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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 June 2016 (23.06.2016)

WIPO | PCT

(10) International Publication Number
WO 2016/100328 A8

(51) International Patent Classification:
*A61K 39/12* (2006.01)

(21) International Application Number:
PCT/US2015/065795

(22) International Filing Date:
15 December 2015 (15.12.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/091,824 15 December 2014 (15.12.2014) US

(71) Applicants: **THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK** [US/US]; 412 Low Memorial Library, 535 West 116th Street, New York, NY 10027 (US). **RAMOT AT TEL-AVIV UNIVERSITY LTD.** [IL/IL]; P.O. Box 39296, 6139201 Tel Aviv (IL). **KIMRON VETERINARY INSTITUTE** [IL/IL]; P.O. Box 12, 50250 Bet Dagan (IL).

(72) Inventors: **LIPKIN, W. Ian**; 45 West 105th Street, New York, NY 10025 (US). **BRIESE, Thomas**; 803 Pondside Drive, White Plains, NY 10607 (US). **MISHRA, Nischay**; 615 W 164th Street, Apt. #2B, New York, NY 10032 (US). **BACHARACH, Eran**; Tel Aviv University, P.O. Box 39040, 6997801 Tel Aviv (IL). **ELDAR, Avi**; Kimron Veterinary Institute, P.O. Box 12, 50250 Bet Dagan (IL).

(74) Agents: **CARNEY, Bonnie K** et al.; Leason Ellis LLP, One Barker Avenue, Fifth Floor, White Plains, NY 10601 (US).

(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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, 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, SA, 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, ST, 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, KM, ML, MR, NE, SN, TD, TG).

**Published**:

— *with international search report (Art. 21(3))*

— *with sequence listing part of description (Rule 5.2(a))*

*[Continued on next page]*

(54) Title: NOVEL TILAPIA VIRUS AND USES THEREOF

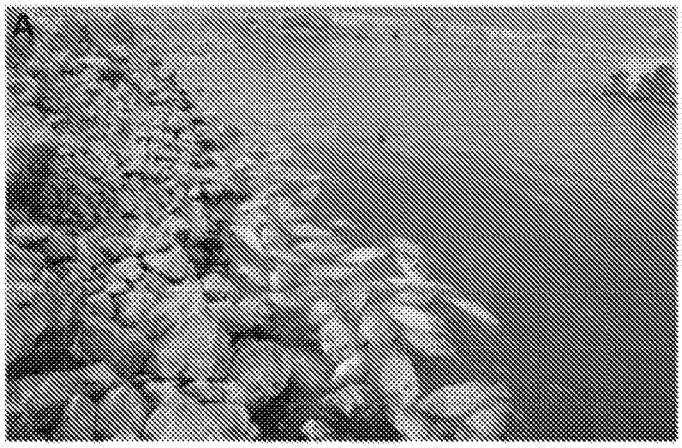


**Fig. 1A**

(57) Abstract: The invention is directed to isolated Tilapia Lake Virus or TiLV, and isolated nucleic acids sequences and polypeptides thereof. The invention also relates to probes and primers, and to antibodies against antigens from TiLV, and use of these reagents for detecting the presence or absence of TiLV in an animal. The invention also relates to iRNAs which target nucleic acid sequences of TiLV. The invention is also related to immunogenic compositions, including anitbodies and vaccines, for inducing an immune response against TiLV in an animal. The invention is also related to gene constructs and cells comprising TiLV and isolated nucleic acids sequences and polypeptides thereof for use in developing prophylactic and therapeutic agents.

WO 2016/100328 A8

WO 2016/100328 A8

(48) **Date of publication of this corrected version**:
19 January 2017

(15) **Information about Correction**:
see Notice of 19 January 2017