

The development of a cell line capable to repress the expression of the transgene carried by an adenoviral vector during the production process may prevent the negative effects of the transgene overexpression. Therefore, the system is based on a cell line expressing high levels of TetR and by Ad vectors carrying a transgene under control of human cytomegalovirus promoter or other strong promoters such as CASI promoter, CAG promoter, EF1 α promoter with two or more copies of TetR binding sites inserted downstream the promoter TATA box.

Summary

In one aspect, the present disclosure refers to a cell line, wherein the cells of the cell line are HEK293 cells, and wherein a tetracycline repressor (Tet-R) is expressed under the control of a cellular or partly cellular promoter.

In one example, the present disclosure provides a cell line, wherein a tetracycline repressor (Tet-R) is expressed under the control of a cellular or partly cellular promoter.

In a further aspect, the disclosure relates to a use of the cell line as described herein for producing infectious viral particles. In yet another aspect, the present disclosure refers to a method for producing infectious viral particles comprising the steps of: (i) growing the cells of the cell line as described herein *in vitro* in the presence or absence of tetracycline or a tetracycline analog; or (ii) infecting the cells of the cell line as described herein with a viral vector, preferably an adenoviral vector; and (iii) recovering the viral particles.

In another example, the disclosure relates to a method for producing infectious viral particles comprising the steps of:

- (i) growing the cells of the cell line of the first example of the invention further comprising a viral genome capable of assembling into an infectious viral particle *in vitro* in the absence of tetracycline or a tetracycline analog; or
- (ii) infecting the cells of the cell line of the first example of the invention with a viral vector, preferably an adenoviral vector; and
- (iii) recovering the viral particles.

List of Figures

In the following, the content of the figures comprised in this specification is described. In this context please also refer to the detailed description of the invention above and/or below.

5 **Figure 1: Diagram of pneo/CAG-TetR.** Pneo/CAG-TetR contains the expression cassette for the Tetracycline repressor and G418-resistance gene.

10 **Figure 2: SeAP expression in clone M9 and M38.** Clones were seeded in flasks T25 and infected with ChAdETetOSeap at moi 30 (multiplicity of infection) in presence or absence of tetracycline. A score for each single clone was then obtained by calculating the ratio with and without tetracycline 48 h post infection. Clone M9 showed the best ratio +/- tet.

Figure 3: Production of AdTetO E1E2p7 in M9, M38 and Hek293 cells. M9, M38 and HEK 293 were infected at moi 100 (multiplicity of infection) with AdTetOE1/F78E2p7