CLAIMS

1. A polynucleotide consisting of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing.

2. A polynucleotide comprising at least 3000 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing.

3. A polynucleotide comprising at least 2000 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing.

4. A polynucleotide comprising at least 1500 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing.

5. A polynucleotide consisting of a polynucleotide sequence having a homology of 95% or more to the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 4.

6. A polynucleotide consisting of a polynucleotide sequence having a homology of 99% or more to the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 4.

7. A polynucleotide consisting of:

(i) a polynucleotide sequence containing two or more sequences of the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 6; and/or

(ii) two or more types of polynucleotides selected from the polynucleotides according to claims 1 to 6.

8. A polynucleotide consisting of a polynucleotide sequence containing:

- at least one sequence of the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 6; and

- at least one sequence of

(a) polynucleotide sequence represented by SEQ ID NO: 2 in the Sequence Listing or a partial fragment thereof;

(b) polynucleotide sequence represented by SEQ ID NO: 3 in the Sequence Listing or a partial fragment thereof;

(c) polynucleotide sequence represented by SEQ ID NO: 4 in the Sequence Listing or a partial fragment thereof; and/or

(d) polynucleotide sequence represented by SEQ ID NO: 5 in the Sequence Listing or a partial fragment thereof.

9. A foreign gene expression vector comprising the polynucleotide sequence of a polynucleotide according to any one of claims 1 to 8.

10. The foreign gene expression vector according to claim 9, wherein the protein encoded by the foreign gene is a multimeric protein.

11. The foreign gene expression vector according to claim 9, wherein the protein encoded by the foreign gene is a hetero-multimeric protein.

12. The foreign gene expression vector according to claim 11, wherein the protein encoded by the foreign gene is an antibody or a functional fragment thereof.

13. A transformed cell into which the foreign gene expression vector according to any one of claims 9 to 12 has been introduced.

14. The transformed cell according to claim 13, wherein the cell is a cultured cell derived from a mammal.

15. The transformed cell according to claim 14, wherein the cultured cell derived from a mammal is a cell selected from the group consisting of COS-1 cells, 293 cells, and CHO cells.

16. The transformed cell according to any one of claims 13 to 15, wherein the protein encoded by the foreign gene is a multimeric protein.

17. The transformed cell according to claim 16, wherein the protein encoded by the foreign gene is a hetero-multimeric protein.

18. The transformed cell according to claim 17, wherein the protein encoded by the foreign gene is an antibody or a functional fragment thereof.

19. A method for producing a protein characterized by comprising culturing the transformed cell according to any one

of claims 13 to 18 and obtaining the protein encoded by the foreign gene from the resulting culture product.

20. A method for enhancing foreign gene expression in a transformed cell into which a foreign gene or a foreign gene expression vector has been introduced, characterized by using a polynucleotide according to any one of claims 1 to 8 or a foreign gene expression vector according to any one of claims 9 to 12.

21. Use of the polynucleotide according to any one of claims 1 to 8 for enhancing foreign gene expression in a transformed cell.

CLAIMS

1. An isolated polynucleotide consisting of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing.

2. An isolated polynucleotide comprising at least 3000 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing, wherein the polynucleotide is a partial fragment of SEQ ID NO: 1 and has an activity of enhancing foreign gene expression.

3. An isolated polynucleotide comprising at least 2000 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing, wherein the polynucleotide is a partial fragment of SEQ ID NO: 1 and has an activity of enhancing foreign gene expression.

4. An isolated polynucleotide comprising at least 1500 consecutive nucleotides of a polynucleotide sequence represented by SEQ ID NO: 1 in the Sequence Listing, wherein the polynucleotide is a partial fragment of SEQ ID NO: 1 and has an activity of enhancing foreign gene expression.

5. An isolated polynucleotide consisting of a polynucleotide sequence having a homology of 95% or more to the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 4.

6. An isolated polynucleotide consisting of a polynucleotide sequence having a homology of 99% or more to the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 4.

7. An isolated polynucleotide consisting of a polynucleotide

sequence containing two or more sequences of the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 6.

8. An isolated polynucleotide consisting of a polynucleotide sequence containing:

- at least one sequence of the polynucleotide sequence of the polynucleotide according to any one of claims 1 to 6; and

- at least one sequence of

(a) a polynucleotide sequence represented by SEQ ID NO: 2 in the Sequence Listing, a sequence having 95% or more, or 99% or more, homology thereto or a partial fragment of any one of these sequences;

(b) a polynucleotide sequence represented by SEQ ID NO: 3 in the Sequence Listing, a sequence having 95% or more, or 99% or more, homology thereto or a partial fragment of any one of these sequences;

(c) a polynucleotide sequence represented by SEQ ID NO: 4 in the Sequence Listing, a sequence having 95% or more, or 99% or more, homology thereto or a partial fragment of any one of these sequences; and/or

(d) a polynucleotide sequence represented by SEQ ID NO: 5 in the Sequence Listing, a sequence having 95% or more, or 99% or more, homology thereto or a partial fragment of any one of these sequences.

9. A foreign gene expression vector comprising a foreign gene and the polynucleotide sequence of a polynucleotide according to any one of claims 1 to 8.

10. The foreign gene expression vector according to claim 9, wherein the protein encoded by the foreign gene is a multimeric protein.

11. The foreign gene expression vector according to claim 9, wherein the protein encoded by the foreign gene is a hetero-multimeric protein.

12. The foreign gene expression vector according to claim 11, wherein the protein encoded by the foreign gene is an antibody or a functional fragment thereof.

13. A transformed cell into which the foreign gene expression vector according to any one of claims 9 to 12 has been introduced.

14. The transformed cell according to claim 13, wherein the cell is a cultured cell derived from a mammal.

15. The transformed cell according to claim 14, wherein the cultured cell derived from a mammal is a cell selected from the group consisting of COS-1 cells, 293 cells, and CHO cells.

16. The transformed cell according to any one of claims 13 to 15, wherein the protein encoded by the foreign gene is a multimeric protein.

17. The transformed cell according to claim 16, wherein the protein encoded by the foreign gene is a hetero-multimeric protein.

18. The transformed cell according to claim 17, wherein the protein encoded by the foreign gene is an antibody or a functional fragment thereof.

19. A method for producing a protein characterized by comprising culturing the transformed cell according to any one of claims 13 to 18 and obtaining the protein encoded by the foreign gene from the resulting culture product.

20. A method for enhancing foreign gene expression in a transformed cell into which a foreign gene or a foreign gene expression vector has been introduced, characterized by using a polynucleotide according to any one of claims 1 to 8 or a foreign gene expression vector according to any one of claims 9 to 12.

21. Use of the polynucleotide according to any one of claims 1 to 8 for enhancing foreign gene expression in a transformed cell.