Claims

1. A nucleic acid sequence, comprising, in the 5’ to 3’ order, at least 2 copies of TetO-operator sequences capable of binding to a transactivator rtTA regulatable by tetracycline or a derivative thereof, and 1 copy of a minimal promoter sequence containing a TATA box sequence, and at least 1 copy of a CuO-operator sequence capable of binding to a transcription repressor CymR regulatable by cumate, wherein the CuO-operator sequence is downstream of the 3' end of the TATA box sequence, and is 30 bp to 100 bp apart from the TATA box, wherein the nucleic acid sequence is neither SEQ ID NO:23 nor SEQ ID NO:30, and wherein the derivative of tetracycline is selected from doxycycline, anhydrotetracycline, chlorotetracycline, oxytetracycline, and deoxytetracycline.

2. The nucleic acid sequence according to claim 1, wherein the CuO-operator sequence is 30 bp to 50 bp apart from the TATA box.

3. The nucleic acid sequence according to claim 1, wherein the CuO-operator sequence is 30 bp or 50 bp apart from the TATA box.

4. The nucleic acid sequence according to claim 1, wherein the TetO-operator sequence is set forth in SEQ ID NO: 24, and/or the minimal promoter sequence is set forth in SEQ ID NO: 25 or SEQ ID NO: 26, and/or the CuO-operator sequence is set forth in SEQ ID NO:27.

5. The nucleic acid sequence according to claim 4, wherein the nucleic acid sequence is set forth in SEQ ID NO:28 or SEQ ID NO:29.

6. The nucleic acid sequence according to any one of claims 1 to 5, further comprising a spliceable intron sequence at the 3' end thereof.

7. A vector comprising the nucleic acid sequence according to any one of claims 1 to 6.

8. The vector according to claim 7, wherein the vector is an expression vector comprising a nucleic acid fragment of interest downstream of the 3' end of the nucleic acid sequence according to any one of claims 1 to 6, and the transcription of the nucleic acid fragment of interest is controlled by the nucleic acid sequence according to any one of claims 1 to 6.

9. A host cell comprising the nucleic acid sequence according to any one of claims 1 to 6 or the vector according to claim 7 or 8.

10. An *in vitro* method for inducing the expression of a nucleic acid fragment of interest in a host cell, comprising the following steps:

(1) introducing the vector according to claim 8 and a coding sequence of rtTA and a coding sequence of CymR into the host cell;

(2) expressing rtTA and CymR in the host cell subjected to step (1); and

(3) providing tetracycline or a derivative thereof and cumate or a functional analog thereof for the host cell subjected to step (2), wherein the derivative of tetracycline is selected from doxycycline, anhydrotetracycline, chlorotetracycline, oxytetracycline, and deoxytetracycline, and the Cumate functional analog is selected from p-ethylbenzoic acid, p-propylbenzoic acid, p-isopropylbenzoic acid, p-isobutylbenzoic acid, p-tert-butylbenzoic acid, p-n-dimethylaminobenzoic acid, and p-n-ethylaminobenzoic acid.

11. The method according to claim 10, wherein the rtTA is $rtTA_{adv}$ or $rtTA_{3G}$.

12. The method according to claim 10, wherein the coding sequence of rtTA is set forth in SEQ ID NO: 18.

13. The method according to claim 10, wherein the coding sequence of CymR is set forth in SEQ ID NO: 15.