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(54) **Title**: ARTIFICIAL NUCLEIC ACID MOLECULES FOR IMPROVED PROTEIN OR PEPTIDE EXPRESSION

(57) **Abstract**: The invention relates to an artificial nucleic acid molecule comprising at least one 5'UTR element which is derived from a TOP gene, at least one open reading frame, and preferably at least one histone stem-loop. Optionally the artificial nucleic acid molecule may further comprise, e.g. a poly(A)sequence, a poyladenylation signal, and/or a 3'UTR. The invention further relates to the use of such an artificial nucleic acid molecule in gene therapy and/or genetic vaccination.