CLAIMS

1. A double-stranded nucleic acid molecule comprising:

(a) a first nucleic acid comprising an *env* gene; and

(b) a second nucleic acid comprising a *gag-pol* gene;

wherein the coding sequences of the first and second nucleic acids are on opposing strands of the double-stranded nucleic acid molecule, wherein the *env* and *gag-pol* genes are independently operably-associated with first and second inducible promoters, respectively, the first and second promoters having less than 95% nucleotide sequence identity between them, and wherein the double-stranded nucleic acid molecule comprises nucleotide sequences encoding apoptosis inhibitors IAP1 and EBNA5.

2. A double-stranded nucleic acid molecule as claimed in claim 1, wherein the nucleotide sequence identity between the first and second promoters is less than 90%, 85%, 80%, 70% or 60%.

3. A double-stranded nucleic acid molecule as claimed in claim 1 or claim 2, wherein the *env* gene is a *VSV-G* gene.

4. A double-stranded nucleic acid molecule as claimed in any one of the preceding claims, wherein the *gag-pol* gene is from HIV-1, or is a derivative thereof.

5. A double-stranded nucleic acid molecule as claimed in any one of the preceding claims, wherein the nucleic acid molecule additionally comprises a *rev* gene.

6. A double-stranded nucleic acid molecule as claimed in any one of the preceding claims, wherein the nucleic acid molecule additionally comprises a transgene.

7. A retroviral vector, more preferably a lentiviral vector, comprising a double-stranded nucleic acid molecule as claimed in any one of the preceding claims.

8. A mammalian cell comprising a double-stranded nucleic acid as claimed in any one of claims 1 to 6, preferably wherein the double-stranded nucleic acid is stably integrated into the nuclear genome of the mammalian cell.

9. A retroviral packaging cell comprising a double-stranded nucleic acid molecule as claimed in any one of claims 1 to 6.

10. A kit comprising:

(i) a retroviral packaging vector comprising a double-stranded nucleic acid molecule as claimed in any one of claims 1 to 6,

together with one or more of the following:

(ii) a retroviral Transfer Vector comprising a transgene and a retroviral *rev* gene;

(iii) cells of a cell line suitable for the production of virus particles.

11. A kit comprising:

(i) a retroviral packaging vector comprising a double-stranded nucleic acid molecule as claimed in any one of claims 1 to 6 which additionally comprises a *rev* gene,

together with one or more of the following:

(ii) a retroviral Transfer Vector comprising a transgene;

(iii) cells of a cell line suitable for the production of virus particles.

12. A process for producing a retroviral packaging cell, the process comprising the steps:

(i) stably integrating a double-stranded nucleic acid molecule as claimed in any one of claims 1 to 6 into a mammalian cell,

thereby producing a mammalian cell that expresses retroviral *env* and *gag-pol* genes, and optionally the *rev* gene.

13. Use of a retroviral packaging cell as claimed in claim 9 in the production of a retrovirus particle.

14. A process for producing retroviruses, the process comprising the steps:

(a) introducing a retroviral Transfer Vector comprising:

(i) 5’ and 3’ retrovirus LTRs,

(ii) a retrovirus packaging signal, and

(iii) a retroviral *rev* gene,

into a retroviral packaging cell as claimed in claim 9, wherein the retroviral packaging cell comprises retroviral *env* and *gag-pol* genes stably integrated into its genome;

(b) culturing the cell under conditions such that retroviruses are assembled and secreted by the cell; and

(c) harvesting packaged retrovirus from the supernatant.

15. A process for producing retroviruses, the process comprising the steps:

(a) introducing a retroviral Transfer Vector comprising a transgene into a retroviral packaging cell as claimed in claim 9, wherein the retroviral packaging cell comprises retroviral *env, gag-pol* and *rev* genes stably integrated into its genome;

(b) culturing the cell under conditions such that retroviruses are assembled and secreted by the cell; and

(c) harvesting packaged retrovirus from the supernatant.