

MODIFICATION OF tRNA T-STEM FOR ENHANCING N-METHYL AMINO ACID INCORPORATION

Abstract

The problem to be solved by the present invention is to develop a novel peptide synthesizing method which enables the discovery of a highly N-methylated peptide having improved membrane permeability and improved stability against proteolysis and enables the simultaneous incorporation of a plurality of respectively different N-methyl amino acids. The present invention provides a tRNA having a T-stem in which $N_1N_2GGN_3$ and N_4CCN_5U form a pair and encoding an N-methyl amino acid (N_1 is G or A, one of N_2 and N_4 is G and the other one is C, and N_3 and N_5 are arbitrary amino acids forming a pair).

[Fig. 3]