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(71) Applicant: **CUREVAC GMBH** [DE/DE]; Paul-Ehrlich-Str. 15, 72076 Tübingen (DE).

(72) Inventor; and
(71) Applicant *(for US only)*: **THEß, Andreas** [DE/DE]; Hindenburgstr. 9, 72127 Kusterdingen (DE).

(74) Agents: **GRAF VON STOSCH, Andreas** et al.; Graf von Stosch Patentanwaltsgesellschaft mbH, Prinzregentenstrasse 22, 80538 München (DE).

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(54) Title: ARTIFICIAL NUCLEIC ACID MOLECULES COMPRISING A 5'TOP UTR

(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 optionally at least one 3'UTR element comprising a nucleic acid sequence which is preferably derived from the 3'UTR of a gene providing a stable mRNA, such as an albumin gene, or from a variant of the 3'UTR of a gene providing a stable mRNA. The invention further relates to the use of such an artificial nucleic acid molecule in gene therapy and/or genetic vaccination.

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