(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 October 2013 (03.10.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/143700 A2

(51) International Patent Classification:
C12N 15/67 (2006.01)

(21) International Application Number:
PCT/EP2013/000938

(22) International Filing Date:
27 March 2013 (27.03.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/EP2012/001334 27 March 2012 (27.03.2012) EP
PCT/EP2012/002448 8 June 2012 (08.06.2012) EP

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

WO 2013/143700 A2

(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.