Claims

Claim 1. An insect cell comprising integrated into the genome of the cell:

i) a first delayed early baculoviral promoter operably linked to a nucleotide sequence encoding an mRNA, translation of which in the cell produces at least one of parvoviral Rep 78 and 68 proteins;

ii) a second promoter operably linked to a nucleotide sequence encoding an mRNA, translation of which in the cell produces at least one of parvoviral Rep 52 and 40 proteins; and

iii) at least one enhancer element that is operably linked to the first and second promoters, wherein the at least one enhancer element is dependent on a transcriptional transregulator,

wherein introduction of the transcriptional transregulator into the cell induces transcription from the first and second promoters.

Claim 2. The insect cell according to claim 1, wherein the first and second promoters are baculoviral promoters, the transcriptional transregulator is a baculoviral immediate-early protein (IE1) or its spice variant (IE0) and the transcriptional transregulator-dependent enhancer element is a baculoviral homologous region (*hr*) enhancer element, wherein preferably the baculovirus is *Autographa californica* multicapsid nucleopolyhedrovirus.

Claim 3. The insect cell according to claim 2, wherein the *hr* enhancer element is selected from the group consisting of hr1 (SEQ IS NO. 26), hr3 (SEQ ID NO. 27), *hr*4b (SEQ ID NO. 19) and *hr*5 (SEQ ID NO. 20).

Claim 4. The insect cell according to claim 2 or 3, wherein the first and second promoters are distinct, wherein, preferably the first promoter is a 39k promoter and the second promoter is a late or very late baculovirus promoter selected from the group consisting of the polH, p10, p6.9 and pSel120 promoters.

Claim 5. The insect cell according to any one of the preceding claims, wherein the at least one of parvoviral Rep 52 and 40 proteins and the at least one of parvoviral Rep 78 and 68 proteins have a common amino acid sequence that is at least 90% identical, while the nucleotide sequence encoding the common amino acid sequence in the mRNA for the at least one of parvoviral Rep 52 and 40 proteins has less than 95, 90, 85, 80, 75, 70, 65 or 60% sequence identity with the nucleotide sequence encoding the common the amino acid sequence in the mRNA for the at least one of parvoviral Rep 78 and 68 proteins, wherein preferably the codon usage in the nucleotide sequence encoding the common the amino acid sequence in the mRNA for the at least one of parvoviral Rep 52 and 40 proteins, is more

adapted to the codon usage bias of the insect cell than codon usage in the nucleotide sequence encoding the common the amino acid sequence in the mRNA for the at least one of parvoviral Rep 78 and 68 proteins.

Claim 6. The insect cell according to any one of the preceding claims, wherein the nucleotide sequence encoding the mRNA for the at least one of parvoviral Rep 78 and 68 proteins comprises an open reading frame that starts with a suboptimal translation initiation codon selected from ACG, CTG, TTG, GTG and ATT.

Claim 7. The insect cell according to any one of the preceding claims, wherein the first and second promoters are integrated in the cell's genome in opposite directions of transcription and wherein the at least one enhancer element is present in between the first and second promoters, wherein preferably two enhancer elements are present in between the first and second promoters.

Claim 8. The insect cell according to any one of the preceding claims, wherein the cell further comprises:

a) a nucleotide sequence comprising parvoviral capsid protein coding sequences operably linked to a third promoter for expression in the insect cell;

b) a nucleotide sequence comprising a transgene that is flanked by at least one parvoviral inverted terminal repeat sequence; and,

c) a nucleotide sequence comprising an expression cassette for expression of the transcriptional transregulator.

Claim 9. The insect cell according to claim 8, wherein the nucleotide sequences of at least one of a) and b) is comprised in a baculoviral vector, wherein, preferably the nucleotide sequences of at least one of a), b) and c) are comprised in the baculoviral vector comprising the expression cassette for expression of the transcriptional transregulator.

Claim 10. The insect cell according to claim 8 or 9, wherein the first promoter is active before the third promoter.

Claim 11. The insect cell according to any one of claims 8-10, wherein the at least one of parvoviral Rep 78 and 68 proteins, the at least one of parvoviral Rep 52 and 40 proteins, the parvoviral VP1, VP2, and VP3 capsid proteins and the at least one parvoviral inverted terminal repeat sequence are from an adeno associated virus (AAV).

Claim 12. The insect cell according to any one of claims 8-11, wherein the nucleotide sequence capsid protein coding sequences comprise CAP AAV2/5 (SEQ ID NO. 29) and AAV5 (SEQ ID NO. 30).

Claim 13. A method for producing a recombinant parvoviral virion comprising the steps of:

a) culturing an insect cell as defined in any one of claims 1 – 7;

b) providing the cell cultured in a) with the nucleotide sequences as defined in any one of claims 8 – 12; and,

c) recovery of the recombinant parvoviral virion.

Claim 14. The method according to claim 13, wherein recovery of the recombinant parvoviral virion in step c) comprises at least one of affinity-purification of the virion using an immobilised anti-parvoviral antibody and filtration over a filter having a nominal pore size of 30 - 70 nm.

Claim 15. A kit of parts comprising at least an insect cell as defined in any one of claims 1 – 7 and a baculoviral vector and/or the nucleotide sequences as defined in any one of claims 8 – 12.