

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
22 November 2018 (22.11.2018)



(10) International Publication Number  
**WO 2018/213440 A1**

(51) International Patent Classification:

G01N 33/48 (2006.01) G01N 33/68 (2006.01)  
G01N 33/50 (2006.01)

(21) International Application Number:

PCT/US2018/032962

(22) International Filing Date:

16 May 2018 (16.05.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/507,166 16 May 2017 (16.05.2017) US

(71) Applicants: **AMPRION, INC.** [US/US]; 535 Mission St, 14th Floor, Suite 1643, San Francisco, California 94105 (US). **BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM** [US/US]; 201 West 7th Street, Austin, Texas 78701 (US).

(72) Inventors; and

(71) Applicants: **SOTO-JARA, Claudio** [US/US]; 2403 Pine Drive, Friendswood, Texas 77546 (US). **LEBOVITZ, Russell M.** [US/US]; 222 Broadway, #1304, Oakland, California 94607 (US). **VOLLRATH, Benedikt K.** [US/US]; 4704 Niagara Avenue, San Diego, California 92107 (US).

**SHAHNAWAZ, Mohammad** [IN/US]; 8450 Cambridge Street, Apartment 2165, Houston, Texas 77054 (US). **DI-NAMARCA, Nicolas Mendez** [CL/US]; 7900 Cambridge St, Apartment 13-2a, Houston, Texas 77054 (US).

(74) Agent: **KERN, Benjamin** et al.; 41 South High Street, Suite 2600, Columbus, Ohio 43215 (US).

(81) Designated States (unless otherwise indicated, for every kind of regional 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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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,

(54) Title: DETECTION OF MISFOLDED TAU PROTEIN

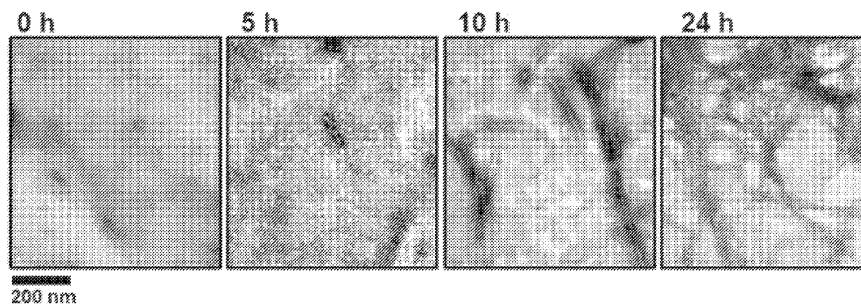


FIG. 1A

(57) Abstract: Methods and kits are provided for amplifying and detecting misfolded tau protein from samples, for example, from patients having tauopathies such as Alzheimer's Disease, Progressive Supranuclear Palsy, and the like.

[Continued on next page]



WO 2018/213440 A1

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))*
- *before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments (Rule 48.2(h))*