

[Title of Invention]

METHOD FOR PRODUCING PEPTIDE CONTAINING NON-NATURAL AMINO ACID

[ABSTRACT]

5 The present invention revealed that translating an mRNA that encodes a peptide
containing an unnatural amino acid in a translation system that contains a ribosome containing
an engineered L31 protein can increase the amount of the translated peptide. Furthermore, the
invention revealed that by using this ribosome, the relative amount of by-products can also be
reduced. An engineered L31 protein of the present invention has an amino acid sequence with
10 deletion of 6 or more amino acid residues from the C terminus in the amino acid sequence of the
wild-type *Escherichia coli* L31 protein.

[FIG. 1]