Claims

1. An inducible promoter comprising binding sites of transcription factors STAT3, STAT5 and AP-1 and a minimal promoter, wherein

the binding site of the transcription factor STAT3 is a nucleotide sequence selected from a group of nucleotide sequences including SEQ ID NO: 1, SEQ ID NO: 2 or SEQ ID NO: 3;

the binding site of the transcription factor STAT5 is a nucleotide sequence selected from a group of nucleotide sequences including SEQ ID NO: 4, SEQ ID NO: 5 or SEQ ID NO: 6;

the binding site of the AP-1 family transcription factor is a nucleotide sequence selected from a group of nucleotide sequences including SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9;

the binding sites of transcription factors STAT3, STAT5 and AP-1 are arranged from 5' end to 3' end one after the other in the following order: STAT3-STAT5-AP-1;

the minimal promoter comprises a TATA box.

2. The inducible promoter according to claim 1, wherein the binding sites of the transcription factors STAT3, STAT5 and AP-1 are arranged from 5' end to 3' end one after the other in the following order: STAT3-STAT5-AP-1, and comprise a nucleotide sequence selected from a group of nucleotide sequences including SEQ ID NO: 10, SEQ ID NO: 11 or SEQ ID NO: 12.

3. The inducible promoter according to claim 1, wherein the binding sites of transcription factors STAT3, STAT5 and AP-1 comprise the nucleotide sequence of SEQ ID NO: 13.

4. The inducible promoter according to claim 1, wherein the minimal promoter comprises the nucleotide sequence of SEQ ID NO: 14.

5. An inducible expression vector comprising, in 5' end to 3' end direction, the inducible promoter according to any one of claims 1 to 4 and a reporter gene.

6. The inducible expression vector according to claim 5, wherein the reporter gene is a gene of firefly luciferase protein.

7. The inducible expression vector according to claim 6, wherein the gene of firefly luciferase protein comprises the nucleotide sequence of SEQ ID NO: 15.

8. The inducible expression vector according to claim 5, comprising the nucleotide sequence of SEQ ID NO: 16.

9. A method for producing a host cell for analyzing the activity of target protein, comprising transforming the cell with the inducible expression vector according to any one of claims 5 to 8.

10. A host cell for analyzing the activity of target protein comprising the inducible promoter according to any one of claims 1 to 4 and a reporter gene.

11. The host cell according to claim 10, wherein the reporter gene is a gene of firefly luciferase protein.

12. The host cell according to claim 11, wherein the gene of firefly luciferase protein comprises the nucleotide sequence of SEQ ID NO: 15.

13. The host cell according to claim 10, comprising the nucleotide sequence of SEQ ID NO: 16.

14. The host cell according to claim 10, wherein the target protein is a receptor ligand.

15. The host cell according to claim 14, wherein the receptor ligand is cytokine.