possibility of producing viruses having infectious titers two to three times greater than those obtained in a conventionally used neutral medium.

In an aspect, there is provided a process for producing an enveloped virus, characterized in that the host cells producing said virus are cultivated in a mildly acid medium.

In another aspect, there is provided a kit for applying the process as disclosed herein, comprising a mildly acid culture medium, or a culture medium accompanied by one or several solutions useful for bringing the pH of said medium to a mildly acid value, the kit further comprising: (a) one or several suitable plasmids for producing the enveloped virus; and/or (b) suitable cells for producing said virus.

In yet another aspect, there is provided a kit for applying the process as disclosed herein, comprising (i) means for applying said process and (ii) instructions to be followed for applying the process.

In a further aspect, there is provided a kit for applying the process as disclosed herein, comprising a culture medium accompanied by one or several solutions useful for bringing the pH of said medium to a mildly acid value.

Therefore the object of the ~~invention~~ disclosure is the use of mildly acid conditions for producing an enveloped virus. More particularly, the ~~invention~~ disclosure relates to a process for producing an enveloped lentiviral vector, characterized in that the culture medium used for cultivating the host cells producing said vector is a mildly acid medium.

DETAILED DESCRIPTION OF THE INVENTION

The invention therefore relates to a process for producing enveloped vectors characterized in that said vectors are produced under mildly acid conditions.

The expression "mildly acid condition" refers to the pH of an aqueous solution comprised between 5 and 6.6, in particular between 5.5 and 6.6 or between 5 and 6.2, more particularly between 5.8 and 6.2. The pH will notably be equal to 5.5, 5.6, 5.7, 5.8, 5.9, 6, 6.1 or 6.2. According to a particular embodiment, the pH is of about 6. The selected pH will also depend

on the buffering power of the medium used, which the person skilled in the art will be able to easily determine considering his/her general knowledge.

The person skilled in the art is able to modify the pH of a solution, notably the pH of a cell culture medium. He/she may notably introduce into said solution a solution of an acid, notably of a strong acid such as hydrochloric acid. If need be, a solution of a base, notably of a strong base such as sodium hydroxide, may be used for readjusting the pH to bring it up to the desired value.

Except for mildly acid conditions which are the object of the present invention, the process used for producing enveloped viruses applies processes and materials well known in the field. The person skilled in the art may refer to his/her general knowledge in the production of enveloped viruses, notably illustrated by (Ansorge et al. 2010; Schweizer and Merten 2010; Rodrigues et al. 2011).

Within the scope of the present invention, the term of "virus" designates both a natural virus, as found in nature, and a modified virus, for which the genome includes modifications

transfer plasmid comprising an expression cassette of a transgene of interest, comprised between a lentiviral LTR–5' and a LTR–3' and one plasmid bearing an expression cassette of envelope glycoprotein(s).

10. A kit for applying the process according to any one of claims 1 to 9, comprising a mildly acid culture medium, or a culture medium accompanied by one or several solutions useful for bringing the pH of said medium to a mildly acid value, the kit further comprising:

(a) one or several suitable plasmids for producing the enveloped virus; and/or

(b) suitable cells for producing said virus.

11. The kit according to claim 10, further comprising instructions for applying the process for producing an enveloped virus according to any one of claims 1 to ~~11~~9.

12. ~~The~~ A kit for applying the process according to any one of claims 1 to 9, comprising (i) means for applying said process and (ii) instructions to be followed for applying the process.

13. The kit according to claim 12, the means comprised in the kit being selected from one or several of the following means:

(a) one or several suitable plasmids for producing the enveloped virus;

(b) suitable cells for producing said virus; and

(c) a mildly acid culture medium, or a culture medium accompanied by one or several solutions useful for bringing the pH of said medium to a mildly acid value.

14. The kit according to claim 13, comprising the means (a) and (b), (a) and (c), (b) and (c) or (a) and (b) and (c).

15. A kit for applying the process according to any one of claims 1 to 9, comprising a culture medium accompanied by one or several solutions useful for bringing the pH of said medium to a mildly acid value.