CLAIMS

1. A Chinese Hamster Ovary (CHO) cell lines comprising a nucleotide sequence 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 % identity to the sequence of SEQ ID NO: 2 or to the sequence of SEQ ID NO: 4.

2. The Chinese Hamster Ovary (CHO) cell line according to claim 1, wherein said DHODH is sensitive to at least one DHODH inhibitor.

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

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

5. The Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 4, 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.

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

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

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

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

10. The expression system according to any one of claims 7 to 9, wherein the DHODH encoded by the nucleotide sequence encoding a DHODH is not a hamster DHODH.

11. A kit comprising the Chinese Hamster Ovary (CHO) cell line according to any one of claims 1 to 6 and at least one DHODH inhibitor.

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

13. 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 6;

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

c) isolating and/or purifying said recombinant protein.

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

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

16. The method according to any one of claims 13 to 15, further comprising the step of formulating said recombinant protein in step (c) into a pharmaceutical composition.

17. Use of a Chinese Hamster Ovary (CHO) cell line of any one of claims 1 to 6, an expression system according to any one of claims 7 to 10, or a kit according to claim 11 or 12 for producing a recombinant protein.

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

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

20. Use of a DHODH-encoding nucleotide sequence as defined in claim 1 as a selection marker for isolating clones producing recombinant proteins.

21. The use according to claim 20, wherein said DHODH-encoding nucleotide sequence is used in combination with at least one DHODH inhibitor.

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