CLAIMS

1. A Chinese Hamster Ovary (CHO) cell line comprising an expression vector encoding a mammalian dihydroorotate dehydrogenase (DHODH) and at least one expression cassette for expressing a recombinant protein, wherein said DHODH comprises a sequence at least 90% identical to the sequence of SEQ ID NO: 2 or to the sequence of SEQ ID NO: 4, and wherein said DHODH is sensitive to at least one DHODH inhibitor.

2. The Chinese Hamster Ovary (CHO) cell line according to claim 1, wherein said nucleotide sequence comprises the sequence of SEQ ID NO: 1 or the sequence of SEQ ID NO: 3.

3. The Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 2, wherein said recombinant protein is a monoclonal antibody.

4. The Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 3, wherein said vector comprises a first expression cassette suitable for cloning of an antibody light chain, and a second expression cassette suitable for cloning of an antibody heavy chain.

5. The Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 4, wherein said DHODH is sensitive to teriflunomide.

6. An expression system comprising a Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 5.

7. The expression system according to claim 6 further comprising at least one DHODH inhibitor.

8. The expression system according to claim 7, wherein the at least one DHODH inhibitor is teriflunomide.

9. The expression system according to any one of claims 6 to 8, wherein the DHODH encoded by the expression vector encoding a DHODH is not a hamster DHODH.

10. A kit comprising the Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 5 and at least one DHODH inhibitor.

11. The kit according to claim 10, wherein the at least one DHODH inhibitor is teriflunomide.

12. An *in vitro* method of producing a recombinant protein comprising the steps of:

a) providing a Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 5;

b) culturing said cell line obtained under conditions suitable for production of the recombinant protein; and

c) isolating and/or purifying said recombinant protein.

13. The method according to claim 12, wherein step (b) is conducted in the presence of at least one DHODH inhibitor.

14. The method according to claim 13, wherein the at least one DHODH inhibitor is teriflunomide.

15. The method according to any one of claims 12 to 14, further comprising the step of formulating said recombinant protein in step (c) into a pharmaceutical composition.

16. Use of a Chinese Hamster Ovary (CHO) cell line of any one of claims 1 to 5, an expression system according to any one of claims 6 to 9, or a kit according to claim 10 or 11 for producing a recombinant protein.

17. The use according to claim 16, wherein the Chinese Hamster Ovary (CHO) cell line, the expression system, or the kit is used in combination with at least one DHODH inhibitor.

18. The use according to claim 17, wherein the at least one DHODH inhibitor is teriflunomide.

19. Use of a DHODH-encoding expression vector as defined in claim 1 as a selection marker for isolating CHO cell clones producing recombinant proteins.

20. The use according to claim 19, wherein said DHODH-encoding expression vector is used in combination with at least one DHODH inhibitor.

21. The use according to claim 20, wherein the at least one DHODH inhibitor is teriflunomide.