- --C --- --- --- A-- --- --- --A --- -TT --- --G --- --- -C- --- -A- --- --- ---
KIR2DL5A*001          --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --- -G- --- -C- -T- -A- --- --A ---
KIR2DL5B*002          --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --G -G- --- -C- -T- -A- --- --- ---
KIR2DL5B*003          --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --- -G- --- -C- -T- -A- --- --A ---
KIR2DL5B*004          --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --- -G- --- -C- -T- -A- --- --A ---
KIR2DL5(KIR2DLXa)     --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --G -G- --- -C- -T- -A- --- --- ---
KIR2DL5(KIR2DLXb)     --- --- -C- -TC --- -GT --- --- --- --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -A- --- --- TG- A-- --- A-- C-- --- --- --- --- --- --T --- --C --- --- --- --- --- --- --- --- --- -A- --G -G- --- -C- -T- -A- --- --- ---
KIR2DS1*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*002           --- --- --- --C --- -GT --- --A --G --- --T G-G GTG -CT --C --T GAG C-- T-- AA- -T- --- --- TG- A-C --- C-T T-- --- --- --- --- --- --- --- --C --- --- --- --T -C- --- --- --- --- -AA --- --- -A- -C- -G- --- --- --- ---
KIR2DS1*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*004           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*001           --- --- --- --C --- -GT --- --- --G --- -GT G-G GTG -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-C --- C-T T-- --- --- --- --- --- --C --- --. A-- --- --A --- --- --- --- --- --- -A- A-- --- --- -C- -G- --- --- --A ---
KIR2DS2*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*004           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*005           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00101         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00102         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00103         --- --- --- --C --- -GT --- --- --G --T --T G-G GTG -CT --C --T GAA CA- T-- AA- --- --- --- TG- A-A --- C-T T-- --- --- --- --- --- --G T-- --C A-- --- --- --T --- --C --- --- --- -A- --- --- --- -C- -G- --- --- --- ---
KIR2DS4*00101         --- --- --- --C --- -GT --- --- --G --T --T G-G GTG -CT --C --T GAG C-G T-- AA- --- --- --- TG- A-A --- C-T T-- --- --- --- --- --- --G T-- --- --- --- --- --T --- --C --- --- --- -A- A-- --- --- -C- -G- --- --- --- ---
KIR2DS4*00102         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*002           --- --- --- --C --- -GT --- --- --G --T --T G-G GTG -CT --C --T GAG C-- T-- AA- --- --- --- TG- A-A --- C-T T-- --- --- --- --- --- --G T-- --C A-- --- --- --T --- --C --- --- --- -A- A-- --- --- -C- -G- --- G-- --- ---
KIR2DS4*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00101         A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- A-- --- --- --- --T --- --- --- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*00102         A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- A-- --- --- --- --T --- --- --- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*002           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- T-- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*003           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- T-- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*00401         A-- --- --- --- --- --- --A --- --- --- --- G-- -T- --- A-- --- --- --- --T --- --- --- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- -T- ---
KIR3DL1*00402         A-- --- --- --- --- --- --A --- --- --- --- G-- -T- --- A-- --- --- --- --T --- --- --- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- -T- ---
KIR3DL1*005           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- A-- --- --- --- --T --- --- --- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*006           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- T-- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*007           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- T-- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*008           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- T-- --- --- --- --- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL1*009           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DS1*010           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DS1*011           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DS1*012           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DS1*013           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DS1*014           A-- --- --- --- --- --- --A --- --- --- --- --- -T- --- --- --- --- --- --T --- --- --- --- --- --- G-- --- -A- --- A-- --- --- --- A-- --- --- --- --- -A- --- -C- --- --- --- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL2*001           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*003           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- A--
KIR3DL2*007           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- A--
KIR3DL2*008           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*009           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001           --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- --- --- -G- A-C --- --T C-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-C A-- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL3*00201         --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- --- --- -G- A-C --- --T C-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-C A-- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL3*00202         --- --- --T G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- --- --- -G- A-C --- --T C-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-C A-- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL3*003           --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- --- --- -G- A-C --- --T C-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-C A-- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DL3*004           --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- --- --- -G- A-C --- --T C-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-C A-- --- -A- --- --- --- -C- --- --- --- --- ---
KIR3DP1*001           --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- G-- --- -GA A-C -C- G-T T-- --A --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- -T- --- --- --- --- --A ---
KIR3DP1*002           --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- G-- --- -GA A-C -C- G-T T-- --A --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- -T- --- --- --- --- --A ---
KIR3DP1*00301         --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- G-- --- -GA A-C -C- G-T T-- --A --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- -T- --- --- --- --- --A ---
KIR3DP1*00302         --- --- --- G-A --- -GT --- -C- --- --- --- G-G -TG -CT --C --T GAG C-- T-- AA- --- G-- --- -GA A-C -C- G-T T-- --A --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- -T- --- --- --- --- --A ---
KIR2DP1*001           --- --- --- --C --- -GT --- --A --G --- --T G-G GTG -CT -GC A-T GAG C-- T-- AA- --- --- --- TG- A-- --- C-T T-- --- --- --- --- --- --- --- --C A-- --- --G --- --- --- --- --- --- -A- --- --- --- -C- -G- --- --- --- ---
KIR2DP1*002           --- --- --- --C --- -GT --- --A --G --- --T G-G GTG -CT -GC A-T GAG C-- T-- AA- --- --- --- TG- A-- --- C-T T-- --- --- --- --- --- --- --- --C A-- --- --G --- --- --- --- --- --- -A- --- --- -A- -C- -G- --- --- --- ---
```

Fig. 1 (continued)

```
                                                 (Pseudo)Exon 3 |  Exon 4
                              90                                |    100                                        110                                     120                                     130                                     140
                               |                                |     |                                           |                                       |                                       |                                       |
KIR3DL2*001Ref        CCC AGC AAC CCC CTG GTG ATC ATG GTC ACA G | GA AAC CAC AGA AAA CCT TCC CTC CTG GCC CAC CCA GGG CCC CTG CTG AAA TCA GGA GAG ACA GTC ATC CTG CAA TGT TGG TCA GAT GTC ATG TTT GAG CAC TTC TTT CTG CAC AGA GAG GGG ATC TCT GAG
KIR2DL1*001           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL1*002           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL1*00301         *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --G --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL1*00302         *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --G --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL1*004           --- --- --- --- --- -A- --- -C- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL1*005           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DL2*001           --- --- --- --- --- --- --- G-- --- -T- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL2*002           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL2*003           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL2*004           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- -C- --A --- -AG -T- A--
KIR2DL3*001           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL3*002           --- --- --- --- --- --- --- G-- --- -T- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL3*003           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL3*004           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- -G- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL3*005           --- --- --- --- --- --- --- G-- --- -T- - | -- GT- --- --- --- --- --- --- -G- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL3*006           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- --- --A --- -AG -T- A--
KIR2DL4*00101         --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00102         --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00201         --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00202         --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*003           --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*004           --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*005           --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*006           --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*007           --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5A*001          --- --- --- --- --- --- --- G-- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*002          --- --- --- --- --- --- --- G-- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*003          --- --- --- --- --- --- --- --- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*004          --- --- --- --- --- --- --- G-- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5(KIR2DLXa)     --- --- --- --- --- --- --- G-- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5(KIR2DLXb)     --- --- --- --- --- --- --- G-- --- --- - | .. ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DS1*001           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DS1*002           --- --- --- --- --- -A- --- -C- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DS1*003           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DS1*004           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --A --- --- C-- --- --- --- --- --- --G -T- A-C
KIR2DS2*001           --- --- --- --- --- --- --- G-- --- -T- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -AG -A- A--
KIR2DS2*002           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -AG -A- A--
KIR2DS2*003           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -AG -A- A--
KIR2DS2*004           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -AG -A- A--
KIR2DS2*005           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -AG -A- A--
KIR2DS3*00101         *** *** *** *** *** *** *** *** *** *** * | -- TT- -G- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR2DS3*00102         *** *** *** *** *** *** *** *** *** *** * | -- TT- -G- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR2DS3*00103         --- --- --- --- --- C-- --- --- --- --- - | -- TT- -G- --- --- --- --- --- --- --- --- --- --T -G- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR2DS4*00101         --- --- --- --- --- --- --- --- --- --- - | -- GT- --- --- --- --- --- T-- --- --- -T- --- --T -A- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --G --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-C
KIR2DS4*00102         *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- T-- --- --- -T- --- --T -A- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --G --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-C
KIR2DS4*002           --- --- --- --- --- --- --- G-- --- --- - | -- GT- --- --- --- --- --- T-- --- --- -T- --- --T -A- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --G --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-C
KIR2DS4*003           *** *** *** *** *** *** *** *** *** *** * | -- GT- --- --- --- --- --- T-- --- --- -T- --- --T -A- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --G --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-C
KIR2DS5*001           *** *** *** *** *** *** *** *** *** *** * | -- TT- -G- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR2DS5*002           *** *** *** *** *** *** *** *** *** *** * | -- TT- -G- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR2DS5*003           *** *** *** *** *** *** *** *** *** *** * | -- TT- -G- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -CG -T- A-C
KIR3DL1*00101         --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*00102         --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*002           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*003           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*00401         --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*00402         --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*005           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*006           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*007           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*008           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL1*009           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DS1*010           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- T-- --- --- A--
KIR3DS1*011           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- T-- --- --- A--
KIR3DS1*012           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- T-- --- --- A--
KIR3DS1*013           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- T-- --- --- A--
KIR3DS1*014           --- --- --- --- A-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- -G- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- -A- --- --- --- --- A--
KIR3DL2*001           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR3DL2*003           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*007           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*008           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*009           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011           --- --- --- --- G-- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012           --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001           --- --- --- --T G-- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --G --- --- --G --- --- --- --- --- --- --- --- --- -G- --- --- -G- --- C-- --- --- --- --- --- --- A-- ---
KIR3DL3*00201         --- --- --- --T G-- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --G --- --- --G --- --- --- --- --- --- --- --- --- -G- --- --- -G- --- C-- --- --- --- --- --- --- A-- ---
KIR3DL3*00202         --- --- --- --T G-- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- --- --- --G --- --- --- --- --- --- --- --- --- -G- --- --- -G- --- C-- --- --- --- --- --- --- A-- ---
KIR3DL3*003           --- --- --- --T G-- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --G --- --- --G --- --- --- --- --- --- --- --- --- -G- --- --- -G- --- C-- --- --- --- --- --- --- A-- ---
KIR3DL3*004           --- --- --- --T G-- --- --- --- --- --G - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --G --- --- --G --- --- --- --- --- --- --- --- --- -G- --- --- -G- --- C-- --- --- --- --- --- --- A-- ---
KIR3DP1*001           --- --- --- --- --- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-T
KIR3DP1*002           --- --- --- --- --- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-T
KIR3DP1*00301         --- --- --- --- --- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-T
KIR3DP1*00302         --- --- --- --- --- --- --- --- --- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- -AG -T- A-T
KIR2DP1*001           --- --- --- --- --- --- --- --- -C- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- C-- --- --- --- --- --- -CA -T- A-C
KIR2DP1*002           --- --- --- A-- --- --- --- --- -C- --- - | -- GT- --- --- --- --- --- --- --- --- --- --- --T --- --- G-- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- -G- --- C-- --- --- C-- --- --- --- --A --- -AG -T- A-C
```

Fig. 1 (continued)

```
                                                     150                                     160                                     170                                     180                                     190
                                                      |                                       |                                       |                                       |                                       |
KIR3DL2*001Ref     GAC CCC TCA CGC CTC GTT GGA CAG ATC CAT GAT GGG GTC TCC AAG GCC AAC TTC TCC ATC GGT CCC TTG ATG CCT GTC CTT GCA GGA ACC TAC AGA TGT TAT GGT TCT GTT CCT CAC TCC CCC TAT CAG TTG TCA GCT CCC AGT GAC CCC CTG GAC ATC GTG
KIR2DL1*001        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL1*002        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL1*00301      --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL1*00302      --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL1*004        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL1*005        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -C- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DL2*001        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL2*002        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL2*003        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL2*004        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --T --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*001        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*002        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*003        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*004        --- A-T -TG --- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*005        --- A-T -TG --- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL3*006        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DL4*00101      ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00102      ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00201      ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*00202      ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*003        ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*004        ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*005        ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*006        ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL4*007        ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5A*001       ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*002       ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*003       ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5B*004       ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5(KIR2DLXa)  ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DL5(KIR2DLXb)  ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
KIR2DS1*001        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -G- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR2DS1*002        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -A- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR2DS1*003        --- A-T -TG --- --- A-- --- G-A CA- --C --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -A- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR2DS1*004        --- A-T -TG --- --- A-- --- G-A CA- --- --- --- --- --- --- --- --- --- --- --- A-- -G- A-- -A- -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- G-- --- --- --- --- --- --T --- --- --- ---
KIR2DS2*001        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DS2*002        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DS2*003        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DS2*004        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DS2*005        --- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- -AA -A- --- --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --C
KIR2DS3*00101      --- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -G- -AA -A- --G --- --G --- --- --- --C --C --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- --T --- --- --- ---
KIR2DS3*00102      --- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -G- -AA -A- --G --- --G --- --- --- --C --C --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- --T --- --- --- ---
KIR2DS3*00103      --- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -G- -AA -A- --G --- --G --- --- --- --C --C --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- --T --- --- --- ---
KIR2DS4*00101      A-- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --T --- --- A-- --- --- --- --- --- --- --- --- --- --C --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --G ---
KIR2DS4*00102      A-- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --T --- --- A-- --- --- --- --- --- --- --- --- --- --C --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --G ---
KIR2DS4*002        A-- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --T --- --- A-- --- --- --- --- A-- --- --- --- --- --C --C A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --G ---
KIR2DS4*003        A-- A-T -TG -A- --- A-- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --T --- --- A-- --- --- --- --- --- --- --- --- --- --C --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --G ---
KIR2DS5*001        C-- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- -G- --- --- --- --- --- -G- A-- -CA -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --G --- --- --- --T --- --- --- ---
KIR2DS5*002        C-- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- -G- --- --- --- --- --- -G- A-- -CA -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --G --- --- --- --T --- --- --- ---
KIR2DS5*003        C-- A-T -TG --- --- A-- --- G-- CA- AT- --- --- --- --- --- -G- --- --- --- --- --- -G- A-- -CA -AA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR3DL1*00101      --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*00102      --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*002        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*003        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*00401      --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- T-- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*00402      --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- T-- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*005        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- T-- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*006        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --T --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*007        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*008        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL1*009        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --- A-- --- -T- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DS1*010        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- T-- A-- --- -G- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DS1*011        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- T-- A-- --- -G- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DS1*012        --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- T-- A-- --- -G- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DS1*013        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- T-- A-- --- -G- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DS1*014        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- T-- A-- --- -G- -C- --- --- --G --- --- --- --C --C --- --- --- A-- --- A-- --- --- --- --- --- --- --- --- --T --- --- --- --- ---
KIR3DL2*001        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*003        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004        --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005        --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*007        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*008        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*009        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011        --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012        --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001        --- --- -TG --- --- A-- --- --- C-- --C --- -C- -GT --- C-- -T- --- -AT --- --G --- --- A-- -CA --- -C- --- --- --G --- --- --- --C -T- --- --- --C A-- --- -TA --- --- G-- --- --G --- --- --- --- --T --- --- --- ---
KIR3DL3*00201      --- --- -TG --- --- --- --- --- C-- --C --- -C- -GT --- C-- -T- --- -AT --- --G --- --- A-- -CA --- -C- --- --- --G --- --- --- --C -T- --- --- --C A-- --- -TA --- --- G-- --- --G --- --- --- --- --T --- --- --- ---
KIR3DL3*00202      --- --- -TG --- --- --- --- --- C-- --C --- -C- -GT --- C-- -T- --- -AT --- --G --- --- A-- -CA --- -C- --- --- --G --- --- --- --C -T- --- --- --C A-- --- -TA --- --- G-- --- --G --- --- --- --- --T --- --- --- ---
KIR3DL3*003        --- --- -TG --- --- A-- --- --- C-- --C --- -C- -GT --- C-- -T- --- -AT --- --G --- --- A-- -CA --- -C- --- --- --G --- --- --- --C -T- --- --- --C A-- --- -TA --- --- G-- --- --G --- --- --- --- --T --- --- --- ---
KIR3DL3*004        --- --- -TG --- --- --- --- --- C-- --C --- -C- -GT --- C-- -T- --- -AT --- --G --- --- A-- -CA --- -C- --- --- --G --- --- --- --C -T- --- --- --C A-- --- -TA --- --- G-- --- --G --- --- --- --- --T --- --- --- ---
KIR3DP1*001        --- A-T -TG --- --- AC- --- G-- C-- --- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -C- -AA -A- --- --- --G --- --- --- --C --C --- --- --- --- --T --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR3DP1*002        --- A-T -TG --- --- AC- --- G-- C-- --- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -C- -AA -A- --- --- --G --- --- --- --C --C --- --- --- --- --T --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR3DP1*00301      --- A-T -TG --- --- AC- --- G-- C-- --- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -C- -AA -A- --- --- --G --- --- --- --C --C --- --- --- --- --T --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR3DP1*00302      --- A-T -TG --- --- AC- --- G-- C-- --- --- --- --- --- --- --- --- --- --- --- --- -G- A-- -C- -AA -A- --- --- --G --- --- --- --C --C --- --- --- --- --T --- --- --- --- --- --- --- --- --- --T --- --- --- ---
KIR2DP1*001        --- A-T -TG -A- --- AC- --- G-- CA- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- GAA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- .-- --- --- --- --- --- --- --T --- --- --- --C
KIR2DP1*002        --- A-T -TG -A- --- AC- --- G-- CA- --- --- --- --T --- --- --- --- --- --- --- --- --- A-- --- GAA -A- --G --- --G --- --- --- --C --C --- --- --- A-- --- --- --- .-- --- --- --- --- --- --- --T --- --- --- --C
```

Fig. 1 (continued)

```
                     Exon 4   |  Exon 5
                              |     200                            210                            220                            230                            240
                              |      |                              |                              |                              |                              |
KIR3DL2*001Ref       ATC ACA G | GT CTA TAT GAG AAA CCT TCT CTC TCA GCC CAG CCG GGC CCC ACG GTT CAG GCA GGA GAG AAC GTG ACC TTG TCC TGT AGC TCC TGG AGC TCC TAT GAC ATC TAC CAT CTG TCC AGG GAA GGG GAG GCC CAT GAA CGT AGG CTC CGT GCA GTG CCC
KIR2DL1*001          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DL1*002          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DL1*00301        --- -T- - | -- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DL1*00302        --- -T- - | -- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DL1*004          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- A--
KIR2DL1*005          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DL2*001          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- T-- --- T-- TC- --- -G- ---
KIR2DL2*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- T-- --- T-- TC- --- -G- ---
KIR2DL2*003          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- T-- --- T-- TC- --- -G- ---
KIR2DL2*004          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- T-- --- T-- TC- --- -G- ---
KIR2DL3*001          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL3*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL3*003          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL3*004          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL3*005          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL3*006          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DL4*00101        ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --- --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*00102        ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*00201        ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --- --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*00202        ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*003          ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*004          ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*005          ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*006          ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- -T- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL4*007          ... ... . | -- --- --- --- --- --- --G --T A-- --- -G- --- --- --- --- --- -GC --- --- --- --- --- --- --- --- --C --- --- CA- --- --- -T- --- --- --- --- --A --- --- --G --- --A --- --- --- -T- --- --- -C- --- --- ---
KIR2DL5A*001         ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DL5B*002         ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DL5B*003         ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DL5B*004         ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DL5(KIR2DLXa)    ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- --- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DL5(KIR2DLXb)    ... ... . | -- --- -T- -G- --- --- --A --- --- --- --- --- --- --- --- --- -GC A-- --- --- --- --- G-- --- --- --C --- --- A-- --- --A -T- --- --G --- --- --A --- --- --G --- AG- --- --- --- -C- --- --- -C- --- --- ---
KIR2DS1*001          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- A--
KIR2DS1*002          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- A--
KIR2DS1*003          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- A--
KIR2DS1*004          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- A--
KIR2DS2*001          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- TT- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS2*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- TT- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS2*003          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- TT- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS2*004          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- TT- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS2*005          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- TT- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS3*00101        --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- --- --- --- --- --- --G --- --- --A --- -C- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS3*00102        --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- --- --- --- --- --- --G --- --- --A --- -C- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS3*00103        --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- --- --- --- --- --- --G --- --- --A --- -C- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
KIR2DS4*00101        --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- --- -G-
KIR2DS4*00102        --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- --- -C- --- --- -G-
KIR2DS4*002          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- T-- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- --- -C- --- --- -G-
KIR2DS4*003          --- -T- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- ... ... ... ... ... ... ... .-- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- --- -G-
KIR2DS5*001          --- --- - | -- --- --- --- --- --- --- --- C-- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DS5*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR2DS5*003          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --T --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --- --- --- --- --- --- --- --- --- -C- --- -G- ---
KIR3DL1*00101        G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*00102        G-- --G - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*002          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G C-- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*003          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*00401        G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*00402        G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*005          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*006          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*007          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL1*008          G-- --- - | -- -C- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
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KIR3DS1*010          G-- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DS1*011          G-- --- - | -- --- --- --- --- --- --- --- --- C-G --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DS1*012          G-- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DS1*013          G-- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DS1*014          G-- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- -G- --- --- --- --- --- --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- -GA --- --- --- --- --- --- -C- --- --- -G-
KIR3DL2*001          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*003          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004          --- --- - | -- --- --- --- --- --- --- --- --- C-G --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*007          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*008          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*009          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001          G-- GT- - | -- --- --- -G- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- -TG -T- --- --T --- --- --A --- --- --G -CA --- --- GG- --- -T- --- --- AC- --G --- -TG
KIR3DL3*00201        G-- GT- - | -- --- --- -G- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- -TG -T- --- --T --- --- --A --- --- --G -CA --- --- GG- --- -T- --- --- AC- --G --- -TG
KIR3DL3*00202        G-- GT- - | -- --- --- -G- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- -TG -T- --- --T --- --- --A --- --- --G -C- --- --- GG- --- -T- --- --- AC- --- --- -TG
KIR3DL3*003          G-- GT- - | -- --- --- -G- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- -TG -T- --- --T --- --- --A --- --- --G -CA --- --- GG- --- -T- --- --- AC- --G --- -TG
KIR3DL3*004          G-- GT- - | -- --- --- -G- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- --C --- --- C-- --- -TG -T- --- --T --- --- --A --- --- --G -CA --- --- GG- --- -T- --- --- AC- --G --- -TG
KIR3DP1*001          --T --- - | -- --- -G- -G- --- --- --- --- --- --- --- --- C-- --- -T- --- A-- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --- --- --- --A --A --- --G --- --- --T --- --- -T- --- T-- -C- --- --- ---
KIR3DP1*002          --T --- - | -- --- -G- -G- --- --- --- --- --- --- --- --- C-- --- -T- --- A-- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --- --- --- --A --A --- --C --- --- --T --- --- -T- --- T-- -C- --- --- ---
KIR3DP1*00301        --T --- - | -- --- -G- -G- --- --- --- --- --- --- --- --- C-- --- -T- --- A-- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --- --- --- --A --A --- --G --- --- --T --- --- -T- --- T-- -C- --- --- ---
KIR3DP1*00302        --T --- - | -- --- -G- -G- --- --- --- --- --- --- --- --- C-- --- -T- --- A-- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --- --- --- --A --A --- --G --- --- --T --- --- -T- --- T-- -C- --- --- ---
KIR2DP1*001          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- -C- --G --- --- --- --- --- --- --- T-- TC- --- -G- A--
KIR2DP1*002          --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -T- --- --- --- -G- --- --- --- --- --C --- --- C-- --- --- --- --- --G --- --- --A --- --- --G --- --- --- --- --- --- --- T-- TC- --- -G- ---
```

Fig. 1 (continued)

```
                                                                                                                                                                                       Exon 5 | Exon 6
                     250                                     260                                     270                                     280                                     290                        |            300
                     |                                       |                                       |                                       |                                       |                          |            |
KIR3DL2*001Ref       AAG GTC AAC AGA ACA TTC CAG GCA GAC TTT CCT CTG GGC CCT GCC ACC CAC GGA GGG ACC TAC AGA TGC TTC GGC TCT TTC CGT GCC CTG CCC TGC GTG TGG TCA AAC TCA AGT GAC CCA CTG CTT GTT TCT GTC ACA G | GA AAC CCT TCA AGT AGT TGG CCT
KIR2DL1*001          --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL1*002          --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL1*00301        --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL1*00302        --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL1*004          --- --- --- G-- --- --- --- --C A-- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL1*005          --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL2*001          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- -T- - | -- --- --- --- -A- --- --- ---
KIR2DL2*002          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- -T- - | -- --- --- --- -A- --- --- ---
KIR2DL2*003          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL2*004          --- --- --- G-- --- --- --- --C --- --- --- --- -A- --- --- --- --- --- --A --G --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL3*001          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL3*002          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- -T-
KIR2DL3*003          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL3*004          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL3*005          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL3*006          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DL4*00101        -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -AA --- --- G-- G-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*00102        -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- G-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*00201        -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*00202        -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*003          -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- G-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*004          -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*005          -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*006          -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL4*007          -GC A-- --T G-- --- --- --- --C --- --C --- --- --T --- --- --- --- --- -A- --- --- --- --- --- --- --- --- -A- -GA TCT --- -A- -A- --- --- G-- C-G --- --- --- --- -C- --- --- --- --- - | -- --- --- --T --- --- --- ---
KIR2DL5A*001         -GC --- --T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- C-- -A- -A- TCA --- -AT -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- T-- --- --- --- -CA T--
KIR2DL5B*002         -GC --- G-T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- A-- --- C-- -A- -A- TCA --- -AT -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- T-- --- --- --- -CA T--
KIR2DL5B*003         -GC --- --T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- C-- -A- -A- TCA --- -AT -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- T-- --- --- --- -CA T--
KIR2DL5B*004         -GC --- --T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- C-- -A- -A- TC* *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** ***
KIR2DL5(KIR2DLXa)    -GC --- G-T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- A-- --- C-- -A- -A- TCA --- -AT -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- T-- --- --- --- -CA T--
KIR2DL5(KIR2DLXb)    -GC --- G-T G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- A-- --- C-- -A- -A- TCA --- -AT -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- T-- --- --- --- -CA T--
KIR2DS1*001          --- --- --- G-- --- --- --- --C A-- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS1*002          --- --- --- G-- --- --- --- --C A-- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS1*003          --- --- --- G-- --- --- --- --C A-- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS1*004          --- --- --- G-- --- --- --- --C A-- --- --- --- --- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS2*001          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -AT -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS2*002          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -AT -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS2*003          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -AT -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS2*004          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -AT -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS2*005          --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -AT -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS3*00101        --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --A --- --A --- --- --- --- --- --- --- --- -A- -A- TCT --- -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS3*00102        --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --A --- --A --- --- --- --- --- --- --- --- -A- -A- TCT --- -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS3*00103        --- --- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --A --- --A --- --- --- --- --- --- --- --- -A- -A- TCT --- -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS4*00101        -GC A-- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- GCT --- -A- -A- --- --- --- --G --- --T --- --- --- --- --C --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS4*00102        -GC A-- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- GCT --- -A- -A- --- --- --- --G --- --T --- --- --- --- --C --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS4*002          -GC A-- C-- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- GCT --- -A- -A- --- --- --- --G --- --T --- --- --- --- --C --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS4*003          -GC A-- --- G-- --- --- --- --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- GCT --- -A- -A- --- --- --- --G --- --T --- --- --- --- --C --- --- - | -- --- --- --- -A- --- --- ---
KIR2DS5*001          --- --- --- --- --- --- --- --C --- -C- --- --- -A- --- --- --- --- --- --- G-- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- T-- --- -A- --- --- ---
KIR2DS5*002          --- --- --- --- --- --- --- --C --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- T-- --- -A- --- --- ---
KIR2DS5*003          --- --- --- G-- --- --- --- --C --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- TCT --A -A- -A- --- --- --G --- --- --- --- --- --- --- --- --- --- - | -- --- T-- --- -A- --- --- ---
KIR3DL1*00101        --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*00102        --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*002          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*003          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*00401        --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- CA- TCT --- -A- -A- -T- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*00402        --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- CA- TCT --- -A- -A- -T- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*005          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --T --- --- --- --- CA- TCT --- -A- -A- -T- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*006          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- T-- CA- TCT --- -A- -A- -T- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*007          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*008          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL1*009          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DS1*010          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DS1*011          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DS1*012          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DS1*013          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DS1*014          --- --- --- --- --- --- --- --- --T --C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CA- TCT --- -A- -A- --- --- G-- C-G --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*001          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*002          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*003          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*004          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*005          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*006          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*007          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*008          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*009          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*010          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*011          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL2*012          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- ---
KIR3DL3*001          -G- --- --T G-- --- --- --- --C A-- --C --- --- --- --- -TG --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- CA- -C- --- --- G-- C-G --- --- --- --- -CC --- --- --- --- - | .. ... ... ... ... ... ... ...
KIR3DL3*00201        -G- --- --T G-- --- --- --- --C A-- --C --- --- --- --- -TG --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- CA- -C- --- --- G-- C-G --- --- --- --- -CC --- --- --- --- - | .. ... ... ... ... ... ... ...
KIR3DL3*00202        -G- --- --T G-- --- --- --- --C A-- --C --- --- --- --- -TG --- --- --- --- -A- --- --- --- --- --- --- --- -** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** ***
KIR3DL3*003          -G- --- --T G-- --- --- --- --C A-- --C --- --- --- --- -TG --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- CA- -C- --- --- G-- C-G --- --- --- --- -CC --- --- --- --- - | .. ... ... ... ... ... ... ...
KIR3DL3*004          -G- --- --T G-- --- --- --- --C A-- --C --- --- --- --- -TG --- --- --- --- -A- --- --- --- --- --- --- --- --- --- --- --- CA- -C- --- --- G-- C-G --- --- --- --- -CC --- --- --- --- - | .. ... ... ... ... ... ... ...
KIR3DP1*001          --- --- --T G-- --C --- --- --C A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** ***
KIR3DP1*002          --- --- --T G-- --C --- --- --C A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- TCT --- -A- -A- --- --- G-- CTT --- --- --- --- --- --- --- --- --- - | ** *** *** *** *** *** *** ***
KIR3DP1*00301        --- --- --T G-- --C --- --- --C A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** ***
KIR3DP1*00302        --- --- --T G-- --C --- --- --C A-- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -A- TCT --- -A- -A- --- --- G-- CTT --- --- --- --- --- --- --- --- --- - | ** *** *** *** *** *** *** ***
KIR2DP1*001          --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- -** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** ***
KIR2DP1*002          --- --- --- G-- --- --- --- --T --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -A- TCT --- -A- -A- --- --- --- --G --- --- --- --- --- --- --- --- --- - | -- --- --- --- -A- --- --- ---
```

Fig. 1 (continued)

```
                                                     Exon 6 | Exon 7                                                                                                                              Exon 7 | Exon 8
                                              310           |                          320                                 330                                 340                                   |        350
                                               |            |                           |                                   |                                   |                                    |         |
KIR3DL2*001Ref        TCA CCC ACA GAA CCA AGC TCC AAA TCT G | GT ATC TGC AGA CAC CTG CAT GTT CTG ATT GGG ACC TCA GTG GTC ATC TTC CTC TTC ATC CTC CTC CTC TTC TTT CTC CTT TAT CGC TGG TGC TCC AAC AAA AAG A | .AT GCT GCT GTA ATG GAC CAA GAG CCT
KIR2DL1*001           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL1*002           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL1*00301         --- --- --T --- --- --- --- --- A-G - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL1*00302         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL1*004           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- T-- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL1*005           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL2*001           --- --- --T --- --- --- --T --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL2*002           --- --- --T --- --- --- --T --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL2*003           --- --- --T --- --- --- --T --- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL2*004           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- C-- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- ... --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --G --- --- --- --- --- T--
KIR2DL3*001           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL3*002           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL3*003           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL3*004           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- -T- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL3*005           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL3*006           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- -G- --- --- --A - | .-- --- -T- --- --- --- --- --- ---
KIR2DL4*00101         --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --T -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*00102         --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --- -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*00201         --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --T -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*00202         --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --T -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*003           --- --- --- --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --- -C- A-- --- -C- --- --- --- --- C-- --- --- --- --- --A --- --A G | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*004           --- --- --- --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --- -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*005           --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --- -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*006           --- --- --- --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --- -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | .-- --- --- --- --- A-- --- --- ---
KIR2DL4*007           --- --- --T --- --- --- -T- --- A-- - | -- --- GC- --- --- --- --- -C- G-- --- A-- TA- --- --- -C- --- A-- --- --T -C- A-- --T -C- --- --- --- --- C-- --- --- --- --- --A --- --A - | ..- --- --- --- --- A-- --- --- ---
KIR2DL5A*001          --- --- --T --- --- --- --- --- A-- - | -- --- C-- --- --- --- --C A-- --- --- --- --- --- --- -CT --- A-- --- --- --- A-- --- T-- --- --- --- --- C-- T-- --C --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR2DL5B*002          --- --- --T --- --- --- --- --- A-- - | -- --- C-- --- --- --- --C A-- --- --- --- --- --- --- -CT --- A-- --- --- --- A-- --- T-- --- --- --- --- C-- T-- --C --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR2DL5B*003          --- --- --T --- --- --- --- --- A-- - | -- --- C-- --- --- --- --C A-- --- --- --- --- --- --- -CT --- A-- --- --- --- A-- --- T-- --- --- --- --- C-- T-- --C --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR2DL5B*004          *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR2DL5(KIR2DLXa)     --- --- --T --- --- --- --- --- A-- - | -- --- C-- --- --- --- --C A-- --- --- --- --- --- --- -CT --- A-- --- --- --- A-- --- T-- --- --- --- --- C-- T-- --C --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR2DL5(KIR2DLXb)     --- --- --T --- --- --- --- --- A-- - | -- --- C-- --- --- --- --C A-- --- --- --- --- --- --- -CT --- A-- --- --- --- A-- --- T-- --- --- --- --- C-- T-- --C --- --- --- --- --- - | .-- --- --- --- --- --- --- -G- ---
KIR2DS1*001           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS1*002           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS1*003           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS1*004           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS2*001           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS2*002           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --- --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS2*003           --- --- --T --- --- --- --- --- A-C - | -- -A- -C- --- T-- --- --C -C- --- --- --- --- --- --- --- --- A-- -C- --T GCT A-- --- --- --- --- --- --- C-- --- --- --T G-- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS2*004           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --- --C --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS2*005           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS3*00101         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS3*00102         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS3*00103         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS4*00101         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS4*00102         --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS4*002           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS4*003           --- --- --T --- --- --- --- --- A-C - | -- -A- CC- --- --- --A --- --- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- G-- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR2DS5*001           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS5*002           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR2DS5*003           --- --- --T --- --- --- --- G-- A-C - | -- -A- CC- --- --- --A --C --- --- --- --- --- --- --- --- -AA C-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --A T-- --- --- --- --- -G- ---
KIR3DL1*00101         --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*00102         --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --G --- ---
KIR3DL1*002           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*003           --- --- --- --- --- --- --- --- -G- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*00401         --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --- --- --C --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- -A- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*00402         --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --- --- --C --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- -A- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*005           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*006           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*007           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*008           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL1*009           --- --- --- --- --- --- --- --- --- - | -- -A- CC- --- --- --- --C A-- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- -T- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DS1*010           --- --- --- --- --- --- --- --- --- - | -- -A- CT- --- --- --- --C A-- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DS1*011           --- --- --- --- --- --- --- --- --- - | -- -A- CT- --- --- --- --C A-- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | A-- --- --- --- --- --- --- --- ---
KIR3DS1*012           --- --- --- --- --- --- --- --- --- - | -- -A- CT- --- --- --- --C A-- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | A-- --- --- --- --- --- --- --- ---
KIR3DS1*013           --- --- --- --- --- --- --- --- --- - | -- -A- CT- --- --- --- --C A-- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | A-- --- --- --- --- --- --- --- ---
KIR3DS1*014           --- --- --- --- --- --- --- --- --- - | -- -A- CT- --- --- --- --C A-- --- --- --- --- --- --- --- -AA A-- -CT --- -C- A-- --- --- --- --- --- --- C-- --- --- --- --- --- --- --A - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*001           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*002           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*003           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*004           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*005           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*006           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*007           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*008           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*009           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*010           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*011           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL2*012           --- --- --- --- --- --- --- --- --- - | -- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- - | .-- --- --- --- --- --- --- --- ---
KIR3DL3*001           ... ... ... ... ... ... ... ... ... . | -- -A- -C- --- A-- --- --C --- --- --- --- --- --- --- --- --- A-- -C- --T GCT A-- --- --- --- --- --- --- C-- --- --- --T G-- --- --- --- - | .-- --- -T- --- --- --- --- --- ---
KIR3DL3*00201         ... ... ... ... ... ... ... ... ... . | -- -A- -C- --- --- --- --C --- --- --- --- --- --- --- --- --- A-- -C- --T GCT A-- --- --- --- --- --- --- C-- --- --- --T G-- --- --- --- - | .-- --- -T- --- --- --- --- --- ---
KIR3DL3*00202         *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR3DL3*003           ... ... ... ... ... ... ... ... ... . | -- -A- -C- --- T-- --- --C -C- --- --- --- --- --- --- --- --- A-- -C- --T GCT A-- --- --- --- --- --- --- C-- --- --- --T G-- --- --- --- - | .-- --- -T- --- --- --- --- --- ---
KIR3DL3*004           ... ... ... ... ... ... ... ... ... . | -- -A- -C- --- T-- --- --C -C- --- --- --- --- --- --- --- --- A-- -C- --T GCT A-- --- --- --- --- --- --- C-- --- --- --T G-- --- --- --- - | .-- --- -T- --- --- --- --- --- ---
KIR3DP1*001           *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR3DP1*002           *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR3DP1*00301         *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR3DP1*00302         *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR2DP1*001           *** *** *** *** *** *** *** *** *** * | ** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** * | .** *** *** *** *** *** *** *** ***
KIR2DP1*002           --- --- --T --- --- --- --- --- A-C - | -- -A- CCA --- --- --- --C --- --- --- --- --- --- --- --- --- A-- --- --- --- --- --- --- --- --- --- --- C-- --- --- --- --- --- --G --A - | .-- --- --- --- --- --- --- --- ---
```

Fig. 1 (continued)

```
                                                                Exon 8 | Exon 9
                          360                                          |                 370                                                        380                                                              390                                                              400                                                              410
                           |                                           |                  |                                                          |                                                                |                                                                |                                                                |
KIR3DL2*001Ref      GCG GGG GAC AGA ACA GTG AAT AGG CAG | GAC TCT GAT GAA CAA GAC CCT CAG GAG GTG ACG TAC GCA CAG TTG GAT CAC TGC GTT TTC ATA CAG AGA AAA ATC AGT CGC CCT TCT CAG AGG CCC AAG ACA CCC CTA ACA GAT ACC AGC GTG TAC ACG GAA CTT
KIR2DL1*001         --A --A A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL1*002         --A --A A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL1*00301       --A --A A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL1*00302       --A --A A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL1*004         --A --A A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL1*005         --A --- A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL2*001         --A --- A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- G-- --- ---
KIR2DL2*002         --A --- A-- --- --- -C- --C --- --- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- G-- --- ---
KIR2DL2*003         --A --- A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- G-- --- ---
KIR2DL2*004         --A --A A-- --- --- -C- --- -TC G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- -A- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*001         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*002         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- -A- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*003         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- A-- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*004         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- -A- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*005         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- -A- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL3*006         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- -A- --- --- --- --- --- --- --- --- -C- --- --- -T- -T- --- --- --- --- ---
KIR2DL4*00101       --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*00102       --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*00201       --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*00202       --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*003         --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*004         --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*005         --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*006         --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL4*007         --- --A C-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- A-- --- -C- --- --- --- --- -C- G-- --- --- --- --- AG- --- -G- --- TC- --- --- --- --- --- -GT -TA --- ---
KIR2DL5A*001        --C --- --- --- --- --- --C --- G-- | --- --- --- --T --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- -C- --- --- -C- TC- --- --- --- --- --- --- --- --T -C- --- --- --- -C- A-- --- -T- --- ---
KIR2DL5B*002        --C --- --- --- --- --- --C --- G-- | --- --- --- --T --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- -C- --- --- -C- TC- --- --- --- --- --- --- --- --T -C- --- --- --- -C- A-- --- -T- --- ---
KIR2DL5B*003        --C --- --- --- --- --- --C --- G-- | --- --- --- --T --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- -C- --- --- -C- TC- --- --- --- --- --- --- --- --T -C- --- --- --- -C- A-- --- -T- --- ---
KIR2DL5B*004        *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DL5(KIR2DLXa)  --C --- --- --- --- --- --C --- G-- | --- --- --- --T --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- -C- --- --- -C- TC- --- --- --- --- --- --- G-- --T -C- --- --- --- -C- A-- --- -T- --- ---
KIR2DL5(KIR2DLXb)   --C --- --- --- --- --- --C --- G-- | --- --- --- --T --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- -C- --- --- -C- TC- --- --- --- --- --- --- G-- --T -C- --- --- --- -C- A-- --- -T- --- ---
KIR2DS1*001         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*002         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*003         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*004         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*001         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*002         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*003         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*004         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*005         --- --- A-- --- --- --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00101       --- --- A-- --- --- --- --C --- G-- | --T --- --C --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00102       --- --- A-- --- --G --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00103       --- --- A-- --- --- --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*00101       --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*00102       --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*002         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*003         --A --- A-- --- --- --- --C --C G-- | --T --- --- --- --- --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*001         --- --- A-- --- --- --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*002         --- --- A-- --- --- --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*003         --- --- A-- --- --- --- --C --- G-- | --T --- --- --- --G --- -A- --- --- --- T-A --- --- T-A *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00101       --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*00102       --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*002         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*003         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*00401       --A --- A-- --- --- -CC --C --C G-- | --T --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*00402       --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*005         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*006         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*007         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- --- --- --- --A --T --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*008         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DL1*009         --A --- A-- --- --- -CC --C --C G-- | --- --- --- --- --- --- --- G-- --- --- --A --- --- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -CT --- --- --- -T- T-- --- --- --- ---
KIR3DS1*010         --A --- A-- --- -.. --- --C --C G-- | --T --- --* *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*011         --A --- A-- --- -.. --- -** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*012         --A --- A-- --- -.. --- -** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*013         --A --- A-- --- -.. --- -** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*014         --A --- A-- --- -.. --- --C --C G-- | --T --- --* *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL2*001         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*003         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*007         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*008         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --- --- --- ---
KIR3DL2*009         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012         --- --- --- --- --- --- --- --- --- | --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --A *** *** ***
KIR3DL3*00201       --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --A *** *** ***
KIR3DL3*00202       *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL3*003         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --A *** *** ***
KIR3DL3*004         --A --- A-- --- --- --- --C --- G-- | --- --- --- --- --- --- --- --- --- --- --A --- --- --- --- A-- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- --- --- --- --A *** *** ***
KIR3DP1*001         *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*002         *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*00301       *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*00302       *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DP1*001         *** *** *** *** *** *** *** *** *** | *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DP1*002         --A --- A-- --- --- -C- --- --C G-- | --- --- --- --- --- --- --- --- --- --- --A --- -T- --- --- --- --- --- --- --- -C- --- --- --- --- -C- --- --- --- --- --- --- --- --- --- -C- --- --- --- --A --- --- --- --- ---
```

Fig. 1 (continued)

```
                                                 420                           430                           440                           450
                                                  |                             |                             |                             |
KIR3DL2*001Ref        CCA AAT GCT GAG CCC AGA TCC AAA GTT GTC TCC TGC CCA CGA GCA CCA CAG TCA GGT CTT GAG GGG GTT TTC TAG
KIR2DL1*001           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*002           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*00301         --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*00302         --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*004           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL1*005           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL2*001           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL2*002           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL2*003           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL2*004           --- -G- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*001           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*002           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*003           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*004           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*005           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL3*006           --- --- --- --- --- T-- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR2DL4*00101         --- --- --- --- --- --- G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- GGA GAC AAC AGC CCT GTC TCA AAC CCA GCT TGC CAG CTC TAA TGT ACC AGC AGC TGG AAT CTG A
KIR2DL4*00102         --- --- --- --- --- --- G-. ... --- A-- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -
KIR2DL4*00201         --- --- --- --- --- --- G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -
KIR2DL4*00202         --- --- --- --- --- --- G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -
KIR2DL4*003           --- --- --- --- --- --- G-. ... --- A-- --- --- G-- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CC- --- --- --- --- --- --- --- -
KIR2DL4*004           --- --- --- --- --- --- G-. ... --- --- --- --- G-- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- CC- --- --- --- --- --- --- --- -
KIR2DL4*005           --- --- --- --- --- --- G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -
KIR2DL4*006           --- --- --- --- --- --- G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -
KIR2DL4*007           --- --- --- --- --- --T G-. ... --- --- --- --- --- T-- --- --- --- --- --C --- --T --- A-C --- --- --- --- --- --- --- --- --- --- --- --- --- --- -** *** *** *** *** *** *** *** *** *
KIR2DL5A*001          --- --- --- A-- --A --- --. ... A-- --- --- --- --- TA- --- --- --- --- --C --- --- --- A-C --- --- --- --- --- --- --- --- --- --A --G -G- --- T-- --- CC- --- --- --- --- --- --- --- -
KIR2DL5B*002          --- --- --- A-- --A --- --. ... A-- --- --- --- --- TA- --- --- --- --- --C --- --- --- A-C --- --- --- --- --- --- --- --- --- --A --G -G- --- T-- --- CC- --- --- --- --- --- --- --- -
KIR2DL5B*003          --- --- --- A-- --A --- --. ... A-- --- --- --- --- TA- --- --- --- --- --C --- --- --- A-C --- --- --- --- --- --- --- --- --- --A --G -G- --- T-- --- CC- --- --- --- --- --- --- --- -
KIR2DL5B*004          *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *
KIR2DL5(KIR2DLXa)     --- --- --- A-- --A --- --. ... A-- --- --- --- --- TA- --- --- --- --- --C --- --- --- A-C --- --- --- --- --- --- --- --- --- --A --G -G- --- T-- --- CC- --- --- --- --- --- --- --- -
KIR2DL5(KIR2DLXb)     --- --- --- A-- --A --- --. ... A-- --- --- --- --- TA- --- --- --- --- --C --- --- --- A-C --- --- --- --- --- --- --- --- --- --A --G -G- --- T-- --- CC- --- --- --- --- --- --- --- -
KIR2DS1*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS1*004           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*004           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS2*005           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00101         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00102         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS3*00103         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*00101         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*00102         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS4*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DS5*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00101         --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00102         --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*002           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*003           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00401         --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*00402         --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*005           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*006           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*007           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*008           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DL1*009           --- --- --- A-- --- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*010           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*011           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*012           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*013           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DS1*014           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL2*001           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*002           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*003           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*004           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*005           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*006           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*007           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*008           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*009           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*010           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*011           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL2*012           --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---
KIR3DL3*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL3*00201         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL3*00202         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL3*003           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DL3*004           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*002           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*00301         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR3DP1*00302         *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DP1*001           *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
KIR2DP1*002           --- --- --- --- T-- --- --- --- --- --- --- --- --- T-- *** *** *** *** *** *** *** *** *** *** ***
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Fig. 1 (continued)

```
                               Leader  |  D0 Domain                                                                                             D0 Domain  |  D1 Domain
                    -20         -10        1         10         20         30         40         50         60         70         80         90        100        110        120        130        140        150        160        170
KIR3DL2*001Ref    M SLTVVSMACV GFFLLQGAWP LMGGQDKPFL SARPSTVVPR GGHVALQCHY RRGFNNFMLY KEDRSHVPIF HGRIFQESFI MGPVTPAHAG TYRCRGSRPH SLTGWSAPSN PLVIMVTGNH RKPSLLAHPG PLLKSGETVI LQCWSDVMFE HFFLHREGIS EDPSRLVGQI HDGVSKANFS IGPLMPVLAG
KIR2DL1*001       - --L------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL1*002       - --LF------ ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL1*00301     - --L------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL1*00302     - --L------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL1*004       - --L------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL1*005       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMTQD---
KIR2DL2*001       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- -------R-- --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL2*002       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- -------R-- --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL2*003       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- -------R-- --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL2*004       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-Q --L--T--KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL3*001       - --M----V-- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-Q --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL3*002       - --M----V-- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-Q --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL3*003       - --M----V-- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-Q --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL3*004       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- -----R---- --V--E---- -------R-- --L-----KF K-TL--I-EH ---------- ---M-QD---
KIR2DL3*005       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- -----R---- --V--E---- -------R-- --L-----KF K-TL--I-EH ---------- ---M-QD---
KIR2DL3*006       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-Q --L-----KF K-TLH-I-EH ---------- ---M-QD---
KIR2DL4*00101   MS- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*00102   --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*00201   --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*00202   --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*003     --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-L------ ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*004     --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-L------ ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*005     --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--C -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*006     --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- ------FH-- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL4*007     --- -P--IIL--L ----D-SV-A HV-------C --W--A---Q ----T-R--- -----I-T-- -K-GVP--EL YN---WN--L IS-------- -N----F--- -P-E------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5A*001      - --M-I----- ---------T HE------L- --W--A---- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ ----V--... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5B*002      - --M------- ---------T HE------L- --W--A---- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ ----V--... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5B*003      - --M------- ---------- HE------L- --W--A---- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ -------... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5B*004      - --M-----.. W--------T HE------L- --W------- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ ----V--... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5(KIR2DLXa) - --M-I----- ---------T HE------L- --W--A---- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ ----V--... .......... .......... .......... .......... .......... .......... ..........
KIR2DL5(KIR2DLXb) - --M-I----- ---------T HE------L- --W--A---- ----T-L-RS -L--TI-S-- ---GVP--EL YNK--WK-IL ---------- -------H-R -PIE------ ----V--... .......... .......... .......... .......... .......... .......... ..........
KIR2DS1*001       - ---------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMRQD---
KIR2DS1*002       - ---------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMKQD---
KIR2DS1*003       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMKQD---
KIR2DS1*004       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- R-V--E---- ---------- --L-----MF N-TL--I-EH ---------- -SRMKQD---
KIR2DS2*001       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-- --L-----KY K-TLH-I-EH ---------- ---M-QD---
KIR2DS2*002       - --M------- --------G- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-- --L-----KY K-TLH-I-EH ---------- ---M-QD---
KIR2DS2*003       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-- --L-----KY K-TLH-I-EH ---------- ---M-QD---
KIR2DS2*004       * ********** ***------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-- --L-----KY K-TLH-I-EH ---------- ---M-QD---
KIR2DS2*005       - --M------- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-V- ---------- --V--E---- -------R-- --L-----KY K-TLH-I-EH ---------- ---M-QD---
KIR2DS3*00101     - --M-I----- ---W------ .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- R-V--E---- ---------- --L-----TF N-TL--I-EH I--------- --RMRQD---
KIR2DS3*00102     - --M-I----- ---W------ .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- R-V--E---- ---------- --L-----TF N-TL--I-EH I--------- --RMRQD---
KIR2DS3*00103     - --M-I----- ---W------ .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- R-V--E---- ---------- --L-----TF N-TL--I-EH I--------- --RMRQD---
KIR2DS4*00101     * **M-II---- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....QE-V- ----F--L-- H-V--E---- ---------- --L-----KF NNTLH-I-EH ---------- ---M------
KIR2DS4*00102     - --M-II---- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....QE-V- ----F--L-- H-V--E---- ---------- --L-----KF NNTLH-I-EH ---------- ---M------
KIR2DS4*002       - --M-II---- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....QE-V- ----F--L-- H-V--E---- ---------- --L-----KF NNTLH-I-EH ---------- ---M----T-
KIR2DS4*003       * ******---- ---------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....QE-V- ----F--L-- H-V--E---- ---------- --L-----KF NNTLH-I-EH ---------- ---M------
KIR2DS5*001       - L-M-I----- A--------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- --V--E---- ---------- --L-----TF NHTL--I-EH I-----G--- --RMTQD---
KIR2DS5*002       - --M-I----- A--------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- --V--E---- ---------- --L-----TF NHTL--I-EH I-----G--- --RMTQD---
KIR2DS5*003       * *****----- A--------- .......... .......... .......... .......... .......... .......... .......... .......... .......... .....HE-FR ---------- --V--E---- ---------- --L-----TF NHTL--I-EH I-----G--- --RMTQD---
KIR3DL1*00101     - --M------- -L--V-R-G- H--------- --W--A---- ----T-R--- -HR------- ----I-I--- ---------N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*00102     * ********** ********** ******---- --W--A---- ----T-R--- -HR------- ----I-I--- ---------N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*002       - L-M------- ----V-R-G- HV-------- --W--A---- ----T-R--- -HR------- ----I----- ---L-----N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*003       - L-M------- ----V-R-G- HV-------- --W--A---- ----T-R--- -HR------- ----I----- ---L-----N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*00401     * ********** ********** ******---- --W--A---- ----T-R--- HHR------- ---GI-I--- ---------N -S---T---- N-T----H-- -P---L---- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*00402     * ********** ********** ******---- --W--A---- ----T-R--- HHR------- ---GI-I--- ---------N -S---T---- N-T----H-- -P---L---- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*005       * ********** ********** ******---- --W--A---- ----T-R--- -HR------- ----I-I--- ---------N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*006       * ********** ********** ******---- --W--A---- ----T-R--- -HR------- ----I----- ---L-----N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*007       - L-M------- ----V-R-G- HV-------- --W--A---- ----T-R--- -HR------- ----I----- ---L-----N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*008       - L-M------- ----V-R-G- HV-------- --W--A---- ----T-R--- HHR------- ----I----- ---L-----N -S---T---- N-T----H-- -P-------- -V-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DL1*009       * ********** ******R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- ---M-LA---
KIR3DS1*010       - --M------- -L--V-R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K-W-- K--------- ---------- --SM-RA---
KIR3DS1*011       - --M------- -L--V-R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K-W-- K--------- ---------- --SM-RA---
KIR3DS1*012       - --M------- -L--V-R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K-W-- K---H----- ---------- --SM-RA---
KIR3DS1*013       - L-M------- -L--V-R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K-W-- K--------- ---------- --SM-RA---
KIR3DS1*014       * ********** ******R-G- H--------- --W--A---- ----T-R--- -HR------- ----I----- -------G-N -S---T---- N-T----H-- -P-------- -M-------- ---------- --V----R-- ------I--- -----K---- K--------- ---------- --SM-RA---
KIR3DL2*001       - ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*002       - ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ------D--- ---------- ---------- ----------
KIR3DL2*003       - ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- -V-------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*004       - ---------- ---------- ---------- --------A- ---------- ---------- ---------- ---------- ---------- ---------- ---------- -V-------- ---------- ---------- ---------- ---------- ----H----- ---------- ----------
KIR3DL2*005       - ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- -V-------- ---------- ---------- ---------- ---------- ----H----- ---------- ----------
KIR3DL2*006       * ********** ********** ******---- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ------T--- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*007       * ********** ********** ******---- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ------T--- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*008       - ---------- ---------- ---------- ---------Q ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- T--------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*009       - ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*010       * ********** ********** **-------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*011       * ********** ********** **-------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- -V-------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*012       * ********** ********** **-------- ---------Q ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----H----- ---------- ----------
KIR3DL3*001       - --M------- -----E-P-- HV-------- --W-G---SE -Q--T---RS -L---E-S-S ---GMP--EL YN---RN--L ---------- ----CS-H-- -P-------- -V------V- ---------- --V------- -------R-- R-L------T ---L--I--L --AG-QV-Y- M--MT-A---
KIR3DL3*00201     - --M------- -----E-P-- HV-------- --W-G---SE -Q--T---RS -L---E-S-S ---GMP--EL YN---RN--L ---------- ----CS-H-- -P-------- -V------V- ---------- --V------- -------R-- R-L------T ---L-----L --AG-QV-Y- M--MT-A---
KIR3DL3*00202     * ********** *----E-P-- HV-------- --W-G---SE -Q--T---RS -L---E-S-S ---GMP--EL YN---RN--L ---------- ----CS-H-- -P-------- -V------V- ---------- --V------- -------R-- R-L------T ---L-----L --AG-QV-Y- M--MT-A---
KIR3DL3*003       - --M------- -----E-P-- HV-------- --W-G---SE -Q--T---RS -L---E-S-S ---GMP--EL YN---RN--L ---------- ----CS-H-- -P-------- -V------V- ---------- --V------- -------R-- R-L------T ---L--I--L --AG-QV-Y- M--MT-A---
KIR3DL3*004       - --M------- -----E-P-- HV-------- --W-G---SE -Q--T---RS HL---E-S-S ---GMP--EL YN---RN--L ---------- ----CS-H-- -P-------- -V------V- ---------- --V------- -------R-- R-L------T ---L-----L --AG-QV-Y- M--MT-A---
```

Fig. 2 Alignment of KIR amino acid sequences

```
                                   D1 Domain  |  D2 Domain                                                                      D2 Domain  |        Stem          |    Transmembrane    |  Cytoplasmic Domain
                        180        190        200        210        220        230        240        250        260        270        280        290        300        310        320        330        340        350        360
                         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
KIR3DL2*001Ref    TYRCYGSVPH SPYQLSAPSD PLDIVITGLY EKPSLSAQPG PTVQAGENVT LSCSSWSSYD IYHLSREGEA HERRLRAVPK VNRTFQADFP LGPATHGGTY RCFGSFRALP CVWSNSSDPL LVSVTGNPSS SWPSPTEPSS KSGICRHLHV LIGTSVVIFL FILLLFFLLY RWCSNKKNAA VMDQEPAGDR
KIR2DL1*001       --------T- ----V----- ------I--- ---------- ---L------ -----R---- M--------- -----P-G-- --G------- ---------- ------HDS- YE--K----- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL1*002       --------T- ----V----- ------I--- ---------- ---L------ -----R---- M--------- -----P-G-- --G------- ---------- ------HDS- YE--K----- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL1*00301     --------T- ----V----- ------I--- --------L- ---L------ -----R---- M--------- -----P-G-- --G------- ---------- ------HDS- YE--K----- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL1*00302     --------T- ----V----- ------I--- --------L- ---L------ -----R---- M--------- -----P-G-- --G------- ---------- ------HDS- YE--K----- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL1*004       --------T- ----V----- ------I--- ---------- ---L------ -----R---- M--------- -----P-GT- --G----N-- ---------- -------DS- YE--K----- ---------N ---------- ET-NP----I --------I- ----.----H C--------- -----S--N-
KIR2DL1*005       --------T- ----V----- ------I--- --------L- ---L------ -----R---- M--------- -----P-G-- --G------- ---------- ------HDS- YE--K----- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL2*001       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- --C-FS-G-- --G------- ---------- -------DS- YE-------- ----I----N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL2*002       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- --C-FS-G-- --G------- ---------- -------DS- YE-------- ----I----N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL2*003       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- --C-FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- -T-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL2*004       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- --C-FS-G-- --G------- ---D------ -------DS- YE-------- ---------N ---------- ET-NP----I --------I- ----.----H ---------- -----S--N-
KIR2DL3*001       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NP----- --------I- ---------H ---C-----V --------N-
KIR2DL3*002       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N --L------- ET-NP----- --------I- ---------H ---C-----V --------N-
KIR2DL3*003       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NP----- --------I- ---------H ---C-----V --------N-
KIR2DL3*004       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NPI---- --------I- ---------H ---C-----V --------N-
KIR2DL3*005       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NP----- --------I- ---------H ---C-----V --------N-
KIR2DL3*006       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NP----- --------I- ---------H ---C-----V --------N-
KIR2DL4*00101     .......... .......... .......--- -----T-R-- ---RT----- -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DA---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*00102     .......... .......... .......--- -----T-R-- ---RT----- -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DA---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*00201     .......... .......... .......--- -----T-R-- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*00202     .......... .......... .......--- -----T-R-- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*003       .......... .......... .......--- -----T-R-- ---RT----- -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DA---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*004       .......... .......... .......--- -----T-R-- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K--D-- --N-----H-
KIR2DL4*005       .......... .......... .......--- -----T-R-- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*006       .......... .......... .......--- -----T-RL- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K----- --N-----H-
KIR2DL4*007       .......... .......... .......--- -----T-R-- ---R------ -----Q--F- ---------- --L--P---S I-G------- -------E-- ------HGS- YE--DP---- P--------- ---------F -T--A----A V-RY--A-I- -TI-P----H ----K--MLL X
KIR2DL5A*001      .......... .......... .......--F G--------- ---RT----- -----R--F- M-------R- --P--P---S --G------- ---------- T----LHDS- YE--DP---- -------S-- -SS------- -T--R----I ------A-I- --I-F----H CC-------- ----------
KIR2DL5B*002      .......... .......... .......--F G--------- ---RT----- -----R--F- M-------R- --P--P---S -DG------- ---------- T--S-LHDS- YE--DP---- -------S-- -SS------- -T--R----I ------A-I- --I-F----H CC-------- ----------
KIR2DL5B*003      .......... .......... .......--F G--------- ---RT----- -----R--F- M-------R- --P--P---S --G------- ---------- T----LHDS- YE--DP---- -------S-- -SS------- -T--R----I ------A-I- --I-F----H CC-------- ----------
KIR2DL5B*004      .......... .......... .......--F G--------- ---RT----- -----R--F- M-------R- --P--P---S --G------- ---------- T----LHD** ********** ********** ********** ********** ********** ********** ********** **********
KIR2DL5(KIR2DLXa) .......... .......... .......--F G--------- ---RT----- -----R--F- M-------R- --P--P---S -DG------- ---------- T--S-LHDS- YE--DP---- -------S-- -SS------- -T--R----I ------A-I- --I-F----H CC-------- ----------
KIR2DL5(KIR2DLXb) .......... .......... .......--F G--------- ---RT----A -----R--F- M-------R- --P--P---S -DG------- ---------- T--S-LHDS- YE--DP---- -------S-- -SS------- -T--R----I ------A-I- --I-F----H CC-------- -----G----
KIR2DS1*001       --------T- ---------- ------I--- ---------- ---L------ -----R---- M--------- -----P-GT- --G----N-- ---------- -------DS- YE--K----- ---------N ---------- ET-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS1*002       --------T- ---------- ------I--- ---------- ---L------ -----R---- M--------- -----P-GT- --G----N-- ---------- -------DS- YE--K----- ---------N ---------- ET-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS1*003       --------T- ---------- ------I--- ---------- ---L------ -----R---- M--------- -----P-GT- --G----N-- ---------- -------DS- YE--K----- ---------N ---------- ET-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS1*004       --------T- ----V----- ------I--- ---------- ---L------ -----R---- M--------- -----P-GT- --G----N-- ---------- -------DS- YE--K----- ---------N ---------- -T-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS2*001       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- -T-NP----- -------KIP -TI------H ---------- --------N-
KIR2DS2*002       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- -T-NP----- -------KIP -TI------H ---------- --------N-
KIR2DS2*003       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- -T-NS-Y--A --------IP -AI------H ---A------ --------N-
KIR2DS2*004       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- ET-NP----- -------KIP -TI------H ---------- --------N-
KIR2DS2*005       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- ----FS-G-- --G------- ---------- -------DS- YE-------- ---------N ---------- -T-NP----- -------KLP -TI------H ----D----S ----G---N-
KIR2DS3*00101     ---------- ----F----- ---------- ---------- ---L---S-- ---------- M----T---- ----FS-G-- --G------- -----Q---- ------HDS- YE--K----- ---------N ---------- -T-NP----- -------KLP -TI------H ----D----S ----G---N-
KIR2DS3*00102     ---------- ----F----- ---------- ---------- ---L---S-- ---------- M----T---- ----FS-G-- --G------- -----Q---- ------HDS- YE--K----- ---------N ---------- -T-NP----- -------KLP -TI------H ----D----S ----G---N-
KIR2DS3*00103     ---------- ----F----- ---------- ---------- ---L---S-- ---------- M----T---- ----FS-G-- --G------- -----Q---- ------HDS- YE--K----- ---------N ---------- -T-NP----- -------KLP -TI------H ----D----S ----G---N-
KIR2DS4*00101     ---------- ---------- ---M--I--- ---------- ---------- -----R---- M--------- -----P--RS I-G------- ---------- -------DA- YE-------- ---------N ---------- -T-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS4*00102     ---------- ---------- ---M--I--- ---------- ---------- -----R---- M--------- -----P--RS I-G------- ---------- -------DA- YE-------- ---------N ---------- -T-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS4*002       -----S---- ---------- ---M--I--- ---------- ---------S -----R---- M--------- -----P--RS IHG------- ---------- -------DA- YE-------- ---------N ---------- -T-NP----- -------KIP -TI------H ----D----- --------N-
KIR2DS4*003       ---------- ---------- ---M--I--- ---------- ---------- -----IYPGK GRPMNVGSLQ CAASTEHSRP TFLWALPPTE GPTDASALSV TLPT-GQTRV IHCLFP-QET -QI-GLH-LN QA-K-VT-DT YMFX
KIR2DS5*001       --------T- ---------- ---------- -----P---- ---L---S-- -----R---- M--------- -----P-G-- --------S- -D------A- -------DS- YE--K----- -------S-N ---------- ET-NP----- -------KLP -TI------H ---------S ----G---N-
KIR2DS5*002       --------T- ---------- ---------- ---------- ---L---S-- -----R---- M--------- -----P-G-- ---------- -D-------- -------DS- YE--K----- -------S-N ---------- ET-NP----- -------KLP -TI------H ---------S ----G---N-
KIR2DS5*003       --------T- ---------- ---------- ---------- ---L------ -----R---- M--------- -----P-G-- --G------- -D-------- -------DS- YE--K----- -------S-N ---------- ET-NP----- -------KLP -TI------H ---------S ----G---N-
KIR3DL1*00101     --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DL1*00102     --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----- --------I- ---------H L--------- --------N-
KIR3DL1*002       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------RG -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DL1*003       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- -C-NP----I --------I- ---------H L--------- --------N-
KIR3DL1*00401     --------T- TS-------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YEL-DP---- ---------- ---------- ---NP----- --------I- ---------H L-Y------- --------N-
KIR3DL1*00402     --------T- TS-------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YEL-DP---- ---------- ---------- ---NP----- --------I- ---------H L-Y------- --------N-
KIR3DL1*005       --------T- TS-------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YEL-DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DL1*006       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- ------CHS- YEL-DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DL1*007       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----- --------I- ---------H L--------- --------N-
KIR3DL1*008       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DL1*009       --------T- T--------- -----V--P- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NP----I --------I- ---------H L--------- --------N-
KIR3DS1*010       --------T- T--------- -----V---- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NL----I -------KIP -TI------H ---------- --------N-
KIR3DS1*011       --------T- T--------- -----V---- ------P--- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NL----I -------KIP -TI------H -------KCC CNGPRACREQ
KIR3DS1*012       --------T- T--------- -----V---- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NL----I -------KIP -TI------H -------KCC CNGPRACREQ
KIR3DS1*013       --------T- T--------- -----V---- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NL----I -------KIP -TI------H -------KCC CNGPRACREQ
KIR3DS1*014       --------T- T--------- -----V---- ---------- -K-----S-- -----R---- M-------G- -----P--R- ---------- ---------- -------HS- YE--DP---- ---------- ---------- ---NL----I -------KIP -TI------H ---------- --------N-
KIR3DL2*001       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*002       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*003       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*004       ---------- ---------- ---------- ------P--- ---------- ---------- T--------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*005       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*006       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*007       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*008       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*009       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- -------H-- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*010       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*011       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL2*012       ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
KIR3DL3*001       ----F---T- L--E------ -----VV--- G--------- ---------- -----R-LF- -------A-- G-L--T--LR --G----N-- ---V----N- ---------- HA--DP---- P----..... .......... ..-NS-N--- --------IP -AI------H ---A-----V --------N-
KIR3DL3*00201     ----F---T- L--E------ -----VV--- G--------- ---------- -----R-LF- -------A-- G-L--T--LR --G----N-- ---V----N- ---------- HA--DP---- P----..... .......... ..-NS----- --------IP -AI------H ---A-----V --------N-
KIR3DL3*00202     ----F---T- L--E------ -----VV--- G--------- ---------- -----R-LF- -------A-- G-L--T--LR --G----N-- ---V----N- ------**** ********** ********** ********** ********** ********** ********** ********** **********
KIR3DL3*003       ----F---T- L--E------ -----VV--- G--------- ---------- -----R-LF- -------A-- G-L--T--LR --G----N-- ---V----N- ---------- HA--DP---- P----..... .......... ..-NS-Y--A --------IP -AI------H ---A-----V --------N-
KIR3DL3*004       ----F---T- L--E------ -----VV--- G--------- ---------- -----R-LF- -------A-- G-L--T--LR --G----N-- ---V----N- ---------- HA--DP---- P----..... .......... ..-NS-Y--A --------IP -AI------H ---A-----V --------N-
```

(-). In the amino acid alignment, stop codons are indicated by an X. Minimum gaps in the sequence, indicated by a period (.), have been inserted to maintain the alignment between alleles of differing length, in such a way as to maintain the reading frame. The pseudo-exon 3 sequences for type I KIR2Ds have been included in the nucleotide alignment where available. The nucleotides are numbered starting at 1 for the first nucleotide of the codon for the initiation methionine. The numbering of the codons of the mature protein, after cleavage of the signal sequence, begins at +1, while the signal sequence is numbered backwards from −1. These alignments include KIR genes and alleles for which complete cDNA sequences or full genomic sequences are available, alternative splice variants escape the scope of this publication and partial cDNA sequences are not being included until further information for them is made available.

These sequences are also available from the IPD/KIR Database, http://www.ebi.ac.uk/ipd/kir. The database provides an online repository for the KIR sequences officially named by the KIR Nomenclature Committee. The IPD/KIR Database provides online versions of the sequence alignments and the nomenclature reports. In time it is envisaged that the website will also provide tools for the submission of new and confirmatory KIR sequences to the KIR Nomenclature Committee. The IPD/KIR Database is part of the Immuno Polymorphism Database (IPD), which provides a suite of tools, and databases for the study of polymorphisms in the immune system.

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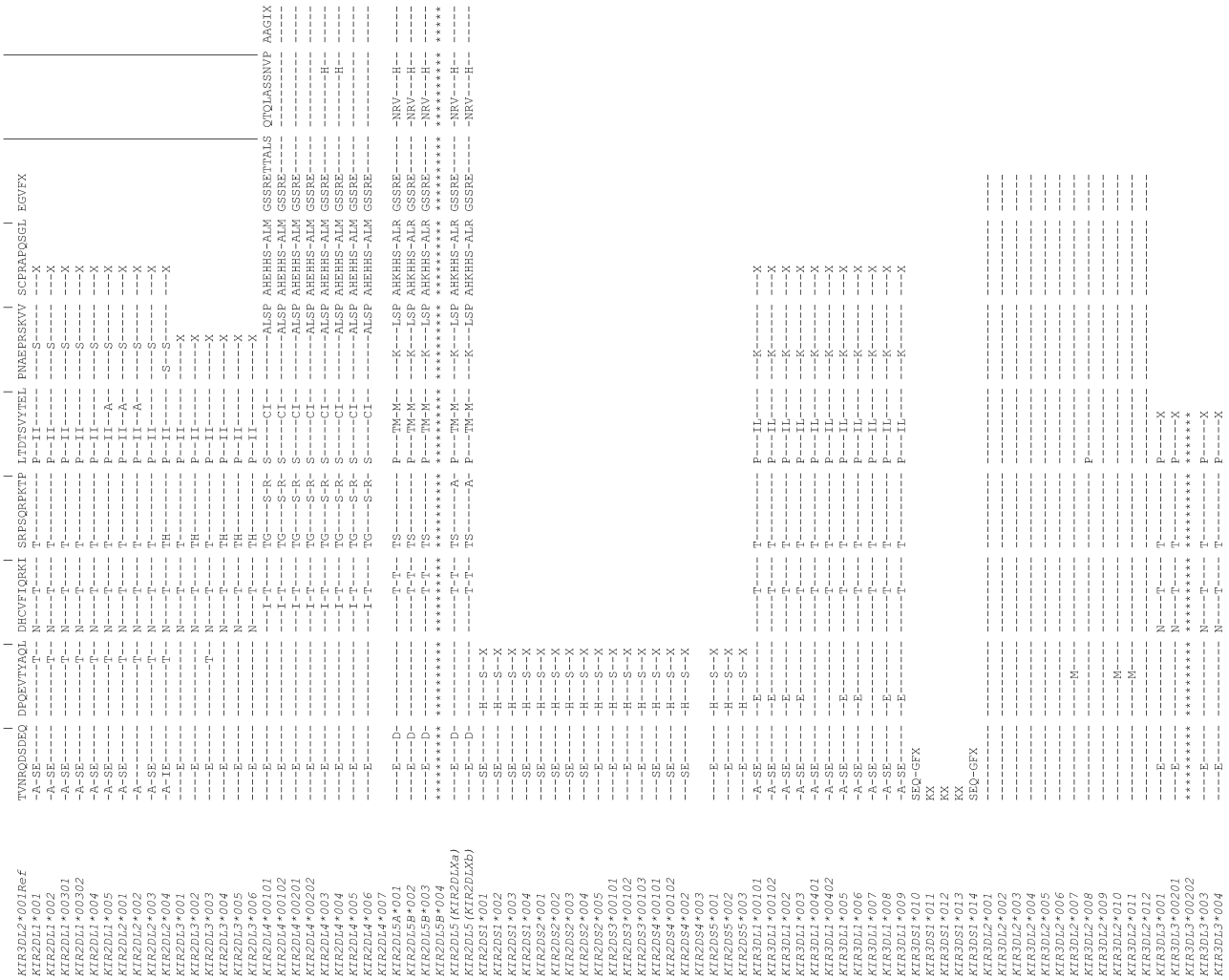

Fig. 2 (continued)