[CLAIMS]
[Claim 1]
A translation enhancer in a cell-free protein synthesis system, the translation enhancer consisting of a nucleic acid as a 3′ untranslated region linked adjacent to a 3′ terminal of a code region that encodes an amino acid sequence of a target protein,
wherein the 3′ untranslated region comprises
a first region consisting of a sequence of 10 to 40 nucleic acids adjacent to the 3′ terminal of the code region, and
a second region consisting of a poly-A sequence having a length of continuous ~~2 to 40~~ "A"s linked to the first region, wherein the length of "A"s is 2 or greater and 20 or less, and
wherein the first region has a hairpin structure.
[Claim 2]
A template nucleic acid used in a cell-free protein synthesis system, the template nucleic acid comprising:
a promoter region;
a code region that encodes an amino acid sequence of a target protein linked so as to be operable by the promoter region; and
a 3′ untranslated region of the code region, wherein the 3′ untranslated region consists of the translation enhancer according to claim 1.
[Claim 3]
The template nucleic acid according to claim 2, wherein the code region is a region that encodes a fusion protein containing a protein tag at the C-terminal of any protein as the target protein.
[Claim 4]
The template nucleic acid according to claim 2, wherein the code region is a region that encodes a fusion protein containing a protein tag at the N-terminal of any protein as the target protein.
[Claim 5]
The template nucleic acid according to claim 3, wherein the code region is a region that encodes a fusion protein containing a protein tag at the N-terminal of any protein as the target protein.
[Claim 6]
The template nucleic acid according to any one of claims 2 to 5, wherein the template nucleic acid is a

transcription template DNA.

[Claim 7]

The template nucleic acid according to any one of claims 2 to 5, wherein the template nucleic acid is a translation template mRNA.

[Claim 8]

A production method of a translation template for a cell-free protein synthesis system, the production method comprising a step of synthesizing translation template mRNA by using the template nucleic acid according to any one of claims 2 to 6 in the absence of a cell and in the presence of an element used for transcribing a transcription template DNA onto mRNA.

[Claim 9]

A production method of a protein, the production method comprising a step of synthesizing a protein by using the template nucleic acid according to claim 7 in the absence of a cell and in the presence of an element used for translating translation template mRNA into a protein.