CLAIMS

1. A pupa comprising a recombinant baculovirus and/or a bacmid derived from *Autographa californica multicapsid nucleopolyhedrovirus* (AcMNPV), wherein the pupa belongs to the genus *Trichoplusia*.

2. The pupa according to claim 1, wherein the recombinant baculovirus and/or bacmid comprises a nucleic acid sequence encoding a recombinant protein.

3 The pupa according to any one of claims 1 or 2, wherein the baculovirus and/or bacmid comprises a nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and a recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein,

wherein the nucleic acid sequence that allows for the expression of the proteins IE-1, IE-0 and/or fragments thereof is selected from the group consisting of:

(a) a nucleic acid containing the nucleotide sequence indicated in any of SEQ ID NOs: 1-5;

(b) a nucleic acid sequence having a sequence identity of at least 70% with the nucleotide sequence indicated in any of SEQ ID NOs: 1-5 and encoding a protein able to function as a transcriptional regulator in a recombinant baculovirus;

(c) a nucleic acid sequence encoding an amino acid containing the amino acid sequence indicated in any of SEQ ID NOs: 6-9; and

(d) a nucleic acid sequence encoding an amino acid sequence having a sequence similarity of at least 70% with the amino acid sequence indicated in any of SEQ ID NOs: 6-9 and able to function as a transcriptional regulator in a recombinant baculovirus.

4. A pupa comprising a nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and a recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein, wherein the pupa belongs to the genus *Trichoplusia*,

wherein the nucleic acid sequence that allows for the expression of the proteins IE-1, IE-0 and/or fragments thereof is selected from the group consisting of:

(a) a nucleic acid containing the nucleotide sequence indicated in any of SEQ ID NOs: 1-5;

(b) a nucleic acid sequence having a sequence identity of at least 70% with the nucleotide sequence indicated in any of SEQ ID NOs: 1-5 and encoding a protein able to function as a transcriptional regulator in a recombinant baculovirus;

(c) a nucleic acid sequence encoding an amino acid containing the amino acid sequence indicated in any of SEQ ID NOs: 6-9; and

(d) a nucleic acid sequence encoding an amino acid sequence having a sequence similarity of at least 70% with the amino acid sequence indicated in any of SEQ ID NOs: 6-9 and able to function as a transcriptional regulator in a recombinant baculovirus.

5. The pupa according to any one of claims 2 to 4, wherein the promoter that drives the expression of said recombinant protein is, selected from the group of nucleic acids comprising:

(a) a nucleic acid containing the nucleotide sequence indicated in any of SEQ ID NOs: 10-14; and

(b) a nucleic acid sequence able to function as a promoter in a recombinant baculovirus and having a sequence identity of at least 70% with the nucleotide sequence

indicated in any of SEQ ID NOs: 10-14; and/or

wherein the recombinant homologous region (*hr*) is the sequence indicated in SEQ ID NO: 21 (*hr1*).

6. The pupa according to any one of claims 2 to 5, wherein the nucleic acid sequence that comprises combinations of recombinant promoters, sequences encoding transcriptional regulators and enhancer regions are selected from the group comprising SEQ ID NOs: 15-20.

7. The pupa according to any one of claims 3 to 6, wherein the pupa further comprises a nucleic acid sequence encoding a recombinant protein.

8. Use of the pupa as defined in any one of claims 1 to 7 for the expression of recombinant proteins.

9. A method for producing at least one recombinant protein comprising the steps of:

(a) Providing a pupa;

(b) Inoculating the pupa of step (a) with a recombinant baculovirus derived from *Autographa californica multicapsid nucleopolyhedrovirus* (AcMNPV);

(c) Incubating the inoculated pupa of step (b) for a period of time sufficient for the at least one recombinant protein to be expressed; and

(d) Obtaining the pupae comprising the at least one recombinant protein,

wherein the pupa belongs to the genus *Trichoplusia.*

10. The method according to claim 9, wherein the recombinant baculovirus comprises a nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and a recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein, wherein the nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and the recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein are as defined in claims 3 and/or 4.

11. The method according to claim 10, wherein the nucleic acid sequence that comprises combinations of recombinant promoters, sequences encoding transcriptional regulators and enhancer regions are selected from the group comprising SEQ ID NO: 15-20.

12. The method according to any one of claims 9 to 11, wherein the pupa further comprises a nucleic acid sequence encoding a recombinant protein.

13. The method according to claim 9, wherein the pupa of step (a) is a silk-free pupa; wherein, optionally, the silk-free pupa is obtained or obtainable through a method for producing a silk-free pupa comprising the steps of:

(a) Providing a pupa contained in a silk cocoon;

(b) Treating the silk cocoon containing a pupa with a solution of a salt of hypochlorous acid; and

(c) Obtaining a silk-free and externally disinfected pupa.

14. A method for producing a recombinant baculovirus comprising the steps of:

(a) Providing a silk-free pupa belonging to the genus *Trichoplusia*;

(b) Transfecting the pupa of step (a) with a bacmid suitable for producing a recombinant baculovirus derived from *Autographa californica multicapsid nucleopolyhedrovirus* (AcMNPV);

(c) Incubating the inoculated pupa of step (b) for a period of time sufficient for the recombinant baculovirus is produced; and

(d) Obtaining the pupae comprising the recombinant baculovirus.

15. The method according to claim 14, wherein the bacmid suitable for producing a recombinant baculovirus derived from *Autographa californica multicapsid nucleopolyhedrovirus* (AcMNPV) comprises or alternatively, consists of, a nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and a recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein, wherein the nucleic acid sequence that allows for the expression above endogenous levels of the proteins IE-1, IE-0 and/or fragments thereof functioning as transcriptional regulators above endogenous levels obtained during baculovirus infection and the recombinant homologous region (*hr*) operably linked to any promoter that is suitable for driving the expression of a recombinant protein are as defined in claims 3 and/or 4.

16. The method according to claim 15, wherein the nucleic acid sequence that comprises combinations of recombinant promoters, sequences encoding transcriptional regulators and enhancer regions are selected from the group comprising SEQ ID NO: 15-20.

17. Use of a device comprising a precision pump, a mobile mechanic arm and a needle suitable for injecting a fluid into a pupa for inoculating a pupa belonging to the genus *Trichoplusia* with a recombinant baculovirus derived from *Autographa californica multicapsid nucleopolyhedrovirus* (AcMNPV).

18. The use according to claim 17, wherein the device further comprises a computer program for defining the position of the needle and/or for calculating the distance from the needle to the pupa and/or the distance of penetration of the needle into the pupa and/or the volume of liquid to be inoculated into the pupa.